

Table S1: Subcellular localization of hypothetical proteins

KEGG ID	UNIPROT ID	pSORTB	CELLO	SOSUI GramN	protCompB	Deep THMMM	Shortlisted (Yes/No)
LA0004	Q8FA31	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0008	Q8FA28	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0010	Q8FA26	Unknown	Extracellular & Outer membrane	Inner membrane	Cytoplasmic & Outer membrane	0	No
LA0012	Q8FA25	Unknown	Outer membrane	Cytoplasmic	Outer membrane	0	No
LA0016	Q8FA21	Unknown	Cytoplasmic, Extracellular & periplasmic	Cytoplasmic	Extracellular	0	No
LA0018	Q8FA19	Outer membrane	Outer membrane	Outer membrane	Outer membrane	0	No
LA0019	Q8FA18	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA0029	Q8FA08	Cytoplasmic membrane	Cytoplasmic, Inner membrane & periplasmic	Inner membrane	Cytoplasmic & Inner membrane	0	No
LA0031	Q8FA06	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	6	No
LA0032	Q8FA05	Unknown	Cytoplasmic & periplasmic	Periplasmic	Periplasmic & Outer membrane	0	No
LA0034	Q8FA03	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0041	Q8F9Z6	Unknown	Cytoplasmic & Outer membrane	Cytoplasmic	Cytoplasmic & Inner membrane	0	No
LA0048	Q8F9Y9	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic, Extracellular	1	No
LA0050	Q8F9Y7	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	6	No
LA0055	Q8F9Y2	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0064	Q8F9X3	Unknown	Outer membrane	Periplasmic	Cytoplasmic & Outer membrane	0	No
LA0067	Q8F9X0	Cytoplasmic membrane	Inner membrane, Cytoplasmic & Outer membrane	Inner membrane	Outer membrane	9	No
LA0068	Q8F9W9	Unknown	Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA0070	Q8F9W7	Cytoplasmic membrane	Inner membrane & Outer membrane	Inner membrane	Outer membrane	6	No
LA0071	Q8F9W6	Unknown	Periplasmic	Periplasmic	Periplasmic & membrane	0	No
LA0074	Q8F9W3	Unknown	Extracellular	Outer membrane	Cytoplasmic & Outer membrane	0	No
LA0075	Q8F9W2	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0077	Q8F9W1	Cytoplasmic membrane	Cytoplasmic & Inner membrane	Inner membrane	Inner membrane	10	No
LA0078	Q8F9W0	Cytoplasmic	Cytoplasmic & Outer	Cytoplasmic	Outer	0	No

			membrane		membrane		
LA0085	Q8F9V3	Unknown	Cytoplasmic	Cytoplasmic	Periplasmic & Outer membrane	0	No
LA0089	Q8F9U9	Unknown	Cytoplasmic	Unknown	Cytoplasmic	0	No
LA0091	Q8F9U8	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic, Extracellular	0	No
LA0092	Q8F9U7	Cytoplasmic	Cytoplasmic	Unknown	Cytoplasmic & Outer membrane	0	No
LA0093	Q8F9U6	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA0094	Q8F9U5	Cytoplasmic	Cytoplasmic	Inner membrane	Inner membrane	0	No
LA0095	Q8F9U4	Cytoplasmic membrane	Inner membrane	Inner membrane	Outer membrane	2	No
LA0097	Q8F9U3	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA0100	Q8F9T9	Unknown	Periplasmic, Extracellular & Outer membrane	Extracellular	Outer membrane	0	No
LA0101	Q8F9T8	Cytoplasmic	Cytoplasmic & periplasmic	Inner membrane	Outer membrane	1	No
LA0102	Q8CXU8	Unknown	Inner membrane, Cytoplasmic & Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA0105	Q8F9T5	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	6	No
LA0107	Q8F9T3	Unknown	Cytoplasmic & periplasmic, Extracellular	Cytoplasmic	Outer membrane	0	No
LA0112	Q8F9S8	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic & Inner membrane	0	No
LA0115	Q8F9S5	Unknown	Cytoplasmic & Outer membrane Inner membrane,	Cytoplasmic	Cytoplasmic & Inner membrane	0	No
LA0116	Q8F9S4	Unknown	Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA0117	Q8F9S3	Unknown	Outer membrane	Inner membrane	Outer membrane	0	No
LA0121	Q8F9R9	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic, Extracellular	0	No
LA0123	Q8F9R7	Cytoplasmic	Cytoplasmic	Unknown	Cytoplasmic	1	No
LA0127	Q8F9R4	Cytoplasmic membrane	Outer membrane	Inner membrane	Inner membrane	5	No
LA0128	Q8F9R3	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA0129	Q8F9R2	Cytoplasmic	Cytoplasmic	Inner membrane	Outer membrane	0	No
LA0132	Q8F9Q9	Unknown	Cytoplasmic	Unknown	Cytoplasmic	0	No
LA0135	Q8F9Q6	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0137	Q8F9Q4	Unknown	Outer membrane	Cytoplasmic	Cytoplasmic	0	No
LA0142	Q8F9P9	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0143	Q8F9P8	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No

LA0147	Q8F9P3	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0148	Q8F9P4	Unknown	Cytoplasmic	Cytoplasmic	Outer membrane	0	No
LA0151	Q8F9P0	Unknown	Extracellular and cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0153	Q8F9N8	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0156	Q8F9N5	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0163	Q8F9M8	Cytoplasmic	Cytoplasmic	Cytoplasmic	Inner membrane	0	No
LA0166	Q8F9M5	Cytoplasmic	Outer membrane	Inner membrane	Cytoplasmic	1	No
LA0172	G1UB18	Cytoplasmic	Cytoplasmic & Outer membrane	Inner membrane	Cytoplasmic	2	No
LA0177	O50638	Unknown	Cytoplasmic & periplasmic	Unknown	Inner membrane	0	No
LA0184	Q8F9L1	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0186	Q8F9K9	Cytoplasmic	Cytoplasmic & Inner membrane	Unknown	Inner membrane	1	No
LA0187	Q8F9K8	Cytoplasmic	Cytoplasmic	Cytoplasmic	Outer membrane	0	No
LA0188	Q8F9K7	Unknown	Cytoplasmic	Cytoplasmic	Extracellular	0	yes
LA0191	Q8F9K4	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0192	Q8F9K3	Unknown	Cytoplasmic	Unknown	Cytoplasmic	0	No
LA0193	Q8F9K2	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0194	Q8F9K1	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0198	Q8F9J7	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0201	Q8F9J4	Unknown	Cytoplasmic & Outer membrane Inner membrane,	Cytoplasmic	Inner membrane	2	No
LA0202	Q8F9J3	Cytoplasmic	Cytoplasmic	Cytoplasmic	Outer membrane	0	No
LA0203	Q8F9J2	Unknown	Cytoplasmic & Outer membrane, extracellular	Extracellular	Inner membrane	0	yes
LA0204	Q8F9J1	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0205	Q8F9J0	Cytoplasmic	Cytoplasmic & Outer membrane	Extracellular	Outer membrane	0	yes
LA0206	Q8F9I9	Unknown	Cytoplasmic	Periplasmic	Outer membrane	0	No
LA0207	Q8F9I8	Cytoplasmic	Cytoplasmic	Cytoplasmic	Inner membrane	0	No
LA0210	Q8F9I5	Cytoplasmic	Cytoplasmic	Cytoplasmic	Inner membrane	0	No
LA0211	Q8F9I4	Unknown	Cytoplasmic	Cytoplasmic	Outer membrane	0	No
LA0212	Q8F9I3	Cytoplasmic	Cytoplasmic & Outer membrane, periplasmic	Unknown	Outer membrane	0	No
LA0213	Q8F9I2	Cytoplasmic	Cytoplasmic	Extracellular	Cytoplasmic	0	No
LA0214	Q8F9I1	Cytoplasmic	Cytoplasmic	Cytoplasmic	Inner membrane	0	No
LA0215	Q8F9I0	Cytoplasmic	Outer membrane	Cytoplasmic	Inner membrane	0	No
LA0216	Q8F9H9	Unknown	Outer membrane	Cytoplasmic	Outer membrane	0	No
LA0217	Q8F9H8	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0218	Q8F9H7	Unknown	Outer membrane	Extracellular	Inner membrane	0	No

LA0219	Q8F9H6	Unknown	Outer membrane	Extracellular	Inner membrane	0	No
LA0227	Q8F9G8	Cytoplasmic	Outer membrane	Cytoplasmic	Inner membrane	0	No
LA0228	Q8F9G7	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0234	Q8F9G1	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0240	Q8F9F5	Cytoplasmic membrane	Cytoplasmic & inner membrane	Unknown	Inner membrane	1	No
LA0248	Q8F9E7	Unknown	Outer membrane	Cytoplasmic	Outer membrane	1	No
LA0254	Q8F9E1	Cytoplasmic	Cytoplasmic	Inner membrane	Outer membrane	1	No
LA0259	Q8F9D6	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Periplasmic	0	No
LA0263	Q8F9D2	Cytoplasmic	Outer membrane	Cytoplasmic	Outer membrane	0	No
LA0264	Q8F9D1	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0265	Q8F9D0	Cytoplasmic	Cytoplasmic & outer membrane	Cytoplasmic	Cytoplasmic	0	No
LA0266	Q8F9C9	Cytoplasmic	Cytoplasmic	Cytoplasmic	Outer membrane	0	No
LA0268	Q8F9C7	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0271	Q8F9C4	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	6	No
LA0272	Q8F9C3	Unknown	Cytoplasmic & Outer membrane, extracellular	Inner membrane	Outer membrane	1	No
LA0276	Q8F9B9	Cytoplasmic	Cytoplasmic & Outer membrane	Extracellular	Inner membrane	0	No
LA0278	Q8F9B7	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0279	Q8F9B6	Unknown	Cytoplasmic	Cytoplasmic	Outer membrane	0	No
LA0283	Q8F9B2	Unknown	Outer membrane	Extracellular	Outer membrane	0	yes
LA0284	Q8F9B1	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0284a	D4YW12	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic and Inner membrane	0	No
LA0286	Q8F9A9	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0298	Q8F997	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0302	Q8F993	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic and outer membrane	0	No
LA0306	Q8F989	Cytoplasmic	Cytoplasmic	Cytoplasmic	Outer membrane	0	No
LA0313a	D4YW13	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic & periplasmic	0	No
LA0318	Q8F978	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic and outer membrane	0	No
LA0321	Q8F975	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0323	Q8F973	Unknown	Extracellular	Cytoplasmic	Extracellular and cytoplasmic	0	yes
LA0337	Q8F960	Unknown	Periplasmic	Outer membrane	Outer membrane	0	Yes

LA0338	Q8F959	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA0343	Q8F954	Unknown	Extracellular and cytoplasmic	Cytoplasmic	Extracellular and Outer membrane	0	Yes
LA0352	Q8F945	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	6	No
LA0353	Q8F944	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA0355	Q8F942	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA0358	Q8F939	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA0363	Q8F934	Unknown	Cytoplasmic	Unknown	Inner membrane	0	No
LA0365	Q8F932	Unknown	Outer membrane	Cytoplasmic	Extracellular and Outer membrane	0	Yes
LA0368	Q8F929	Unknown	Cytoplasmic	Cytoplasmic	Outer membrane	0	No
LA0370	Q8F927	Cytoplasmic	Outer membrane	Extracellular	Cytoplasmic & Outer membrane	0	yes
LA0371	Q8F926	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0372	Q8F925	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0373	Q8F924	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA0374	Q8F923	Cytoplasmic	Cytoplasmic	Inner membrane	Outer membrane	2	No
LA0375	Q8F922	Cytoplasmic	Cytoplasmic	Inner membrane	Inner membrane	2	No
LA0376	Q8F921	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0377	Q8F920	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0379	Q8F918	Unknown	Extracellular and Outer membrane	Extracellular	Cytoplasmic & Outer membrane	0	yes
LA0381	Q8F916	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA0382	Q8F915	Unknown	Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	yes
LA0383	Q8F914	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	3	No
LA0387	Q8F910	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA0389	Q8F908	Unknown	Outer membrane and cytoplasmic	Cytoplasmic	Outer membrane	0	yes
LA0390	Q8F907	Cytoplasmic membrane	Inner membrane and cytoplasmic	Inner membrane	Cytoplasmic & inner membrane	0	No

LA0392	Q8F905	Cytoplasmic	Outer membrane and cytoplasmic	Outer membrane	Cytoplasmic	0	yes
LA0393	Q8F904	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic & periplasmic	0	No
LA0400	Q8F8Z8	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0406	Q8F8Z2	Cytoplasmic membrane	Inner membrane and outer membrane	Inner membrane	Inner membrane	13	No
LA0407	Q8F8Z1	Cytoplasmic membrane	Cytoplasmic & periplasmic	Unknown	Inner membrane	0	No
LA0409	Q8F8Y9	Cytoplasmic	Outer membrane and cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0413	Q8F8Y5	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	3	No
LA0420	Q8F8X9	Unknown	Extracellular	Outer membrane	Extracellular	0	yes
LA0421	Q8F8X8	Unknown	Extracellular	Extracellular	Cytoplasmic & Outer membrane	0	yes
LA0425	Q8F8X4	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	11	No
LA0429	Q8F8X0	Cytoplasmic membrane	Inner membrane	Inner membrane	Outer membrane	3	No
LA0432	Q8F8W7	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	3	No
LA0433	Q8F8W6	Cytoplasmic membrane	Cytoplasmic	Inner membrane	Inner membrane	1	No
LA0434	Q8F8W5	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA0441	Q8F8V9	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0442	Q8F8V8	Cytoplasmic membrane	Outer membrane & inner membrane	Inner membrane	Outer membrane	0	No
LA0446	Q8F8V4	Cytoplasmic membrane	Extracellular and Inner membrane	Inner membrane	Inner membrane	4	No
LA0447	Q8F8V3	Unknown	Cytoplasmic	Unknown	Cytoplasmic	0	No
LA0452	Q8F8V0	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA0458	Q8F8U4	Unknown	Cytoplasmic	Inner membrane	Cytoplasmic & inner membrane	0	No
LA0460	Q8F8U2	Unknown	Cytoplasmic & periplasmic	Unknown	Outer membrane	2	No
LA0461	Q8F8U1	Unknown	Cytoplasmic	Unknown	Cytoplasmic & Outer membrane	0	No
LA0462	Q8F8U0	Cytoplasmic	Cytoplasmic	Inner membrane	Cytoplasmic & Outer membrane	0	No
LA0467	Q8F8T6	Cytoplasmic	Outer membrane	Inner membrane	Extracellular and Inner membrane	0	No
LA0471	Q8CXU3	Unknown	Cytoplasmic & periplasmic	Periplasmic	Outer membrane	0	No

LA0478	Q8F8S6	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0479	Q8F8S5	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA0482	Q8F8S2	Cytoplasmic membrane	Cytoplasmic & inner membrane	Inner membrane	Inner membrane	2	No
LA0495	Q8F8R0	Cytoplasmic	Cytoplasmic	Inner membrane	Cytoplasmic & periplasmic	0	No
LA0496	Q8F8Q9	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA0500	Q8F8Q5	Unknown	Outer membrane	Cytoplasmic	Outer membrane	0	yes
LA0501	Q8F8Q4	Unknown	Cytoplasmic	Unknown	Cytoplasmic & Outer membrane	0	No
LA0505	Q8F8Q0	Unknown	Extracellular	Outer membrane	Extracellular and outer membrane	0	yes
LA0506	Q8F8P9	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA0509	Q8F8P6	Unknown	Cytoplasmic & periplasmic & extracellular	Unknown	Periplasmic	0	No
LA0517	Q8F8N8	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA0521	Q8F8N4	Unknown	Cytoplasmic	Unknown	Outer membrane	0	No
LA0532	Q8F8M3	Unknown	Outer membrane	Outer membrane	Outer membrane	0	yes
LA0534	Q8F8M1	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	7	No
LA0535	Q8F8M0	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0536	Q8F8L9	Unknown	Outer membrane	Inner membrane	Outer membrane	0	yes
LA0540	Q8F8L5	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0541	Q8F8L4	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0543	Q8F8L2	Cytoplasmic	Cytoplasmic	Cytoplasmic	Outer membrane	0	No
LA0544	Q8F8L1	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0546	Q8F8K9	Unknown	Cytoplasmic & Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA0547	Q8F8K8	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0548	Q8F8K7	Unknown	Cytoplasmic	Cytoplasmic	Extracellular	0	No
LA0549	Q8F8K6	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0554	Q8F8K1	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0556	Q8F8J9	Cytoplasmic	Cytoplasmic	Inner membrane	Cytoplasmic & inner membrane	1	No
LA0557	Q8F8J8	Cytoplasmic membrane	Inner membrane	Inner membrane	Outer membrane	19	No
LA0560a	D4YW15	Unknown	Cytoplasmic, periplasmic & inner membrane	Inner membrane	Inner membrane	0	No
LA0562	Q8F8J4	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No

LA0564	Q8F8J2	Cytoplasmic membrane	Cytoplasmic	Inner membrane	Inner membrane	2	No
LA0569	Q8F8I7	Cytoplasmic	Periplasmic	Unknown	Periplasmic	0	No
LA0570	Q8F8I6	Cytoplasmic	Outer membrane	Inner membrane	Outer membrane	1	No
LA0571	Q8F8I5	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	8	No
LA0573	Q8F8I3	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0575	Q8F8I1	Unknown	Cytoplasmic & periplasmic	Periplasmic	Cytoplasmic & Outer membrane	0	No
LA0576	Q8F8I0	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0578	Q8F8H8	Cytoplasmic membrane	Cytoplasmic & periplasmic	Inner membrane	Inner membrane	0	No
LA0580	Q8F8H6	Unknown	Cytoplasmic	Unknown	Extracellular and Inner membrane	0	No
LA0588	Q8F8G9	Unknown	Cytoplasmic, periplasmic & Extracellular	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA0589	Q8F8G8	Unknown	Outer membrane	Outer membrane	Outer membrane	0	Yes
LA0590	Q8F8G7	Unknown	Cytoplasmic	Unknown	Cytoplasmic & inner membrane	0	No
LA0591	Q8F8G6	Unknown	Cytoplasmic & Outer membrane & inner membrane	Outer membrane	Inner membrane	0	No
LA0606	Q8F8F1	Cytoplasmic membrane	Inner membrane	Inner membrane	Cytoplasmic & inner membrane	3	No
LA0609	Q8F8E9	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA0615	Q8F8E2	Unknown	Cytoplasmic	Unknown	Outer membrane	0	No
LA0617	Q8F8E0	Unknown	Extracellular and outer membrane	Extracellular	Extracellular	0	yes
LA0620	Q8F8D7	Unknown	Extracellular and outer membrane	Inner membrane	Extracellular	0	yes
LA0629	Q8F8C8	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0631	Q8F8C6	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	10	No
LA0639	Q8F8B9	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	3	No
LA0640	Q8F8B8	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	3	No
LA0641	Q8F8B7	Unknown	Cytoplasmic & periplasmic	Unknown	Cytoplasmic & Outer membrane	0	No
LA0644	Q8F8B3	Unknown	Outer membrane	Cytoplasmic	Outer membrane	0	yes
LA0645	Q8F8B4	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0645a	D4YW16	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA0654	Q8F8A4	Cytoplasmic	Outer membrane	Cytoplasmic	Cytoplasmic &	0	No

					Outer membrane		
LA0659	Q8F899	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0663	Q8F895	Extracellular	Extracellular	Extracellular	Extracellular	0	yes
LA0670	Q8F888	Unknown	Cytoplasmic	Cytoplasmic	Outer membrane	0	No
LA0675	Q8F883	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0678a	D4YW17	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA0680	Q8F878	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA0682	Q8F876	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0689	Q8F869	Cytoplasmic	Cytoplasmic	Extracellular	Cytoplasmic	0	No
LA0696	Q8F862	Unknown	Outer membrane	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA0699	Q8F859	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0706	Q8F853	Unknown	Outer membrane	Inner membrane	Outer membrane	22	No
LA0709	Q8F850	Unknown	Extracellular	Outer membrane	Extracellular	0	yes
LA0711	Q8F848	Unknown	Extracellular, periplasmic and outer membrane	Cytoplasmic	Periplasmic	0	No
LA0713	Q8F846	Cytoplasmic	Extracellular and outer membrane	Extracellular	Cytoplasmic & Outer membrane	0	yes
LA0714	Q8F845	Cytoplasmic	Cytoplasmic	Periplasmic	Periplasmic & membrane bound	0	No
LA0718	Q8F841	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA0719	Q8F840	Cytoplasmic	Cytoplasmic	Unknown	Cytoplasmic & inner membrane	0	No
LA0720	Q8F839	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0727a	D4YW18	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA0727b	D4YW19	Unknown	Cytoplasmic	Cytoplasmic	Inner membrane	0	No
LA0728	Q8F831	Unknown	Cytoplasmic & Outer membrane, periplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0728a	D4YW20	Unknown	Cytoplasmic	Unknown	Cytoplasmic & inner membrane	0	No
LA0732	Q8F828	Unknown	Cytoplasmic	Unknown	Cytoplasmic & Outer membrane	0	No
LA0735	Q8F824	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0769	Q8F820	Unknown	Outer membrane	Outer membrane	Outer membrane	0	No
LA0773	Q8F816	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	10	No
LA0777	Q8F813	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0781	Q8F809	Unknown	Cytoplasmic & inner	Inner	Inner membrane	2	No

			membrane	membrane			
LA0782	Q8F808	Cytoplasmic membrane	Cytoplasmic	Inner membrane	Inner membrane	2	No
LA0784	Q8F806	Unknown	Cytoplasmic	Cytoplasmic	Extracellular and cytoplasmic	0	No
LA0792	Q8F800	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0793	Q8F7Z9	Cytoplasmic membrane	Outer membrane, periplasmic	Cytoplasmic	Outer membrane, periplasmic	0	No
LA0795	Q8F7Z6	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0798	Q8F7Z4	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0801	Q8F7Z1	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA0803	Q8F7Y9	Unknown	Cytoplasmic	Inner membrane	Inner membrane	0	No
LA0804	Q8F7Y8	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0805	Q8F7Y7	Unknown	Cytoplasmic	Unknown	Cytoplasmic	0	No
LA0811	Q8F7Y1	Unknown	Outer membrane, periplasmic	Inner membrane	Cytoplasmic & inner membrane	1	No
LA0812	Q8F7Y0	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA0813	Q8F7X9	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0814	Q8F7X8	Unknown	Cytoplasmic	Cytoplasmic	Outer membrane, periplasmic	0	No
LA0817	Q8F7X5	Cytoplasmic	Cytoplasmic	Inner membrane	Cytoplasmic	0	No
LA0818	Q8F7X4	Outer membrane	Outer membrane	Inner membrane	Outer membrane	1	yes
LA0819	Q8F7X3	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0820	Q8F7X2	Cytoplasmic	Cytoplasmic	Unknown	Cytoplasmic & Outer membrane	0	No
LA0826	Q8F7W6	Unknown	Extracellular, periplasmic and Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA0829	Q8F7W3	Cytoplasmic	Cytoplasmic	Unknown	Cytoplasmic	0	No
LA0835	Q8F7V7	Unknown	Outer membrane	Extracellular	Outer membrane	0	yes
LA0836	Q8F7V6	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA0842	Q8F7V0	Unknown	Cytoplasmic & periplasmic	Periplasmic	Cytoplasmic & Outer membrane	0	No
LA0846	Q8F7U6	Cytoplasmic	Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA0847a	D4YW22	Cytoplasmic membrane	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA0853a	D4YW23	Unknown	Cytoplasmic	Cytoplasmic	Outer membrane	0	No
LA0860	Q8F7T4	Cytoplasmic membrane	Cytoplasmic	Unknown	Inner membrane	0	No
LA0865	Q8F759	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No

LA0878	Q8F7R6	Cytoplasmic	Outer membrane	Inner membrane	Extracellular and Cytoplasmic	0	No
LA0879	Q8F7R5	Cytoplasmic	Cytoplasmic	Cytoplasmic	Extracellular and Cytoplasmic	0	No
LA0882	Q8F7R2	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	3	No
LA0883	Q8F7R1	Unknown	Cytoplasmic	Periplasmic	Cytoplasmic & Outer membrane	0	No
LA0898	Q8F7P6	Cytoplasmic	Cytoplasmic & Outer membrane	Inner membrane	Cytoplasmic & inner membrane	0	No
LA0905	Q8F7N9	Extracellular	Extracellular	Outer membrane	Extracellular	0	yes
LA0906	Q8F7N8	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0908	Q8F7N6	Unknown	Cytoplasmic & Outer membrane	Cytoplasmic	Extracellular	0	No
LA0910	Q8F7N3	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0913a	D4YW24	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0914	Q8F7N0	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0916	Q8F7M8	Cytoplasmic	Cytoplasmic & Outer membrane, periplasmic	Cytoplasmic	Outer membrane	0	No
LA0919	Q8F7M5	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0920	Q8F7M4	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA0927	Q8F7L7	Cytoplasmic	Cytoplasmic & Outer membrane	Cytoplasmic	Outer membrane	0	No
LA0934	Q8F7L0	Unknown	Extracellular and outer membrane	Inner membrane	Extracellular	0	No
LA0935	Q8F8K9	Unknown	Cytoplasmic & Outer membrane	Periplasmic	Cytoplasmic & Outer membrane	0	No
LA0936	Q8F8K8	Unknown	Cytoplasmic & Outer membrane, periplasmic, extracellular	Unknown	Extracellular and Cytoplasmic	0	No
LA0937	Q8F8K7	Unknown	Cytoplasmic	Unknown	Cytoplasmic	0	No
LA0938	Q8F8K6	Unknown	Cytoplasmic & Outer membrane	Cytoplasmic	Inner membrane	1	No
LA0939	Q8F8K5	Unknown	Outer membrane	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA0940	Q8F8K4	Unknown	Outer membrane	Periplasmic	Outer membrane	0	No
LA0950	Q8F7J5	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0951	Q8F7J4	Cytoplasmic membrane	Cytoplasmic & Outer membrane & inner membrane	Inner membrane	Outer membrane	3	No
LA0954	Q8F7J1	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0959	Q8F7I6	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA0960	Q8F7I5	Unknown	Extracellular, periplasmic and Cytoplasmic	Inner membrane	Outer membrane	1	No

LA0978	Q8F7G7	Cytoplasmic membrane	Cytoplasmic & Outer membrane	Inner membrane	Cytoplasmic & inner membrane	1	No
LA0979	Q8F7G6	Unknown	Cytoplasmic & Outer membrane	Inner membrane	Inner membrane	0	No
LA0983	Q8F7G2	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0985	Q8F7G0	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA0986	Q8F7F9	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA0989	Q8F7F6	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	3	No
LA0990	Q8F7F5	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA0991	Q8F7F4	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	9	No
LA0994	Q8F7F1	Unknown	Outer membrane	Cytoplasmic	Outer membrane	1	yes
LA0995	Q8F7F0	Cytoplasmic membrane	Outer membrane	Outer membrane	Outer membrane	3	No
LA0996	Q8F7E9	Unknown	Extracellular	Outer membrane	Outer membrane	0	yes
LA0999	Q8F7E6	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1000	Q8F7E5	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1003	Q8F7E2	Unknown	Outer membrane, periplasmic	Inner membrane	Outer membrane	1	No
LA1005	Q8F7E0	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1010	Q8F7D6	Outer membrane	Outer membrane	Periplasmic	Outer membrane	0	yes
LA1013	Q8F7D3	Unknown	Extracellular, periplasmic and Cytoplasmic	Outer membrane	Cytoplasmic & Outer membrane	0	No
LA1014	Q8F7D2	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1015	Q8F7D1	Unknown	Extracellular and outer membrane	Extracellular	Outer membrane	0	yes
LA1016	Q8F7D0	Outer membrane	Outer membrane	Outer membrane	Extracellular and cytoplasmic	0	yes
LA1018	Q8F7C8	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1019	Q8F7C7	Cytoplasmic	Cytoplasmic & Outer membrane, extracellular	Cytoplasmic	Extracellular and cytoplasmic	0	No
LA1023	Q8F7C3	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1024	Q8F7C2	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA1031	Q8F7B7	Unknown	Cytoplasmic	Unknown	Outer membrane	0	No
LA1033	Q8F7B5	Unknown	Cytoplasmic	Cytoplasmic	Extracellular and cytoplasmic	0	No
LA1037		Unknown	Cytoplasmic	Unknown	Cytoplasmic & Outer membrane	0	No
LA1039	Q8F7A9	Unknown	Cytoplasmic	Periplasmic	Cytoplasmic & Outer	0	No

					membrane		
LA1046	Q8F7A2	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1051	Q8F797	Unknown	Cytoplasmic & Outer membrane	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA1052	Q8F796	Unknown	Outer membrane	Extracellular	Extracellular and outer membrane	0	yes
LA1053	Q8F795	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1054	Q8F794	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1055	Q8F793	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1056	Q8F792	Cytoplasmic membrane	Outer membrane	Inner membrane	Inner membrane	1	No
LA1057	Q8F791	Unknown	Cytoplasmic & Outer membrane	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA1058	Q8F790	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1059	Q8F789	Outer membrane	Outer membrane	Outer membrane	Cytoplasmic	0	yes
LA1060	Q8F788	Unknown	Outer membrane, periplasmic, extracellular	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1061	Q8F787	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1062	Q8F786	Cytoplasmic	Outer membrane	Extracellular	Cytoplasmic & inner membrane	0	No
LA1063	Q8F785	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1064	Q8F784	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1065	Q8F783	Unknown	Extracellular	Extracellular	Extracellular	0	yes
LA1066	Q8F782	Extracellular	Extracellular	Extracellular	Extracellular	0	yes
LA1067	Q8F781	Cytoplasmic	Cytoplasmic	Cytoplasmic	Extracellular and cytoplasmic	0	No
LA1072	Q8F776	Cytoplasmic	Cytoplasmic & Outer membrane	Unknown	Cytoplasmic & Outer membrane	0	No
LA1073	Q8F775	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1079	Q8F769	Cytoplasmic	Outer membrane, Cytoplasmic, extracellular	Cytoplasmic	Cytoplasmic	0	No
LA1087	Q8F761	Cytoplasmic	Outer membrane	Inner membrane	Outer membrane	1	No
LA1088	Q8F760	Unknown	Cytoplasmic & inner membrane	Inner membrane	Inner membrane	0	No
LA1090	Q8F758	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1092	Q8F756	Unknown	Extracellular, periplasmic and cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1093	Q8F755	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA1098	Q8F750	Unknown	Extracellular, periplasmic and cytoplasmic	Cytoplasmic	Periplasmic & Outer membrane	0	No
LA1099	Q8F749	Cytoplasmic	Outer membrane	Inner membrane	Outer membrane	0	No

LA1103	Q8F745	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1107	Q8F741	Cytoplasmic	Cytoplasmic	Unknown	Cytoplasmic	0	No
LA1118	Q8F731	Unknown	Periplasmic	Outer membrane	Periplasmic & Inner membrane	0	No
LA1121	Q8F727	Cytoplasmic membrane	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1122	Q8F726	Unknown	Outer membrane	Outer membrane	Outer membrane	8	No
LA1124a	D4YW26	Unknown	Cytoplasmic	Unknown	Outer membrane	0	No
LA1125	Q8F723	Cytoplasmic	Cytoplasmic & Outer membrane	Inner membrane	Outer membrane	0	No
LA1132	Q8F716	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1133	Q8F715	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1133a	D4YW27	Unknown	Cytoplasmic	Unknown	Inner membrane	0	No
LA1135	Q8F713	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1137	Q8F711	Unknown	Outer membrane	Inner membrane	Outer membrane	1	No
LA1141a	D4YW28	Extracellular	Extracellular and outer membrane	Inner membrane	Extracellular and outer membrane	1	yes
LA1152	Q8F6Z6	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1162	Q8F6Y7	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1163	Q8F6Y6	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	7	No
LA1168	Q8F6Y1	Unknown	Extracellular, periplasmic and cytoplasmic	Outer membrane	Extracellular and periplasmic	0	yes
LA1172	Q8F6X7	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA1177	Q8F6X2	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1178	Q8F6X1	Cytoplasmic	Cytoplasmic	Unknown	Cytoplasmic	0	No
LA1180	Q8F6X0	Unknown	Extracellular, periplasmic and cytoplasmic	Cytoplasmic	Extracellular and outer membrane	0	No
LA1181	Q8F6W8	Unknown	Cytoplasmic	Unknown	Outer membrane	0	No
LA1183	Q8F6W7	Unknown	Cytoplasmic	Unknown	Cytoplasmic	0	No
LA1188	Q8F6W2	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Extracellular	0	No
LA1190	Q8F6W0	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1192	Q8F6V8	Unknown	Outer membrane	Inner membrane	Outer membrane	12	No
LA1192a	D4YW29	Unknown	Cytoplasmic	Cytoplasmic	Outer membrane	0	No
LA1195	Q8F6V4	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1196	Q8F6V3	Cytoplasmic	Outer membrane	Outer membrane	Cytoplasmic	0	No
LA1200	Q8F6V0	Unknown	Cytoplasmic	Cytoplasmic	Extracellular and outer	0	No

					membrane		
LA1202	Q8F6U9	Unknown	Cytoplasmic, periplasmic & inner membrane	Inner membrane	Inner membrane	0	No
LA1204	Q8F6U6	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA1206	Q8F6U4	Cytoplasmic	Cytoplasmic & Outer membrane	Cytoplasmic	Outer membrane	1	No
LA1209	Q8F6U1	Unknown	Extracellular and outer membrane	Extracellular	Extracellular and periplasmic	0	yes
LA1213	Q8F6T7	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1225	Q8F6S6	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1228	Q8F6S3	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1230	Q8F6S1	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1234	Q8F6R7	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1235	Q8F6R6	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1238	Q8F6R3	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1241	Q8F6R0	Unknown	Cytoplasmic	Unknown	Cytoplasmic & Outer membrane	0	No
LA1241a	D4YW30	Unknown	Extracellular, periplasmic and cytoplasmic	Extracellular	Cytoplasmic & Outer membrane	0	No
LA1245	Q8F6Q6	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1261	Q8F6P2	Unknown	Extracellular, Cytoplasmic and outer membrane	Inner membrane	Outer membrane	1	No
LA1271	Q8F6N2	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1273	Q8F6N0	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1275	Q8F6M8	Unknown	Cytoplasmic	Unknown	Cytoplasmic & Outer membrane	0	No
LA1283	Q8F6M0	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	1	No
LA1286	Q8F6L7	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1289	Q8F6L4	Unknown	Cytoplasmic	Cytoplasmic	Extracellular and cytoplasmic	0	No
LA1290	Q8F6L3	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1291	Q8F6L2	Cytoplasmic	Extracellular, periplasmic and cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1295	Q8F6K8	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1297	Q8F6K6	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1305	Q8F6K0	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1306	Q8F6J9	Unknown	Outer membrane, periplasmic, cytoplasmic	Cytoplasmic	Periplasmic	0	No
LA1307	Q8F6J8	Unknown	Outer membrane	Cytoplasmic	Cytoplasmic &	0	No

					Outer membrane		
LA1310	Q8F6J6	Cytoplasmic membrane	Cytoplasmic & periplasmic	Cytoplasmic	Outer membrane	0	No
LA1312	Q8F6J4	Unknown	Extracellular and periplasmic	Periplasmic	Outer membrane	0	No
LA1312a	D4YW31	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1317	Q8F6I9	Cytoplasmic	Outer membrane, periplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA1319	Q8F6I7	Cytoplasmic	Cytoplasmic	Unknown	Extracellular and outer membrane	0	No
LA1326	Q8F6I0	Unknown	Cytoplasmic	Inner membrane	Cytoplasmic & inner membrane	0	No
LA1328	Q8F6H8	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1329	Q8F6H7	Unknown	Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1330	Q8F6H6	Unknown	Extracellular, periplasmic and cytoplasmic	Unknown	Cytoplasmic & Outer membrane	0	No
LA1331	Q8F6H5	Unknown	Cytoplasmic	Cytoplasmic	Extracellular and cytoplasmic	0	No
LA1343	Q8F6G4	Unknown	Cytoplasmic	Periplasmic	Cytoplasmic & inner membrane	0	No
LA1345	Q8F6G2	Cytoplasmic membrane	Outer membrane	Outer membrane	Cytoplasmic & Outer membrane	0	No
LA1349	Q8F6F8	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1357	Q8F6F0	Unknown	Outer membrane	Extracellular	Cytoplasmic & inner membrane	0	No
LA1359	Q8F6E8	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1362	Q8F6E6	Cytoplasmic	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1364	Q8F6E4	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1375	Q8F6D3	Unknown	Extracellular and outer membrane	Extracellular	Outer membrane	0	yes
LA1377	Q8F6D1	Unknown	Cytoplasmic & periplasmic	Unknown	Cytoplasmic & inner membrane	0	No
LA1385	Q8F6C3	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1389	Q8F6B9	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	8	No
LA1390	Q8F6B8	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	7	No
LA1393	Q8F6B5	Unknown	Outer membrane, periplasmic, cytoplasmic	Inner membrane	Outer membrane	0	No
LA1396	Q8F6B2	Cytoplasmic	Extracellular, Cytoplasmic and outer membrane	Cytoplasmic	Cytoplasmic	0	No
LA1398	Q8F6B1	Unknown	Cytoplasmic & periplasmic	Extracellular	Outer membrane	0	yes

LA1400	Q8F6A9	Unknown	Extracellular and outer membrane	Outer membrane	Outer membrane	0	yes
LA1402	Q8F6A7	Unknown	Extracellular	Periplasmic	Extracellular	0	yes
LA1403	Q8F6A6	Cytoplasmic membrane	Inner membrane	Periplasmic	Inner membrane	0	No
LA1404	Q8F6A5	Extracellular	Outer membrane	Extracellular	Outer membrane	0	yes
LA1406a	D4YW32	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1412	Q8F697	Unknown	Outer membrane	Inner membrane	Inner membrane	1	No
LA1413	Q8F695	Cytoplasmic	Cytoplasmic	Inner membrane	Outer membrane	1	No
LA1420	Q8F689	Unknown	Cytoplasmic	Cytoplasmic	Extracellular	0	No
LA1421	Q8F688	Cytoplasmic	Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1429	Q8F680	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1439	Q8F670	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA1440	Q8F669	Cytoplasmic	Cytoplasmic	Periplasmic	Inner membrane	1	No
LA1443	Q8F666	Cytoplasmic	Cytoplasmic	Cytoplasmic	Outer membrane	0	No
LA1444	Q8F667	Unknown	Cytoplasmic	Unknown	Cytoplasmic & Outer membrane	0	No
LA1452	Q8F659	Unknown	Outer membrane	Outer membrane	Cytoplasmic & Outer membrane	22	No
LA1453	Q8F658	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1454	Q8F657	Outer membrane	Outer membrane	Extracellular	Outer membrane	12	No
LA1455	Q8F656	Unknown	Cytoplasmic	Unknown	Cytoplasmic	0	No
LA1459a	D4YW33	Unknown	Extracellular and outer membrane	Unknown	Cytoplasmic & Outer membrane	0	No
LA1468	Q8F644	Cytoplasmic membrane	Extracellular	Extracellular	Outer membrane	0	yes
LA1470	Q8F642	Unknown	Outer membrane	Cytoplasmic	Outer membrane	0	No
LA1473	Q8F639	Unknown	Cytoplasmic & Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1474	Q8F638	Cytoplasmic membrane	Cytoplasmic & inner membrane	Inner membrane	Inner membrane	4	No
LA1478	Q8F634	Cytoplasmic	Cytoplasmic	Unknown	Cytoplasmic & inner membrane	0	No
LA1479	Q8F633	Cytoplasmic	Extracellular, periplasmic and cytoplasmic	Inner membrane	Extracellular and outer membrane	0	No
LA1484	Q8F627	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1489	Q8F623	Unknown	Cytoplasmic & Outer membrane	Cytoplasmic	Cytoplasmic & inner membrane	0	No

LA1494	Q8F618	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1495	Q8F617	Cytoplasmic	Outer membrane, Inner membrane, cytoplasmic	Outer membrane	Outer membrane	0	No
LA1496	Q8F616	Unknown	Outer membrane, periplasmic, cytoplasmic	Outer membrane	Outer membrane	0	No
LA1497	Q8F615	Unknown	Extracellular and cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1498	Q8F614	Cytoplasmic	Extracellular and cytoplasmic	Cytoplasmic	Extracellular and cytoplasmic	0	yes
LA1501	Q8F611	Unknown	Outer membrane	Inner membrane	Outer membrane	16	No
LA1506	Q8F606	Unknown	Cytoplasmic	Inner membrane	Cytoplasmic & inner membrane	0	No
LA1507	Q8F605	Unknown	Outer membrane	Extracellular	Outer membrane	16	No
LA1508	Q8F604	Unknown	Outer membrane	Extracellular	Periplasmic & inner membrane	0	No
LA1510	Q8F602	Outer membrane	Outer membrane	Extracellular	Outer membrane	16	No
LA1512	Q8F600	Cytoplasmic	Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1515	Q8F5Z8	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1517a	D4YW35	Cytoplasmic	Cytoplasmic	Inner membrane	Extracellular and outer membrane	1	No
LA1519	Q8F5Z5	Cytoplasmic membrane	Extracellular, periplasmic and cytoplasmic	Cytoplasmic	Outer membrane	0	No
LA1520	Q8F5Z4	Cytoplasmic membrane	Cytoplasmic & Outer membrane	Inner membrane	Outer membrane	3	No
LA1522	Q8F5Z2	Unknown	Cytoplasmic & Outer membrane	Cytoplasmic	Outer membrane	0	No
LA1523	Q8F5Z1	Unknown	Cytoplasmic & Outer membrane	Inner membrane	Cytoplasmic & inner membrane	0	No
LA1524	Q8F5Z0	Cytoplasmic membrane	Periplasmic	Cytoplasmic	Outer membrane	0	No
LA1536	Q8F5X9	Cytoplasmic	Cytoplasmic	Unknown	Inner membrane	0	No
LA1537	Q8F5X8	Cytoplasmic	Cytoplasmic	Inner membrane	Cytoplasmic & inner membrane	0	No
LA1538	Q8F5X7	Unknown	Extracellular	Inner membrane	Extracellular and outer membrane	0	yes
LA1539	Q8F5X6	Unknown	Extracellular	Outer membrane	Outer membrane	0	yes
LA1542	Q8F5X4	Unknown	Outer membrane	Outer membrane	Outer membrane	14	No
LA1544	Q8F5X2	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA1550	Q8F5W6	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	3	No
LA1554	Q8F5W2	Cytoplasmic	Inner membrane	Inner	Inner membrane	4	No

		membrane		membrane			
LA1559	Q8F5V7	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1560	Q8F5V6	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	3	No
LA1572	Q8F5U5	Cytoplasmic	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1584	Q8F5T3	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1587	Q8F5T0	Cytoplasmic	Outer membrane	Cytoplasmic	Cytoplasmic	0	No
LA1588	Q8F5S9	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1591	Q8F5S6	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1593	Q8F5S4	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1599	Q8F5R8	Cytoplasmic	Cytoplasmic	Inner membrane	Outer membrane	0	No
LA1604	Q8F5R3	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	11	No
LA1608	Q8F5Q9	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1612	Q8F5Q5	Unknown	Outer membrane	Unknown	Cytoplasmic & Outer membrane	0	No
LA1620	Q8F5P7	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1630	Q8F5N7	Cytoplasmic	Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1636	Q8F5N1	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1637	Q8F5N0	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1639	G1UB24	Cytoplasmic membrane	Outer membrane	Outer membrane	Outer membrane	0	yes
LA1641	G1UB22	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	11	No
LA1648	Q8F5M4	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	12	No
LA1652	Q8F5M1	Unknown	Cytoplasmic & Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1665	Q8F5L5	Unknown	Cytoplasmic	Cytoplasmic	Inner membrane	0	No
LA1668	Q8F5L3	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1669	Q8F5L2	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA1686	Q8F5J5	Unknown	Cytoplasmic	Inner membrane	Inner membrane	0	No
LA1690	Q8F5J1	Cytoplasmic membrane	Outer membrane	Inner membrane	Extracellular and outer membrane	0	No
LA1691	Q8F5J0	Unknown	Extracellular	Outer membrane	Periplasmic	0	No
LA1694	Q8F5I7	Cytoplasmic	Extracellular and cytoplasmic	Cytoplasmic	Extracellular and cytoplasmic	0	yes
LA1698	Q8F5I3	Cytoplasmic	Cytoplasmic & Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No

LA1700	Q8F5I1	Unknown	Cytoplasmic	Periplasmic	Extracellular and outer membrane	0	No
LA1701	Q8F5I0	Unknown	Cytoplasmic	Inner membrane	Cytoplasmic & Outer membrane	1	No
LA1707	Q8F5H4	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1715	Q8F5G6	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA1725	Q8F5F5	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1727	Q8F5F4	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1728	Q8F5F3	Cytoplasmic	Cytoplasmic & Outer membrane	Periplasmic	Extracellular	0	No
LA1730	Q8F5F2	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1733	Q8F5E9	Unknown	Outer membrane and inner membrane	Inner membrane	Inner membrane	2	No
LA1736	Q8F5E6	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1737	Q8F5E5	Unknown	Outer membrane	Outer membrane	Outer membrane	0	yes
LA1739	Q8F5E3	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1740	Q8F5E2	Unknown	Periplasmic	Cytoplasmic	Periplasmic	0	No
LA1752	Q8F5D1	Cytoplasmic	Cytoplasmic	Cytoplasmic	Extracellular and cytoplasmic	0	No
LA1753	Q8F5D0	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1756	Q8F5C7	Unknown	Extracellular and outer membrane and cytoplasmic	Extracellular	Cytoplasmic & Outer membrane	0	yes
LA1757	Q8F5C6	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1758	Q8F5C5	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1759	Q8F5C4	Unknown	Extracellular	Extracellular	Extracellular	0	yes
LA1761	Q8F5C3	Unknown	Extracellular and periplasmic	Extracellular	Extracellular	0	yes
LA1762	Q8F5C2	Outer membrane	Outer membrane	Outer membrane	Extracellular	0	yes
LA1763	Q8F5C1	Unknown	Extracellular and outer membrane	Outer membrane	Extracellular and periplasmic	0	yes
LA1764	Q8F5C0	Unknown	Outer membrane	Outer membrane	Extracellular and periplasmic	0	yes
LA1767	Q8F5B7	Cytoplasmic	Cytoplasmic & Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1771	Q8F5B3	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1772	Q8F5B2	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1773	Q8F5B1	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	7	No

LA1774	Q8F5B0	Unknown	Outer membrane, periplasmic, cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1775	Q8F5A9	Unknown	Cytoplasmic	Inner membrane	Inner membrane	2	No
LA1776	Q8F5A8	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1778	Q8F5A6	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1779	Q8F5A5	Cytoplasmic membrane	Cytoplasmic	Inner membrane	Inner membrane	2	No
LA1782	Q8F5A2	Cytoplasmic membrane	Cytoplasmic & periplasmic	Extracellular	Outer membrane	0	No
LA1783	Q8F5A1	Unknown	Cytoplasmic	Cytoplasmic	Inner membrane	1	No
LA1786	Q8F598	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1789	Q8F595	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	3	No
LA1791	Q8F593	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1794	Q8F590	Cytoplasmic	Cytoplasmic	Extracellular	Extracellular	0	yes
LA1796	Q8F588	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1797	Q8F587	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1799	Q8F585	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1800	Q8F584	Unknown	Cytoplasmic	Unknown	Cytoplasmic & inner membrane	0	No
LA1803	Q8F581	Unknown	Cytoplasmic	Cytoplasmic	Extracellular and Cytoplasmic	0	No
LA1806	Q8F578	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1807	Q8F577	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Extracellular	0	No
LA1808a	D4YW38	Unknown	Inner membrane, periplasmic, cytoplasmic	Unknown	Cytoplasmic & inner membrane	0	No
LA1809	Q8F575	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	6	No
LA1813	Q8F573	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA1813a	D4YW39	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1815	Q8F571	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1816	Q8F569	Unknown	Extracellular and periplasmic, cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1816a	D4YW40	Unknown	Cytoplasmic & Outer membrane	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA1820	Q8F566	Unknown	Extracellular and periplasmic, cytoplasmic	Unknown	Cytoplasmic & periplasmic	0	No
LA1823	Q8F563	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1824	Q8F562	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1825	Q8F561	Cytoplasmic	Cytoplasmic & Outer	Cytoplasmic	Cytoplasmic	0	No

			membrane				
LA1826	Q8F559	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1827	Q8F560	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1829	Q8F557	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1831	Q8F555	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1833	Q8F554	Cytoplasmic	Periplasmic & Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1835	Q8F551	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1836	Q8F550	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1839	Q8F547	Cytoplasmic	Cytoplasmic & Outer membrane	Cytoplasmic	Extracellular	0	No
LA1841	Q8F545	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1844	Q8F543	Unknown	Extracellular and periplasmic	Extracellular	Cytoplasmic	0	yes
LA1846	Q8F541	Unknown	Periplasmic	Unknown	Periplasmic and membrane bound	0	No
LA1847	Q8F540	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1849	Q8F538	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1851	Q8F536	Unknown	Cytoplasmic	Inner membrane	Inner membrane	2	No
LA1852	Q8F535	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1854	Q8F533	Unknown	Outer membrane	Cytoplasmic	Cytoplasmic & periplasmic	0	No
LA1861	Q8F526	Unknown	Outer membrane	Extracellular	Extracellular	0	yes
LA1867	Q8F521	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1868	Q8F520	Cytoplasmic	Cytoplasmic	Inner membrane	Extracellular and Cytoplasmic	0	No
LA1869	Q8F519	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA1870	Q8F518	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1872	Q8F516	Cytoplasmic	Cytoplasmic	Inner membrane	Inner membrane	0	No
LA1873	Q8F515	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Outer membrane	0	No
LA1874	Q8F514	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1883	Q8F505	Cytoplasmic	Cytoplasmic	Periplasmic	Cytoplasmic & Outer membrane	0	No
LA1884	Q8F504	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1885	Q8F503	Cytoplasmic	Inner membrane	Inner	Inner membrane	7	No

		membrane		membrane			
LA1887	Q8F501	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	7	No
LA1892	Q8F4Z6	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1894	Q8F4Z4	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1900	Q8F4Y8	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1904	Q8F4Y4	Unknown	Outer membrane	Inner membrane	Outer membrane	3	No
LA1905	Q8F4Y3	Unknown	Extracellular and outer membrane	Outer membrane	Extracellular	0	yes
LA1906	Q8F4Y2	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1910	Q8F4X8	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1912	Q8F4X6	Unknown	Outer membrane	Unknown	Outer membrane	0	yes
LA1916	Q8F4X2	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1917	Q8F4X1	Unknown	Outer membrane	Inner membrane	Extracellular and outer membrane	0	yes
LA1918	Q8F4X0	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA1922	Q8F4W5	Cytoplasmic	Extracellular and outer membrane	Extracellular	Extracellular	1	yes
LA1924	Q8F4W4	Cytoplasmic	Outer membrane	Inner membrane	Inner membrane	2	No
LA1927	Q8F4W1	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1931	Q8F4V8	Unknown	Outer membrane	Outer membrane	Cytoplasmic & inner membrane	10	No
LA1934	Q8F4V5	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1935	Q8F4V4	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA1941	Q8F4U8	Unknown	Cytoplasmic	Unknown	Cytoplasmic	0	No
LA1942	Q8F4U7	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA1945	Q8F4U4	Unknown	Cytoplasmic	Extracellular	Inner membrane	0	No
LA1946	Q8F4U3	Outer membrane	Outer membrane	Inner membrane	Outer membrane	0	No
LA1947	Q8F4U2	Cytoplasmic	Cytoplasmic	Cytoplasmic	Inner membrane	0	No
LA1949	Q8F4U0	Cytoplasmic	Outer membrane	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA1950	Q8F4T9	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1951a	D4YW42	Cytoplasmic	Cytoplasmic	Inner membrane	Inner membrane	2	No
LA1954	Q8F4T5	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1956	Q8F4T3	Unknown	Cytoplasmic	Unknown	Cytoplasmic & Outer membrane	0	No
LA1958	Q8F4T1	Unknown	Outer membrane	Cytoplasmic	Inner membrane	0	No
LA1961	Q8F4S8	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No

LA1962	Q8F4S7	Unknown	Cytoplasmic	Outer membrane	Cytoplasmic & Outer membrane	0	No
LA1963	Q8CVE8	Outer membrane	Cytoplasmic	Outer membrane	Outer membrane	0	yes
LA1965	Q8F4S5	Unknown	Extracellular	Outer membrane	Outer membrane	8	yes
LA1968	Q8F4S2	Unknown	Extracellular	Outer membrane	Outer membrane	16	yes
LA1971	Q8F4R9	Unknown	Cytoplasmic	Cytoplasmic	Inner membrane	0	No
LA1973	Q8F4R7	Cytoplasmic membrane	Cytoplasmic & inner membrane	Inner membrane	Inner membrane	2	No
LA1978	Q8F4R2	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	11	No
LA1980	Q8F4R0	Cytoplasmic	Cytoplasmic	Unknown	Extracellular and Cytoplasmic	0	No
LA1981	Q8F4Q9	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	11	No
LA1984	Q8F4Q7	Cytoplasmic membrane	Inner membrane	Inner membrane	Outer membrane	11	No
LA1985	Q8F4Q5	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA1987	Q8F4Q3	Unknown	Outer membrane	Unknown	Cytoplasmic & Outer membrane	0	No
LA1996	Q8F4P4	Unknown	Outer membrane & inner membrane, periplasmic	Inner membrane	Inner membrane	1	No
LA1999	Q8F4P1	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2003	Q8F4N7	Cytoplasmic membrane	Outer membrane	Periplasmic	Cytoplasmic & inner membrane	0	No
LA2004a	D4YW44	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA2006	Q8F4N4	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2013	Q8F4M7	Unknown	Cytoplasmic	Inner membrane	Inner membrane	0	No
LA2016	Q8F4M4	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA2020	Q8F4M1	Unknown	Cytoplasmic	Unknown	Outer membrane	0	No
LA2024	Q8F4L7	Unknown	Outer membrane, periplasmic, cytoplasmic	Periplasmic	Outer membrane	0	No
LA2025	Q8F4L6	Periplasmic	Cytoplasmic & Outer membrane	Extracellular	Outer membrane	0	No
LA2026	Q8F4L5	Unknown	Outer membrane	Inner membrane	Outer membrane	0	yes
LA2027	Q8F4L4	Cytoplasmic	Cytoplasmic & Outer membrane	Unknown	Cytoplasmic & Outer membrane	0	No
LA2031	Q8F4L0	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2035	Q8F4K7	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2036	Q8F4K5	Cytoplasmic	Outer membrane	Inner membrane	Outer membrane	0	No
LA2041	Q8F4K0	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic &	0	No

					Outer membrane		
LA2046	Q8F4J5	Unknown	Cytoplasmic & inner membrane	Inner membrane	Outer membrane	1	No
LA2052	Q8F4I9	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	12	No
LA2053	Q8F4I8	Cytoplasmic	Cytoplasmic	Inner membrane	Cytoplasmic	1	No
LA2059	Q8F4I3	Outer membrane	Outer membrane	Cytoplasmic	Outer membrane	0	yes
LA2064	Q8F4H7	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA2065	Q8F4H6	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	1	No
LA2066	Q8F4H5	Unknown	Cytoplasmic & periplasmic	Periplasmic	Extracellular and outer membrane	0	No
LA2074	Q8F4G6	Unknown	Cytoplasmic	Outer membrane	Extracellular and Inner membrane	0	yes
LA2078	Q8F4G3	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2080	Q8F4G1	Cytoplasmic	Cytoplasmic	Inner membrane	Outer membrane	0	No
LA2088	Q8F4F3	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2091	Q8F4F0	Cytoplasmic	Cytoplasmic & Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2100	Q8F4E1	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA2100a	D4YW46	Unknown	Cytoplasmic	Cytoplasmic	Inner membrane	0	No
LA2102	Q8F4D9	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2120	Q8F4C1	Cytoplasmic	Cytoplasmic & Outer membrane	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA2121	Q8F4C0	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2123	Q8F4B8	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2127	Q8F4B4	Cytoplasmic	Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2131	Q8F4B0	Cytoplasmic	Cytoplasmic	Cytoplasmic	Periplasmic	0	No
LA2136	Q8F4A5	Cytoplasmic membrane	Outer membrane	Inner membrane	Inner membrane	1	No
LA2137	Q8F4A4	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2149	Q8F493	Unknown	Cytoplasmic & Outer membrane	Inner membrane	Inner membrane	0	No
LA2154a	D4YW47	Unknown	Cytoplasmic & periplasmic	Unknown	Cytoplasmic & periplasmic	0	No
LA2155	Q8F490	Cytoplasmic membrane	Inner membrane, periplasmic, cytoplasmic	Inner membrane	Inner membrane	2	No
LA2157	Q8F488	Unknown	Cytoplasmic	Unknown	Cytoplasmic & Outer membrane	0	No

LA2160	Q8F485	Cytoplasmic	Cytoplasmic & Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2168	Q8F477	Outer membrane	Outer membrane	Cytoplasmic	Outer membrane	18	No
LA2174	Q8F471	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2176	Q8F469	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA2180	Q8F467	Unknown	Cytoplasmic & Outer membrane	Inner membrane	Inner membrane	1	No
LA2183	Q8F464	Cytoplasmic membrane	Cytoplasmic	Inner membrane	Outer membrane	0	No
LA2189	Q8F458	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2191	Q8F456	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2192	Q8F455	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2195	Q8F452	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2196	Q8F451	Cytoplasmic membrane	Outer membrane	Inner membrane	Inner membrane	7	No
LA2203	Q8F444	Unknown	Cytoplasmic & Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2204	Q8F443	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2206	Q8F441	Unknown	Cytoplasmic	Extracellular	Cytoplasmic & Outer membrane	0	No
LA2208	Q8F439	Unknown	Extracellular and outer membrane	Cytoplasmic	Extracellular	1	yes
LA2213	Q8F434	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2227	Q8F420	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2227a	D4YW48	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2228	Q8F419	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2240	Q8F408	Unknown	Extracellular and Periplasmic	Periplasmic	Cytoplasmic & Outer membrane	0	No
LA2241	Q8F407	Unknown	Cytoplasmic	Outer membrane	Extracellular and Cytoplasmic	0	yes
LA2244	Q8F404	Unknown	Cytoplasmic	Inner membrane	Extracellular and Inner membrane	0	No
LA2248	Q8F400	Unknown	Periplasmic	Periplasmic	Extracellular and Periplasmic	0	No
LA2249	Q8F3Z9	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2254	Q8F3Z5	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2255	Q8F3Z4	Cytoplasmic membrane	Cytoplasmic & Outer membrane	Periplasmic	Outer membrane	1	No
LA2257	Q8F3Z1	Cytoplasmic	Cytoplasmic & inner membrane	Inner membrane	Inner membrane	2	No
LA2258	Q8F3Z2	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No

LA2259	Q8F3Z0	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA2268	Q8F3Y1	Cytoplasmic	Cytoplasmic	Inner membrane	Outer membrane	1	No
LA2272	Q8F3X7	Unknown	Outer membrane	Outer membrane	Outer membrane	0	yes
LA2273	Q8F3X6	Unknown	Extracellular	Extracellular	Cytoplasmic & Outer membrane	0	yes
LA2278	Q8F3X1	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2279	Q8F3X0	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2284	Q8F3W5	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	5	No
LA2285	Q8F3W4	Unknown	Outer membrane, periplasmic, cytoplasmic	Periplasmic	Extracellular	0	No
LA2287	Q8F3W2	Unknown	Cytoplasmic	Cytoplasmic	Extracellular and Cytoplasmic	0	No
LA2289	Q8F3W0	Cytoplasmic	Cytoplasmic	Inner membrane	Outer membrane	1	No
LA2293	Q8F3V6	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA2297	Q8F3V3	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2298	Q8F3V2	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2299	Q8F3V1	Unknown	Cytoplasmic	Cytoplasmic	Extracellular and Cytoplasmic	0	No
LA2300	Q8F3V0	Unknown	Extracellular	Extracellular	Cytoplasmic & Outer membrane	0	yes
LA2301	Q8F3U9	Unknown	Extracellular	Cytoplasmic	Cytoplasmic & Outer membrane	0	yes
LA2302	Q8F3U8	Unknown	Extracellular and Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA2308	Q8F3U2	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA2311	Q8F3T8	Unknown	Cytoplasmic & Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2316	Q8F3T4	Unknown	Periplasmic	Inner membrane	Outer membrane	0	No
LA2322	Q8F3S8	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2323	Q8F3S7	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2330	Q8F3S0	Unknown	Outer membrane	Periplasmic	Outer membrane	0	No
LA2331	Q8F3R9	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2336	Q8F3R4	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2340	Q8F3R0	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2342	Q8F3Q8	Unknown	Extracellular and outer membrane	Extracellular	Extracellular	0	yes
LA2352	Q8F3P9	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2353	Q8F3P7	Unknown	Outer membrane, periplasmic, cytoplasmic	Inner membrane	Inner membrane	0	No

LA2354	Q8F3P8	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	5	No
LA2362	Q8F3N9	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2365	Q8F3N6	Cytoplasmic	Cytoplasmic	Inner membrane	Inner membrane	1	No
LA2366	Q8F3N5	Unknown	Cytoplasmic	Inner membrane	Inner membrane	1	No
LA2370	Q8F3N1	Unknown	Extracellular and Periplasmic	Inner membrane	Extracellular and outer membrane	0	yes
LA2371	Q8F3N0	Unknown	Outer membrane and periplasmic	Outer membrane	Extracellular and outer membrane	0	yes
LA2380	Q8F3M1	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2385	Q8F3L6	Unknown	Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2395	Q8F3K7	Cytoplasmic	Outer membrane	Inner membrane	Inner membrane	1	No
LA2399	Q8F3K3	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2407	Q8F3J5	Cytoplasmic	Cytoplasmic & Outer membrane	Outer membrane	Outer membrane, periplasmic,	0	No
LA2419	Q8F3I4	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2430	Q8F3H3	Unknown	Cytoplasmic	Unknown	Cytoplasmic & Outer membrane	0	No
LA2436	Q8F3G7	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2437	Q8F3G6	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA2443	Q8F3G3	Extracellular (Host associated)	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	yes
LA2444	Q8F3G2	Outer membrane	Outer membrane	Inner membrane	Outer membrane	10	No
LA2444a	D4YVX5	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2446	Q8F3G0	Unknown	Cytoplasmic	Unknown	Cytoplasmic & inner membrane	0	No
LA2447	Q8F3F9	Extracellular (Host associated)	Outer membrane & inner membrane, Cytoplasmic	Unknown	Extracellular	0	yes
LA2450	Q8F3F6	Extracellular (Host associated)	Outer membrane & inner membrane, Cytoplasmic, Extracellular	Unknown	Extracellular	0	yes
LA2454	Q8F3F2	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2456	Q8F3F0	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	8	No
LA2458	Q8F3E8	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2465	Q8F3E1	Cytoplasmic	Cytoplasmic	Inner	Cytoplasmic &	1	No

				membrane	inner membrane		
LA2467	Q8F3D9	Cytoplasmic	Cytoplasmic	Inner membrane	Outer membrane	1	No
LA2468	Q8F3D8	Unknown	Outer membrane	Inner membrane	Outer membrane	1	No
LA2471	Q8F3D5	Unknown	Extracellular and outer membrane	Inner membrane	Outer membrane	0	No
LA2472	Q8F3D4	Unknown	Periplasmic	Extracellular	Outer membrane	0	No
LA2478	Q8F3C8	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2484	Q8F3C3	Unknown	Cytoplasmic	Inner membrane	Outer membrane	0	No
LA2486	Q8F3C1	Cytoplasmic	Cytoplasmic	Inner membrane	Cytoplasmic & inner membrane	1	No
LA2488	Q8F3B9	Unknown	Outer membrane, periplasmic, cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2490	Q8F3B7	Cytoplasmic	Cytoplasmic	Inner membrane	Cytoplasmic	1	No
LA2503	Q8F3A4	Unknown	Cytoplasmic	Unknown	Inner membrane	0	No
LA2510	Q8F398	Outer membrane	Outer membrane	Extracellular	Extracellular and outer membrane	28	No
LA2519	Q8F390	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA2529	Q8F382	Cytoplasmic membrane	Periplasmic	Extracellular	Outer membrane	0	No
LA2530	Q8F381	Unknown	Periplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2531	Q8F380	Unknown	Periplasmic	Periplasmic	Extracellular	0	No
LA2538	Q8F373	Unknown	Outer membrane	Inner membrane	Outer membrane	3	No
LA2545	Q8F366	Cytoplasmic membrane	Outer membrane	Inner membrane	Outer membrane	2	No
LA2557	Q8F354	Unknown	Cytoplasmic & Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2575	Q8F336	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2576	Q8F335	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA2584	Q8F327	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA2587	Q8F324	Cytoplasmic membrane	Outer membrane	Cytoplasmic	Outer membrane	4	No
LA2588	Q8F323	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2595	Q8F316	Unknown	Extracellular and outer membrane and periplasmic	Extracellular	Extracellular and Periplasmic	0	yes
LA2596	Q8F315	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2600	Q8F311	Cytoplasmic	Cytoplasmic & Outer membrane	Inner membrane	Extracellular and Cytoplasmic	1	No

LA2601	Q8F310	Unknown	Periplasmic & Outer membrane	Extracellular	Periplasmic	0	No
LA2604	Q8F307	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	2	No
LA2615	Q8F2Z6	Unknown	Cytoplasmic	Extracellular	Cytoplasmic & inner membrane	0	No
LA2617	Q8F2Z3	Outer membrane	Outer membrane	Inner membrane	Extracellular and outer membrane	8	No
LA2624	Q8F2Y7	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2628	Q8F2Y3	Unknown	Outer membrane	Inner membrane	Outer membrane	0	No
LA2640	Q8F2X3	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2640a	D4YVX6	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & periplasmic	0	No
LA2642	Q8F2X1	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2645	Q8F2W8	Cytoplasmic	Cytoplasmic	Unknown	Cytoplasmic	0	No
LA2648	Q8F2W5	Cytoplasmic membrane	Cytoplasmic	Inner membrane	Inner membrane	2	No
LA2656	Q8F2W1	Unknown	Outer membrane	Cytoplasmic	Outer membrane	0	No
LA2671	Q8F2U7	Unknown	Cytoplasmic & periplasmic	Inner membrane	Inner membrane	0	No
LA2672	Q8F2U6	Unknown	Outer membrane	Inner membrane	Cytoplasmic & Outer membrane	0	No
LA2676	Q8F2U2	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	7	No
LA2678	Q8F2U0	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2681	Q8F2T7	Cytoplasmic	Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2682	Q8F2T6	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2683	Q8F2T5	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA2684	Q8F2T4	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2686	Q8F2T2	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2693	Q8F2S5	Unknown	Cytoplasmic	Cytoplasmic	Extracellular and Cytoplasmic	0	No
LA2697	Q8F2S1	Unknown	Cytoplasmic & inner membrane	Inner membrane	Inner membrane	0	No
LA2698	Q8F2S0	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2703	Q8F2R5	Cytoplasmic	Cytoplasmic & Outer membrane	Cytoplasmic	Extracellular and Cytoplasmic	0	No
LA2705	Q8F2R3	Unknown	Cytoplasmic	Inner membrane	Cytoplasmic	0	No

LA2711	Q8F2Q7	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	14	No
LA2713	Q8F2Q5	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA2719	Q8F2P9	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	12	No
LA2720	Q8F2P8	Unknown	Cytoplasmic	Unknown	Cytoplasmic	0	No
LA2722	Q8F2P6	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2724	Q8F2P4	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	3	No
LA2726	Q8F2P1	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2730	Q8F2N9	Cytoplasmic	Cytoplasmic	Inner membrane	Cytoplasmic & inner membrane	0	No
LA2731	Q8F2N8	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Periplasmic	0	No
LA2738	Q8F2N1	Cytoplasmic	Cytoplasmic	Periplasmic	Outer membrane	0	No
LA2739	Q8F2N0	Cytoplasmic	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2741	Q8F2M9	Cytoplasmic membrane	Outer membrane & inner membrane, Cytoplasmic	Outer membrane	Outer membrane	10	No
LA2742	Q8F2M8	Unknown	Outer membrane	Unknown	Extracellular and Periplasmic	0	yes
LA2746	Q8F2M3	Outer membrane	Outer membrane	Outer membrane	Outer membrane	18	No
LA2751	Q8F2M0	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2751a	D4YVX7	Unknown	Outer membrane	Periplasmic	Outer membrane	0	No
LA2753	Q8F2L8	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2762	Q8F2K9	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2765	Q8F2K6	Unknown	Cytoplasmic	Unknown	Outer membrane	0	No
LA2767	Q8F2K4	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2770	Q8F2K1	Cytoplasmic membrane	Outer membrane & inner membrane, Cytoplasmic	Inner membrane	Inner membrane	1	No
LA2773	Q8F2J8	Cytoplasmic	Extracellular and Cytoplasmic	Outer membrane	Cytoplasmic & Outer membrane	0	No
LA2774	Q8F2J7	Cytoplasmic	Cytoplasmic	Cytoplasmic	Inner membrane	0	No
LA2783a	D4YVX8	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA2786	Q8F2I5	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	1	No
LA2786a	D4YVX9	Unknown	Cytoplasmic	Unknown	Cytoplasmic	0	No
LA2787	Q8F2I4	Unknown	Cytoplasmic & Outer membrane, Periplasmic	Inner membrane	Outer membrane	2	No
LA2789	Q8F2I2	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No

LA2796	Q8F2H5	Outer membrane	Outer membrane	Inner membrane	Outer membrane	16	No
LA2797	Q8F2H4	Unknown	Extracellular and outer membrane and periplasmic	Periplasmic	Extracellular and Outer membrane	0	yes
LA2798	Q8F2H3	Cytoplasmic membrane	Inner membrane	Inner membrane	Outer membrane	4	No
LA2800	Q8F2H1	Cytoplasmic membrane	Outer membrane	Inner membrane	Outer membrane	4	No
LA2801	Q8F2H0	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	13	No
LA2811	Q8F2G0	Cytoplasmic	Cytoplasmic	Unknown	Cytoplasmic & inner membrane	0	No
LA2812	Q8F2F9	Unknown	Cytoplasmic	Unknown	Cytoplasmic & Outer membrane	0	No
LA2816	Q8F2F6	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2817	Q8F2F4	Cytoplasmic	Cytoplasmic	Extracellular	Cytoplasmic	0	No
LA2818	Q8F2F3	Outer membrane	Outer membrane	Inner membrane	Outer membrane	12	No
LA2820	Q8F2F1	Unknown	Extracellular and Cytoplasmic and periplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2821	Q8F2F0	Cytoplasmic	Cytoplasmic	Unknown	Cytoplasmic & inner membrane	0	No
LA2824	Q8F2E7	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA2825a	D4YW02	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	12	No
LA2826	Q8F2E5	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2835	Q8F2D6	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA2836	Q8F2D5	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA2845a	D4YVY0	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2859	Q8F2B6	Periplasmic	Cytoplasmic & periplasmic	Cytoplasmic	Periplasmic and membrane bound	0	No
LA2865	Q8F2B1	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2866	Q8F2B0	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2870	Q8F2A6	Unknown	Periplasmic & Outer membrane	Cytoplasmic	Extracellular	0	No
LA2872	Q8F2A4	Cytoplasmic	Cytoplasmic	Extracellular	Cytoplasmic & Outer membrane	0	No
LA2873	Q8F2A3	Cytoplasmic	Cytoplasmic	Inner membrane	Outer membrane	0	No
LA2874	Q8F2A1	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	6	No
LA2876	Q8F2A0	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2881	Q8F295	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No

LA2882	Q8F294	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2884	Q8F292	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA2892	Q8F284	Cytoplasmic	Cytoplasmic	Inner membrane	Inner membrane	0	No
LA2900	Q8F276	Unknown	Cytoplasmic & Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2920	Q8F257	Unknown	Outer membrane	Outer membrane	Cytoplasmic & inner membrane	0	No
LA2922	Q8F255	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2940	Q8F237	Outer membrane	Outer membrane	Outer membrane	Outer membrane	10	No
LA2942	Q8F235	Extracellular	Outer membrane	Inner membrane	Outer membrane	0	yes
LA2943	Q8F234	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2946	Q8F231	Unknown	Cytoplasmic	Inner membrane	Inner membrane	0	No
LA2947a	D4YVY2	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA2948	Q8F229	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2952	Q8F226	Outer membrane	Outer membrane	Inner membrane	Outer membrane	18	No
LA2958	Q8F220	Unknown	Outer membrane	Inner membrane	Extracellular	0	No
LA2967	Q8F211	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2970	Q8F207	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2971	Q8F208	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	15	No
LA2975	Q8F203	Unknown	Outer membrane	Outer membrane	Inner membrane	0	No
LA2976	Q8F202	Cytoplasmic membrane	Outer membrane	Inner membrane	Outer membrane	12	No
LA2984	Q8F1Z4	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA2986	Q8F1Z2	Cytoplasmic	Cytoplasmic & Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA2987	Q8F1Z1	Cytoplasmic membrane	Inner membrane	Cytoplasmic	Inner membrane	5	No
LA2992	Q8F1Y6	Unknown	Extracellular and outer membrane	Outer membrane	Extracellular	0	yes
LA2995	Q8F1Y3	Unknown	Extracellular and Cytoplasmic	Extracellular	Cytoplasmic	0	yes
LA3012	Q8F1W6	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	7	No
LA3015	Q8F1W3	Unknown	Cytoplasmic	Unknown	Extracellular and Cytoplasmic	0	No
LA3016	Q8F1W2	Unknown	Extracellular and Cytoplasmic and periplasmic	Cytoplasmic	Extracellular and Cytoplasmic	0	No
LA3018	Q8F1W0	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	2	No

LA3019	Q8F1V9	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3020	Q8F1V8	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA3024	Q8F1V4	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3025	Q8F1V3	Unknown	Cytoplasmic	Inner membrane	Cytoplasmic & Outer membrane	0	No
LA3031	Q8F1U7	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA3036	Q8F1U2	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3039	Q8F1T9	Cytoplasmic	Cytoplasmic	Inner membrane	Cytoplasmic & Outer membrane	0	No
LA3042	Q8F1T6	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3044	Q8F1T3	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3047	Q8F1T1	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3049	Q8F1S9	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA3055	Q8F1S3	Unknown	Periplasmic	Periplasmic	Cytoplasmic	0	No
LA3056	Q8F1S2	Unknown	Extracellular and outer membrane and periplasmic, Cytoplasmic	Outer membrane	Cytoplasmic & Outer membrane	0	yes
LA3069	Q8F1R0	Outer membrane	Outer membrane	Cytoplasmic	Outer membrane	1	yes
LA3072	Q8F1Q7	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	13	No
LA3076	Q8F1Q3	Unknown	Cytoplasmic	Unknown	Inner membrane and periplasmic	0	No
LA3079	Q8F1Q0	Cytoplasmic	Cytoplasmic	Unknown	Cytoplasmic	0	No
LA3083	Q8F1P6	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3091	Q8F1P0	Unknown	Outer membrane	Cytoplasmic	Outer membrane	0	yes
LA3092	Q8F1N8	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA3093	Q8F1N9	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3093a	D4YVY3	Unknown	Cytoplasmic	Cytoplasmic	Inner membrane	0	No
LA3102	Q8F1N0	Outer membrane	Outer membrane	Outer membrane	Outer membrane	22	No
LA3105	Q8F1M7	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA3115	Q8F1L8	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA3117	Q8F1L6	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3119	Q8F1L4	Cytoplasmic	Periplasmic	Cytoplasmic	Extracellular and Periplasmic	0	No
LA3126	Q8F1K7	Cytoplasmic	Extracellular and outer membrane and periplasmic, Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No

LA3137	Q8F1J8	Unknown	Cytoplasmic	Unknown	Cytoplasmic & Outer membrane	0	No
LA3145	Q8F1J0	Unknown	Outer membrane	Outer membrane	Extracellular and Periplasmic	0	yes
LA3148	Q8F1I7	Cytoplasmic membrane	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA3150	Q8F1I5	Unknown	Extracellular and periplasmic, Cytoplasmic	Extracellular	Cytoplasmic & Outer membrane	0	yes
LA3158a	D4YVY5	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3161	Q8F1H3	Unknown	Cytoplasmic	Unknown	Cytoplasmic & periplasmic	0	No
LA3162	Q8F1H4	Unknown	Cytoplasmic	Cytoplasmic	Extracellular and Cytoplasmic	0	No
LA3165	Q8F1H1	Cytoplasmic	Cytoplasmic, periplasmic & Outer membrane	Inner membrane	Cytoplasmic & periplasmic	1	No
LA3175	Q8F1G1	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3176	Q8F1F9	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA3179	Q8F1F7	Cytoplasmic	Cytoplasmic	Unknown	Cytoplasmic & Outer membrane	0	No
LA3180	Q8F1F6	Unknown	Cytoplasmic	Cytoplasmic	Extracellular and Cytoplasmic	0	No
LA3186	Q8F1F0	Unknown	Cytoplasmic & Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3187	Q8F1E9	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3189	Q8F1E7	Unknown	Cytoplasmic & Outer membrane	Unknown	Cytoplasmic & inner membrane	0	No
LA3191	Q8F1E5	Cytoplasmic	Cytoplasmic	Cytoplasmic	Extracellular and Periplasmic	0	No
LA3193a	D4YVY6	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3196	Q8F1E0	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3201	Q8F1D5	Unknown	Extracellular and Periplasmic	Extracellular	Cytoplasmic	0	yes
LA3203	Q8F1D3	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3209	Q8F1C7	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA3213	Q8F1C3	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3214	Q8F1C2	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3215	Q8F1C1	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3217	Q8F1B9	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3220	Q8F1B6	Cytoplasmic membrane	Cytoplasmic & inner membrane	Inner membrane	Inner membrane	2	No
LA3224	Q8F1B2	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer	0	No

					membrane		
LA3227	Q8F1A9	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3230	Q8F1A6	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	6	No
LA3231	Q8F1A5	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3239	Q8F197	Cytoplasmic membrane	Cytoplasmic & periplasmic	Outer membrane	Inner membrane	0	No
LA3241	Q8F195	Cytoplasmic	Cytoplasmic & Outer membrane	Inner membrane	Outer membrane	1	No
LA3243	Q8F193	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3255	Q8F182	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3260	Q8F177	Unknown	Cytoplasmic	Inner membrane	Cytoplasmic & inner membrane	0	No
LA3263	Q8F174	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	10	No
LA3265	Q8F172	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Inner membrane	2	No
LA3268	Q8F169	Unknown	Periplasmic	Periplasmic	Periplasmic and inner membrane	0	No
LA3270	Q8F167	Cytoplasmic	Cytoplasmic	Outer membrane	Cytoplasmic	0	No
LA3271	Q8F166	Extracellular	Extracellular and Outer membrane	Periplasmic	Outer membrane	0	yes
LA3273	Q8F164	Unknown	Extracellular	Periplasmic	Periplasmic and membrane bound	0	No
LA3275	Q8F162	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3276	Q8F161	Extracellular	Extracellular	Outer membrane	Extracellular	0	yes
LA3277	Q8F160	Unknown	Outer membrane	Inner membrane	Outer membrane	10	No
LA3286a	D4YVY8	Unknown	Extracellular and periplasmic, Cytoplasmic	Unknown	Extracellular	0	yes
LA3287	Q8F151	Unknown	Outer membrane & inner membrane, Cytoplasmic	Unknown	Inner membrane	0	No
LA3301	Q8F137	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3303	Q8F135	Unknown	Periplasmic & Outer membrane	Inner membrane	Cytoplasmic & Outer membrane	1	No
LA3304	Q8F134	Cytoplasmic	Inner membrane	Inner membrane	Inner membrane	3	No
LA3316	Q8F123	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA3319	Q8F120	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3327	Q8F112	Unknown	Cytoplasmic	Extracellular	Cytoplasmic & Outer membrane	0	No
LA3330	Q8F110	Cytoplasmic membrane	Cytoplasmic	Inner membrane	Cytoplasmic & Outer	0	No

					membrane		
LA3331	Q8F109	Unknown	Extracellular	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3332	Q8F108	Unknown	Periplasmic	Outer membrane	Extracellular and Outer membrane	0	yes
LA3334	Q8F106	Unknown	Outer membrane	Extracellular	Cytoplasmic & Outer membrane	8	No
LA3336	Q8F104	Extracellular	Extracellular	Cytoplasmic	Extracellular	0	yes
LA3337	Q8F103	Unknown	Extracellular and outer membrane and cytoplasmic	Inner membrane	Outer membrane	1	yes
LA3344	Q8F0Z6	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	3	No
LA3345	Q8F0Z4	Cytoplasmic membrane	Outer membrane & inner membrane,	Inner membrane	Inner membrane	2	No
LA3352	Q8F0Y8	Cytoplasmic	Cytoplasmic	Inner membrane	Cytoplasmic	1	No
LA3353	Q8F0Y7	Unknown	Outer membrane	Inner membrane	Outer membrane	0	No
LA3355	Q8F0Y6	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3356a	D4YVY9	Unknown	Extracellular and Periplasmic	Cytoplasmic	Periplasmic & Outer membrane	0	No
LA3361	Q8F0Y0	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3369	Q8F0X2	Unknown	Cytoplasmic	Inner membrane	Cytoplasmic	0	No
LA3377	Q8F0W4	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3383	Q8F0V8	Unknown	Cytoplasmic	Unknown	Cytoplasmic & Outer membrane	0	No
LA3385	Q8F0V6	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3387	Q8F0V4	Unknown	Extracellular and periplasmic, Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA3388	Q8F0V3	Unknown	Extracellular and Outer membrane	Inner membrane	Periplasmic & Outer membrane	0	No
LA3388a	D4YVZ0	Unknown	Cytoplasmic	Unknown	Cytoplasmic & Outer membrane	0	No
LA3390	Q8F0V1	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA3392	Q8F0V0	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3396	Q8F0U5	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3397	Q8F0U4	Unknown	Outer membrane	Outer membrane	Extracellular	0	yes
LA3402	Q8F0T9	Unknown	Periplasmic & Outer membrane	Cytoplasmic	Periplasmic and membrane bound	0	No
LA3403	Q8F0T8	Unknown	Cytoplasmic, periplasmic & Outer	Cytoplasmic	Periplasmic & Outer	0	No

			membrane		membrane		
LA3405	Q8F0T6	Unknown	Cytoplasmic	Inner membrane	Periplasmic & Inner membrane	0	No
LA3410	Q8F0T1	Unknown	Extracellular and periplasmic, Outer membrane	Periplasmic	Periplasmic	0	No
LA3426a	D4YVZ1	Unknown	Extracellular and periplasmic, Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3433	Q8F0Q9	Unknown	Cytoplasmic & Outer membrane	Inner membrane	Outer membrane	1	No
LA3438	Q8F0Q4	Cytoplasmic membrane	Cytoplasmic & inner membrane	Inner membrane	Inner membrane	4	No
LA3448	Q8F0P4	Cytoplasmic	Cytoplasmic	Inner membrane	Cytoplasmic & inner membrane	0	No
LA3453	Q8F0N9	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3458	Q8F0N4	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA3463	Q8F0M9	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA3473	Q8F0L9	Unknown	Extracellular and outer membrane and inner membrane	Inner membrane	Outer membrane	0	No
LA3474	Q8F0L8	Cytoplasmic membrane	Extracellular and Inner membrane	Extracellular	Outer membrane	0	No
LA3475	Q8F0L7	Unknown	Extracellular and Outer membrane	Cytoplasmic	Outer membrane	0	yes
LA3476	Q8F0L6	Unknown	Extracellular	Extracellular	Extracellular and cytoplasmic	0	yes
LA3477	Q8F0L5	Unknown	Extracellular	Cytoplasmic	Extracellular and cytoplasmic	0	yes
LA3479	Q8F0L3	Outer membrane	Outer membrane	Outer membrane	Outer membrane	2	No
LA3480	Q8F0L2	Unknown	Cytoplasmic	Inner membrane	Cytoplasmic	0	No
LA3486	Q8F0K7	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3490	Q8F0K3	Extracellular	Extracellular	Inner membrane	Outer membrane	0	yes
LA3491	Q8F0K2	Unknown	Cytoplasmic & periplasmic	Inner membrane	Inner membrane	0	No
LA3492	Q8F0K1	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3494	Q8F0J9	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3497	Q8F0J6	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3499	Q8F0J4	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA3500	Q8F0J3	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3501a	D4YVZ4	Unknown	Extracellular and Periplasmic	Cytoplasmic	Periplasmic & Outer membrane	0	No
LA3501b	D4YVZ5	Unknown	Periplasmic	Extracellular	Cytoplasmic & periplasmic	0	No
LA3504	Q8F0I9	Unknown	Extracellular and periplasmic, Outer	Extracellular	Cytoplasmic & periplasmic	0	yes

			membrane				
LA3505	Q8F0I8	Unknown	Extracellular and Outer membrane	Extracellular	Periplasmic & Outer membrane	0	yes
LA3517a	D4YVZ6	Unknown	Extracellular and Outer membrane	Unknown	Periplasmic	0	No
LA3522	Q8F0H1	Unknown	Cytoplasmic	Cytoplasmic	Inner membrane	0	No
LA3524	Q8F0G9	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3527	Q8F0G6	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA3532	Q8F0G1	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA3533	Q8F0G0	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3534	Q8F0F9	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3535	Q8F0F8	Cytoplasmic membrane	Periplasmic	Extracellular	Periplasmic	1	No
LA3537	Q8F0F6	Unknown	Cytoplasmic	Outer membrane	Inner membrane	0	No
LA3538	Q8F0F5	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3543	Q8F0F2	Unknown	Cytoplasmic & periplasmic	Outer membrane	Periplasmic & Outer membrane	0	No
LA3544	Q8F0F1	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA3545	Q8F0F0	Unknown	Extracellular and periplasmic, Cytoplasmic	Cytoplasmic	Extracellular	0	yes
LA3547	Q8F0E8	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	5	No
LA3552	Q8F0E3	Outer membrane	Outer membrane	Outer membrane	Outer membrane	8	No
LA3553a	D4YVZ7	Unknown	Cytoplasmic	Cytoplasmic	Extracellular	0	No
LA3571	Q8F0C5	Unknown	Periplasmic	Periplasmic	Outer membrane	0	No
LA3571a	D4YVZ8	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3580	Q8F0B6	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3584	Q8F0B2	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3586	Q8F0B0	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA3600	Q8F096	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3602	Q8F094	Cytoplasmic membrane	Cytoplasmic, periplasmic & Outer membrane	Inner membrane	Inner membrane	1	No
LA3606	Q8F090	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3609	Q8F086	Unknown	Cytoplasmic & periplasmic	Periplasmic	Cytoplasmic	0	No
LA3612	Q8F084	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No

LA3620	Q8F076	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3625a	D4YVZ9	Unknown	Extracellular and Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA3637	Q8F060	Unknown	Extracellular and Cytoplasmic, Outer membrane	Inner membrane	Outer membrane	1	No
LA3640	Q8F057	Unknown	Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3642	Q8F055	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA3651	Q8F046	Unknown	Cytoplasmic	Cytoplasmic	Inner membrane	1	No
LA3653	Q8F044	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3659	Q8F038	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3664	Q8F034	Cytoplasmic	Cytoplasmic & periplasmic	Inner membrane	Inner membrane	0	No
LA3675	Q8F022	Unknown	Outer membrane	Outer membrane	Outer membrane	16	No
LA3677	Q8F020	Unknown	Cytoplasmic	Unknown	Periplasmic & Outer membrane	0	No
LA3680	Q8F017	Unknown	Cytoplasmic	Unknown	Extracellularand cytoplsmic	0	No
LA3681	Q8F016	Unknown	Outer membrane	Inner membrane	Outer membrane	10	No
LA3688	Q8F009	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3690	Q8F007	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3696	Q8F001	Cytoplasmic	Cytoplasmic	Cytoplasmic	Extracellularand cytoplsmic	1	No
LA3697	Q8F000	Cytoplasmic	Outer membrane	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA3697a	D4YW01	Unknown	Cytoplasmic	Unknown	Extracellularand cytoplsmic	0	No
LA3711	Q8EZZ0	Unknown	Extracellular and Periplasmic	Periplasmic	Extracellularand cytoplsmic	0	yes
LA3716	Q8EZY5	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3719	Q8EZY2	Unknown	Cytoplasmic & Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3723	Q8EZX8	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3727	Q8EZX4	Unknown	Cytoplasmic & periplasmic	Periplasmic	Periplasmic	0	No
LA3731	Q8EZX0	Unknown	Extracellular	Extracellular	Extracellular	0	yes
LA3741	Q8EZW0	Unknown	Extracellular and Outer membrane	Inner membrane	Outer membrane	1	No
LA3742	Q8EZV9	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	5	No
LA3744	Q8EZV7	Unknown	Outer membrane	Inner membrane	Inner membrane	1	No
LA3745	Q8EZV6	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3748	Q8EZV3	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA3749	Q8EZV2	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3751	Q8EZV0	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	11	No

LA3752	Q8EZU9	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	11	No
LA3753	Q8EZU8	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	11	No
LA3762	Q8EZT9	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA3765	Q8EZT6	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3769	Q8EZT2	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3780	Q8EZX1	Unknown	Cytoplasmic & periplasmic	Unknown	Cytoplasmic & Outer membrane	0	No
LA3789	Q8EZR3	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3790	Q8EZR2	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3794	Q8EZQ8	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	11	No
LA3796	Q8EZQ6	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3797	Q8EZQ5	Cytoplasmic	Outer membrane	Extracellular	Extracellular	0	yes
LA3798	Q8EZQ4	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA3805	Q8EZX7	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA3809	Q8EZX3	Outer membrane	Outer membrane	Outer membrane	Outer membrane	2	No
LA3812	Q8EZX0	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3814	Q8EZX8	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3816	Q8EZX6	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3818	Q8EZX4	Unknown	Periplasmic	Cytoplasmic	Cytoplasmic & periplasmic	0	No
LA3827	Q8EZX5	Unknown	Cytoplasmic, periplasmic & Outer membrane	Extracellular	Outer membrane	1	No
LA3828	Q8EZX4	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3829	Q8EZX3	Unknown	Periplasmic	Outer membrane	Periplasmic & Outer membrane	0	No
LA3833	Q8EZX0	Unknown	Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3834a	D4YW03	Unknown	Extracellular and periplasmic, Cytoplasmic	Cytoplasmic	Periplasmic & Outer membrane	0	No
LA3838	Q8EZX5	Unknown	Outer membrane	Extracellular	Periplasmic and membrane bound	0	No
LA3848	Q8EZX5	Unknown	Extracellular	Extracellular	Outer membrane	0	yes
LA3853	Q8EZX0	Cytoplasmic membrane	Outer membrane	Outer membrane	Cytoplasmic & Outer membrane	8	No
LA3854	Q8EZX9	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA3856	Q8EZX7	Unknown	Cytoplasmic, periplasmic & Outer	Cytoplasmic	Cytoplasmic & Outer	0	No

			membrane		membrane		
LA3861	Q8EZJ2	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3862	Q8EZJ1	Outer membrane	Extracellular and Outer membrane, periplasmic	Inner membrane	Outer membrane	1	No
LA3870	Q8EZI3	Unknown	Outer membrane	Extracellular	Outer membrane	16	No
LA3871a	D4YW04	Unknown	Cytoplasmic	Cytoplasmic	Extracellular	0	No
LA3873	Q8EZI0	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	5	No
LA3877	Q8EZH6	Cytoplasmic	Cytoplasmic	Extracellular	Inner membrane	0	No
LA3890	Q8EZG4	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3907	Q8EZE7	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3910	Q8EZE4	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3911	Q8EZE3	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3912	Q8EZE2	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3916	Q8EZD8	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3917	Q8EZD7	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3922	Q8EZD2	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3923	Q8EZD1	Cytoplasmic membrane	Inner membrane	Extracellular	Outer membrane	4	No
LA3933	Q8EZC2	Unknown	Extracellular and periplasmic, Cytoplasmic	Outer membrane	Periplasmic & Outer membrane	0	No
LA3934	Q8EZC1	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3938	Q8EZB7	Cytoplasmic	Outer membrane	Cytoplasmic	Outer membrane	0	No
LA3940	Q8EZB5	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA3943	Q8EZB2	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3944	Q8EZB1	Cytoplasmic	Cytoplasmic & periplasmic	Inner membrane	Cytoplasmic & Outer membrane	1	No
LA3950	Q8EZA5	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3961	Q8EZ95	Unknown	Cytoplasmic	Periplasmic	Outer membrane	0	No
LA3962	Q8EZ94	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA3966	Q8EZ90	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA3970	Q8EZ86	Cytoplasmic membrane	Extracellular and Outer membrane	Cytoplasmic	Outer membrane	0	No
LA3982	Q8EZ74	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3987	Q8EZ71	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA3990	Q8EZ68	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic & Outer	0	No

					membrane		
LA3993	Q8EZ65	Cytoplasmic	Outer membrane	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA4003	Q8EZ56	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA4005	Q8EZ54	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	6	No
LA4005a	D4YW06	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA4010	Q8EZ51	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	3	No
LA4011	Q8EZ50	Cytoplasmic	Cytoplasmic	Periplasmic	Cytoplasmic	0	No
LA4023	Q8EZ38	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA4025	Q8EZ36	Cytoplasmic	Cytoplasmic	Cytoplasmic	Outer membrane	0	No
LA4026	Q8EZ35	Outer membrane	Outer membrane	Outer membrane	Cytoplasmic & Outer membrane	0	yes
LA4032	Q8EZ29	Unknown	Outer membrane	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA4042	Q8EZ19	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA4044	Q8EZ17	Unknown	Cytoplasmic	Cytoplasmic	Extracellular	0	No
LA4046	Q8EZ15	Unknown	Outer membrane	Inner membrane	Periplasmic and membrane bound	18	No
LA4051	Q8EZ10	Unknown	Outer membrane	Cytoplasmic	Outer membrane	0	No
LA4053	Q8EZ08	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA4059	Q8EZ02	Outer membrane	Outer membrane	Outer membrane	Outer membrane	10	No
LA4062	Q8EYZ9	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	6	No
LA4064	Q8EYZ7	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA4066	Q8EYZ5	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA4068	Q8EYZ3	Unknown	Cytoplasmic	Unknown	Cytoplasmic & inner membrane	0	No
LA4069	Q8EYZ2	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA4070	Q8EYZ1	Outer membrane	Outer membrane	Outer membrane	Outer membrane	0	yes
LA4076	Q8EYY6	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic	0	No
LA4081	Q8EYY1	Unknown	Periplasmic	Cytoplasmic	Cytoplasmic & periplasmic	0	No
LA4082	Q8EYY0	Unknown	Cytoplasmic, periplasmic & Outer membrane	Inner membrane	Outer membrane	1	No
LA4083	Q8EYX9	Cytoplasmic membrane	Cytoplasmic & periplasmic	Extracellular	Inner membrane	0	No
LA4084	Q8EYX8	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA4088	Q8EYX5	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA4096	Q8EYW7	Unknown	Cytoplasmic	Unknown	Cytoplasmic & Outer	0	No

					membrane		
LA4097	Q8EYW6	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	3	No
LA4099	Q8EYW4	Cytoplasmic membrane	Cytoplasmic & inner membrane	Inner membrane	Inner membrane	2	No
LA4100	Q8EYW3	Cytoplasmic membrane	Cytoplasmic & inner membrane	Cytoplasmic	Inner membrane	1	No
LA4106	Q8EYV7	Unknown	Outer membrane	Inner membrane	Inner membrane	2	No
LA4108	Q8EYV5	Unknown	Extracellular and Outer membrane, Cytoplasmic	Extracellular	Outer membrane	0	yes
LA4109	Q8EYV4	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA4110	Q8EYV3	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA4110a	D4YW07	Unknown	Cytoplasmic & periplasmic	Unknown	Extracellular and Periplasmic	0	No
LA4113	Q8EYV0	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA4121	Q8EYU2	Unknown	Cytoplasmic	Inner membrane	Inner membrane	1	No
LA4123	Q8EYU0	Cytoplasmic	Cytoplasmic	Unknown	Cytoplasmic & inner membrane	0	No
LA4128	Q8EYT5	Unknown	Extracellular	Outer membrane	Extracellular and Outer membrane	0	yes
LA4140	Q8EYS3	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA4142	Q8EYS1	Cytoplasmic	Cytoplasmic	Periplasmic	Inner membrane	0	No
LA4142a	D4YW08	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic & periplasmic	0	No
LA4144	Q8EYR9	Unknown	Extracellular	Extracellular	Cytoplasmic & Outer membrane	0	No
LA4145	Q8EYR8	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & periplasmic	0	No
LA4148	Q8EYR5	Unknown	Cytoplasmic	Cytoplasmic	Extracellular and Cytoplasmic	0	No
LA4152	Q8EYR1	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	5	No
LA4153	Q8EYR0	Cytoplasmic	Cytoplasmic & Outer membrane	Outer membrane	Extracellular and Outer membrane	0	No
LA4157	Q8EYQ6	Unknown	Cytoplasmic	Unknown	Cytoplasmic	0	No
LA4158	Q8EYQ5	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LA4160	Q8EYQ3	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA4170	Q8EYP3	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA4172	Q8EYP1	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	3	No
LA4176	Q8EYN7	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA4177	Q8EYN6	Unknown	Cytoplasmic & Outer membrane	Periplasmic	Outer membrane	0	No
LA4179	Q8EYN4	Cytoplasmic membrane	Extracellular and inner membrane,	Inner membrane	Inner membrane	2	No

			Cytoplasmic				
LA4182	Q8EYN1	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Outer membrane	0	No
LA4184	Q8EYM9	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA4185	Q8EYM8	Cytoplasmic	Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA4187	Q8EYM6	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA4188	Q8EYM5	Cytoplasmic	Cytoplasmic	Unknown	Cytoplasmic	0	No
LA4191	Q8EYM2	Cytoplasmic	Cytoplasmic & Outer membrane	Cytoplasmic	Cytoplasmic	0	No
LA4195	Q8EYL8	Unknown	Extracellular and Outer membrane, Periplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA4199	Q8EYL4	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA4208	Q8EYK5	Unknown	Outer membrane	Unknown	Cytoplasmic & Outer membrane	1	No
LA4209	Q8EYK4	Unknown	Outer membrane	Cytoplasmic	Outer membrane	0	No
LA4212	Q8EYK1	Unknown	Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA4226	Q8EYI8	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	9	No
LA4226a	D4YW09	Unknown	Extracellular and periplasmic, Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA4232	Q8EYI2	Cytoplasmic	Outer membrane	Inner membrane	Inner membrane	1	No
LA4233	Q8EYI1	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA4235	Q8EYH9	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA4237	Q8EYH7	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA4237a	D4YW10	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & periplasmic	0	No
LA4252	Q8EYG4	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA4258	Q8EYF8	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA4263	Q8EYF3	Unknown	Outer membrane	Cytoplasmic	Outer membrane	0	No
LA4272	Q8EYE4	Outer membrane	Extracellular and Outer membrane	Extracellular	Outer membrane	18	No
LA4279	Q8EYD7	Cytoplasmic	Cytoplasmic & Outer membrane	Inner membrane	Cytoplasmic & Outer membrane	0	No
LA4280	Q8EYD6	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA4282	Q8EYD4	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic &	0	No

					Outer membrane		
LA4286	Q8EYD0	Cytoplasmic	Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA4291	Q8EYC5	Unknown	Outer membrane	Periplasmic	Extracellular	0	No
LA4292	Q8EYC4	Unknown	Outer membrane	Inner membrane	Outer membrane	0	No
LA4293	Q8EYC3	Unknown	Extracellular and Outer membrane, Periplasmic	Periplasmic	Extracellular	0	yes
LA4304	Q8EYB2	Unknown	Extracellular and periplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LA4310	Q8EYA6	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA4312	Q8EYA4	Unknown	Cytoplasmic & periplasmic	Unknown	Periplasmic & Outer membrane	0	No
LA4314	Q8EYA1	Cytoplasmic membrane	Cytoplasmic & Outer membrane, Inner membrane	Inner membrane	Inner membrane	3	No
LA4314a	D4YW11	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA4315	Q8EYA2	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	5	No
LA4318	Q8EY98	Unknown	Cytoplasmic, periplasmic & Outer membrane	Periplasmic	Outer membrane	0	No
LA4319	Q8EY97	Unknown	Cytoplasmic	Periplasmic	Inner membrane	0	No
LA4320	Q8EY96	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LA4321	Q8EY95	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA4325	Q8EY91	Unknown	Cytoplasmic	Cytoplasmic	Extracellular	0	No
LA4335	Q8EY82	Unknown	Outer membrane	Inner membrane	Outer membrane	18	No
LA4343	Q8EY74	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LA4355	Q8EY63	Unknown	Extracellular and Outer membrane, Periplasmic	Inner membrane	Outer membrane	0	No
			Chromosome II				
LB001	Q8EY56	Outer membrane	Outer membrane	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LB005	Q8EY52	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LB018	Q8EY39	Cytoplasmic membrane	Outer membrane	Inner membrane	Outer membrane	0	No
LB025	Q8EY32	Unknown	Outer membrane	Cytoplasmic	Outer membrane	10	No
LB037	Q8EY20	Unknown	Periplasmic & Outer membrane	Extracellular	Outer membrane	0	No
LB039	Q8EY18	Unknown	Cytoplasmic	Inner membrane	Outer membrane	0	No

LB040	Q8EY17	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LB042	Q8EY15	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB043	Q8EY14	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB044	Q8EY13	Unknown	Cytoplasmic	Inner membrane	Cytoplasmic & Outer membrane	1	No
LB045	Q8EY12	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB047	Q8EY10	Unknown	Extracellular	Extracellular	Extracellular and periplasmic	0	yes
LB050	Q8EY07	Unknown	Outer membrane	Inner membrane	Outer membrane	1	No
LB052	Q8EY05	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB053	Q8EY04	Unknown	Cytoplasmic	Inner membrane	Inner membrane	1	No
LB059	Q8EXZ8	Unknown	Cytoplasmic	Cytoplasmic	Outer membrane	0	No
LB060	Q8EXZ7	Cytoplasmic	Cytoplasmic & Outer membrane	Inner membrane	Outer membrane	2	No
LB065	Q8EXZ2	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB066	Q8EXZ1	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB069	Q8EXY8	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LB071	Q8EXY6	Unknown	Cytoplasmic & periplasmic	Unknown	Cytoplasmic	0	No
LB072	Q8EXY5	Unknown	Periplasmic & Outer membrane	Cytoplasmic	Outer membrane	0	No
LB075	Q8EXY1	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	9	No
LB077	Q8EXY0	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB080	Q8EXX7	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	10	No
LB088	Q8EXW9	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LB090	Q8EXW7	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LB091	Q8EXW6	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB092	Q8EXW5	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LB096	Q8EXW1	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB099	Q8EXV8	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LB107	Q8EXV0	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LB109	Q8EXU8	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB119	Q8EXT9	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LB120	Q8EXT8	Cytoplasmic	Extracellular and Outer membrane, Cytoplasmic	Cytoplasmic	Periplasmic	0	No

LB134	Q8EXS4	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LB137	Q8EXS1	Cytoplasmic membrane	Cytoplasmic	Outer membrane	Cytoplasmic & inner membrane	0	No
LB138	Q8EXS0	Unknown	Cytoplasmic & Outer membrane	Inner membrane	Outer membrane	0	No
LB142	Q8EXR6	Cytoplasmic	Cytoplasmic & inner membrane	Inner membrane	Inner membrane	2	No
LB147	Q8EXR1	Cytoplasmic	Cytoplasmic	Inner membrane	Cytoplasmic & inner membrane	0	No
LB148	Q8EXR0	Cytoplasmic membrane	Cytoplasmic	Inner membrane	Inner membrane	2	No
LB164	Q8EXP4	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB167	Q8EXP0	Cytoplasmic	Cytoplasmic	Inner membrane	Outer membrane	1	No
LB169	Q8EXN9	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB171	Q8EXN7	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LB181	Q8EXM7	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	11	No
LB182	Q8EXM6	Cytoplasmic	Cytoplasmic & Outer membrane	Inner membrane	Outer membrane	1	No
LB190	Q8EXL9	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LB192	Q8EXL6	Unknown	Extracellular	Outer membrane	Cytoplasmic & Outer membrane	0	No
LB197	Q8EXL1	Cytoplasmic	Outer membrane	Outer membrane	Cytoplasmic	0	No
LB198	Q8EXL0	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB199	Q8EXK9	Outer membrane	Outer membrane	Outer membrane	Outer membrane	16	No
LB203	Q8EXK5	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	12	No
LB205	Q8EXK3	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	2	No
LB207	Q8EXK1	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	11	No
LB209	Q8EXJ9	Cytoplasmic	Cytoplasmic	Inner membrane	Cytoplasmic	1	No
LB211	Q8EXJ7	Unknown	Cytoplasmic	Cytoplasmic	Outer membrane	1	No
LB220	Q8EXI8	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	15	No
LB232	Q8EXI0	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & inner membrane	0	No
LB243	Q8EXG9	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LB244	Q8EXG8	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB245a	D4YW50	Unknown	Cytoplasmic	Inner membrane	Inner membrane	0	No
LB248	Q8EXG4	Cytoplasmic	Outer membrane	Outer membrane	Cytoplasmic & Outer membrane	0	No
LB250	Q8EXG2	Unknown	Periplasmic	Periplasmic	Outer membrane	0	No

LB251	Q8EXG1	Cytoplasmic	Cytoplasmic	Unknown	Cytoplasmic & Outer membrane	0	No
LB257	Q8EXF6	Unknown	Cytoplasmic, periplasmic & Outer membrane	Unknown	Cytoplasmic & inner membrane	0	No
LB261	Q8EXF2	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB263	Q8EXF0	Unknown	Cytoplasmic & periplasmic	Unknown	Outer membrane	0	No
LB264	Q8EXE9	Outer membrane	Outer membrane	Extracellular	Outer membrane	0	yes
LB265	Q8EXE8	Unknown	Periplasmic	Cytoplasmic	Extracellular and Cytoplasmic	0	No
LB268	Q8EXE5	Unknown	Extracellular and periplasmic, Cytoplasmic	Cytoplasmic	Cytoplasmic & periplasmic	0	yes
LB276	Q8EXD7	Cytoplasmic membrane	Cytoplasmic, periplasmic & inner membrane	Periplasmic	Inner membrane	0	No
LB277	Q8EXD6	Unknown	Extracellular and Outer membrane,	Extracellular	Outer membrane	0	yes
LB278	Q8EXD5	Unknown	Cytoplasmic	Periplasmic	Cytoplasmic & inner membrane	0	No
LB279	Q8EXD4	Outer membrane	Outer membrane	Outer membrane	Outer membrane	22	No
LB280	Q8EXD3	Unknown	Extracellular and Outer membrane, periplasmic	Extracellular	Cytoplasmic & periplasmic	0	yes
LB285	Q8EXC8	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB287	Q8EXC6	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	5	No
LB288	Q8EXC5	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB289	Q8EXC4	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB299	Q8EXB4	Unknown	Outer membrane	Cytoplasmic	Cytoplasmic	0	No
LB300	Q8EXB3	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB301	Q8EXB2	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB307	Q8EXA7	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	3	No
LB309	Q8EXA5	Cytoplasmic membrane	Extracellular	Extracellular	Extracellular	0	yes
LB316	Q8EX98	Cytoplasmic	Cytoplasmic	Cytoplasmic	Outer membrane	0	No
LB319	Q8EX95	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LB320	Q8EX94	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LB321	Q8EX93	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB330	Q8EX83	Unknown	Cytoplasmic	Unknown	Cytoplasmic & inner membrane	0	No
LB332	Q8EX82	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB334	Q8EX80	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB337	Q8EX77	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No

LB339	Q8EX75	Unknown	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB340	Q8EX74	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB340a	D4YW52	Cytoplasmic	Cytoplasmic	Cytoplasmic	Extracellular and Cytoplasmic	1	No
LB341	Q8EX73	Cytoplasmic membrane	Cytoplasmic & inner membrane	Inner membrane	Inner membrane	2	No
LB342	Q8EX72	Unknown	Cytoplasmic	Unknown	Cytoplasmic	0	No
LB343	Q8EX71	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	3	No
LB348	Q8EX67	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	4	No
LB351	Q8EX64	Unknown	Outer membrane	Outer membrane	Cytoplasmic	0	No
LB354	Q8EX61	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB356	P41395	Unknown	Cytoplasmic & Outer membrane	Inner membrane	Outer membrane	1	No
LB358	Q8EX59	Cytoplasmic membrane	Inner membrane	Inner membrane	Inner membrane	11	No
LB361	Q8EX56	Unknown	Cytoplasmic & periplasmic	Cytoplasmic	Cytoplasmic & Outer membrane	0	No
LB362	Q8EX55	Unknown	Outer membrane	Cytoplasmic	Inner membrane	0	No
LB363	Q8EX54	Cytoplasmic	Cytoplasmic	Cytoplasmic	Cytoplasmic	0	No
LB367	Q8EX50	Cytoplasmic	Extracellular and Outer membrane, Cytoplasmic	Cytoplasmic	Cytoplasmic & periplasmic	0	No

Table S1 VirulentPred results for 129 proteins

S.No.	Protein Name	Prediction results	Predicted Scores
Cascade of SVMs and PSI-BLAST			
1	>tr Q8F9K7 Q8F9K7_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0188 PE=4 SV=1	Virulent	0.9961
2	>tr Q8F9J2 Q8F9J2_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0203 PE=4 SV=1	Virulent	1.0389
3	>tr Q8F9J0 Q8F9J0_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0205 PE=4 SV=1	Virulent	0.0552
4	>tr Q8F9B2 Q8F9B2_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0283 PE=4 SV=2	Virulent	1.0777
5	>tr Q8F973 Q8F973_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0323 PE=3 SV=2	Virulent	1.0629
6	>tr Q8F960 Q8F960_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0337 PE=4 SV=1	Virulent	0.9877
7	>tr Q8F954 Q8F954_LEPIN CENP-V/GFA domain-containing protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0343 PE=3 SV=1	Virulent	0.9377
8	>tr Q8F932 Q8F932_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0365 PE=4 SV=1	Virulent	0.991
9	>tr Q8F927 Q8F927_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0370 PE=4 SV=2	Virulent	1.0819
10	>tr Q8F918 Q8F918_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0379 PE=4 SV=2	Virulent	1.066
11	>tr Q8F915 Q8F915_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0382 PE=4 SV=1	Virulent	1.0184
12	>tr Q8F908 Q8F908_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0389 PE=4 SV=2	Virulent	0.9644
13	>tr Q8F905 Q8F905_LEPIN Phosphagen kinase C-terminal domain-containing protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0392 PE=4 SV=1	Virulent	0.8518

14	>tr Q8F8X9 Q8F8X9_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0420 PE=4 SV=1	Virulent	0.9451
15	>tr Q8F8X8 Q8F8X8_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0421 PE=4 SV=1	Virulent	1.0989
16	>tr Q8F8Q5 Q8F8Q5_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0500 PE=4 SV=1	Virulent	1.0981
17	>tr Q8F8Q0 Q8F8Q0_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0505 PE=4 SV=1	Virulent	0.9795
18	>tr Q8F8M3 Q8F8M3_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0532 PE=4 SV=1	Virulent	1.0205
19	>tr Q8F8L9 Q8F8L9_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0536 PE=4 SV=1	Virulent	0.9852
20	>tr Q8F8I6 Q8F8I6_LEPIN PpiC domain-containing protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0570 PE=4 SV=2	Virulent	0.4597
21	>tr Q8F8G8 Q8F8G8_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0589 PE=4 SV=1	Virulent	1.0789
22	>tr Q8F8E0 Q8F8E0_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0617 PE=4 SV=2	Virulent	0.9901
23	>tr Q8F8D7 Q8F8D7_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0620 PE=4 SV=1	Virulent	1.0969
24	>tr Q8F8B3 Q8F8B3_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0644 PE=4 SV=2	Virulent	1.1032
25	>tr Q8F895 Q8F895_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0663 PE=4 SV=2	Virulent	0.9537
26	>tr Q8F850 Q8F850_LEPIN INTEIN_C_TER domain-containing protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0709 PE=4 SV=2	Virulent	0.9969
27	>tr Q8F846 Q8F846_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0713 PE=4 SV=2	Virulent	0.9642
28	>tr Q8F820 Q8F820_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0769 PE=4 SV=2	Virulent	1.0542

29	>tr Q8F7X4 Q8F7X4_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0818 PE=4 SV=2	Virulent	1.0654
30	>tr Q8F7V7 Q8F7V7_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0835 PE=4 SV=1	Virulent	1.0688
31	>tr Q8F7N9 Q8F7N9_LEPIN Hypothetical lipoprotein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0905 PE=4 SV=2	Virulent	1.0937
32	>tr Q8F7F1 Q8F7F1_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0994 PE=4 SV=1	Virulent	0.9425
33	>tr Q8F7E9 Q8F7E9_LEPIN DUF1554 domain-containing protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_0996 PE=4 SV=1	Virulent	1.0944
34	>tr Q8F7D6 Q8F7D6_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1010 PE=4 SV=1	Virulent	1.0719
35	>tr Q8F7D1 Q8F7D1_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1015 PE=4 SV=1	Virulent	0.6726
36	>tr Q8F7D0 Q8F7D0_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1016 PE=4 SV=1	Virulent	1.0405
37	>tr Q8F796 Q8F796_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1052 PE=4 SV=1	Virulent	1.0572
38	>tr Q8F789 Q8F789_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1059 PE=4 SV=1	Virulent	1.024
39	>tr Q8F783 Q8F783_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1065 PE=4 SV=2	Virulent	1.1062
40	>tr Q8F782 Q8F782_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1066 PE=4 SV=2	Virulent	1.0444
41	>tr D4YW28 D4YW28_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1141a PE=4 SV=1	Virulent	1.0513
42	>tr Q8F6Y1 Q8F6Y1_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1168 PE=4 SV=1	Virulent	1.0443
43	>tr Q8F6U1 Q8F6U1_LEPIN Membrane dipeptidase OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1209 PE=3 SV=1	Virulent	1.0001

44	>tr Q8F6D3 Q8F6D3_LEPIN C-type lectin domain-containing protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1375 PE=4 SV=1	Virulent	0.8966
45	>tr Q8F6B1 Q8F6B1_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1398 PE=4 SV=1	Virulent	0.9964
46	>tr Q8F6A9 Q8F6A9_LEPIN Ricin B-type lectin domain-containing protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1400 PE=4 SV=2	Virulent	1.0592
47	>tr Q8F6A7 Q8F6A7_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1402 PE=4 SV=2	Virulent	1.0817
48	>tr Q8F6A5 Q8F6A5_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1404 PE=4 SV=2	Virulent	1.0617
49	>tr Q8F644 Q8F644_LEPIN Hypothetical lipoprotein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1468 PE=4 SV=1	Virulent	1.0306
50	>tr Q8F614 Q8F614_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1498 PE=4 SV=2	Virulent	1.1112
51	>tr Q8F5X7 Q8F5X7_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1538 PE=4 SV=1	Virulent	0.9976
52	>tr Q8F5X6 Q8F5X6_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1539 PE=4 SV=1	Virulent	0.995
53	>tr G1UB24 G1UB24_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1639 PE=3 SV=1	Virulent	0.8994
54	>tr Q8F5I7 Q8F5I7_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1694 PE=4 SV=1	Virulent	0.7244
55	>tr Q8F5E5 Q8F5E5_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1737 PE=4 SV=1	Virulent	1.0213
56	>tr Q8F5C7 Q8F5C7_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1756 PE=4 SV=1	Virulent	1.135
57	>tr Q8F5C4 Q8F5C4_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1759 PE=4 SV=2	Virulent	0.8524
58	>tr Q8F5C3 Q8F5C3_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1761 PE=4 SV=2	Virulent	0.9532

59	>tr Q8F5C2 Q8F5C2_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1762 PE=4 SV=2	Virulent	0.857
60	>tr Q8F5C1 Q8F5C1_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1763 PE=4 SV=1	Virulent	1.1071
61	>tr Q8F5C0 Q8F5C0_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1764 PE=4 SV=2	Virulent	1.0687
62	>tr Q8F590 Q8F590_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1794 PE=4 SV=1	Virulent	0.9069
63	>tr Q8F543 Q8F543_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1844 PE=4 SV=1	Virulent	1.0567
64	>tr Q8F526 Q8F526_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1861 PE=4 SV=1	Virulent	1.0249
65	>tr Q8F4Y3 Q8F4Y3_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1905 PE=4 SV=1	Virulent	1.0705
66	>tr Q8F4X6 Q8F4X6_LEPIN Hypothetical lipoprotein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1912 PE=4 SV=1	Virulent	0.9952
67	>tr Q8F4X1 Q8F4X1_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1917 PE=4 SV=1	Virulent	1.0799
68	>tr Q8F4W5 Q8F4W5_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1922 PE=4 SV=2	Virulent	1.0414
69	>tr Q8CVE8 Q8CVE8_LEPIN Outer membrane efflux protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1963 PE=3 SV=2	Non-Virulent	-0.894
70	>tr Q8F4S5 Q8F4S5_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1965 PE=4 SV=2	Virulent	0.8607
71	>tr Q8F4S2 Q8F4S2_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_1968 PE=4 SV=2	Virulent	1.0612
72	>tr Q8F4L5 Q8F4L5_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_2026 PE=4 SV=2	Virulent	0.8075
73	>tr Q8F4I3 Q8F4I3_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_2059 PE=4 SV=2	Virulent	0.7539

74	>tr Q8F4G6 Q8F4G6_LEPIN Haem_bd domain-containing protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_2074 PE=4 SV=1	Virulent	1.0831
75	>tr Q8F439 Q8F439_LEPIN GH18 domain-containing protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_2208 PE=3 SV=1	Virulent	1.0236
76	>tr Q8F407 Q8F407_LEPIN Hypothetical lipoprotein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_2241 PE=4 SV=1	Virulent	1.0016
77	>tr Q8F3X7 Q8F3X7_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_2272 PE=4 SV=1	Virulent	1.0154
78	>tr Q8F3X6 Q8F3X6_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_2273 PE=4 SV=2	Virulent	1.0594
79	>tr Q8F3V0 Q8F3V0_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_2300 PE=4 SV=1	Virulent	0.7569
80	>tr Q8F3U9 Q8F3U9_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_2301 PE=4 SV=1	Virulent	1.0385
81	>tr Q8F3Q8 Q8F3Q8_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_2342 PE=4 SV=1	Virulent	1.092
82	>tr Q8F3N1 Q8F3N1_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_2370 PE=4 SV=1	Virulent	1.0211
83	>tr Q8F3N0 Q8F3N0_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_2371 PE=4 SV=2	Virulent	1.041
84	>tr Q8F3G3 Q8F3G3_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_2443 PE=4 SV=2	Virulent	1.0387
85	>tr Q8F3F9 Q8F3F9_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_2447 PE=4 SV=1	Virulent	1.0135
86	>tr Q8F3F6 Q8F3F6_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_2450 PE=4 SV=1	Virulent	1.0106
87	>tr Q8F316 Q8F316_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_2595 PE=4 SV=1	Virulent	1.018
88	>tr Q8F2M8 Q8F2M8_LEPIN Hypothetical lipoprotein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_2742 PE=4 SV=2	Virulent	0.8717

89	>tr Q8F2H4 Q8F2H4_LEPIN FecR domain-containing protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_2797 PE=4 SV=1	Virulent	0.9976
90	>tr Q8F235 Q8F235_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_2942 PE=4 SV=2	Virulent	0.8243
91	>tr Q8F1Y6 Q8F1Y6_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_2992 PE=4 SV=1	Virulent	1.0487
92	>tr Q8F1Y3 Q8F1Y3_LEPIN FlgM domain-containing protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_2995 PE=4 SV=1	Virulent	1.1107
93	>tr Q8F1W2 Q8F1W2_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3016 PE=4 SV=1	Virulent	0.999
94	>tr Q8F1S2 Q8F1S2_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3056 PE=4 SV=1	Virulent	1.079
95	>tr Q8F1R0 Q8F1R0_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3069 PE=4 SV=1	Virulent	0.7363
96	>tr Q8F1P0 Q8F1P0_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3091 PE=4 SV=2	Virulent	1.0015
97	>tr Q8F1J0 Q8F1J0_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3145 PE=4 SV=1	Virulent	0.9696
98	>tr Q8F1I5 Q8F1I5_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3150 PE=4 SV=1	Virulent	1.1292
99	>tr Q8F1D5 Q8F1D5_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3201 PE=4 SV=2	Virulent	0.9924
100	>tr Q8F166 Q8F166_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3271 PE=4 SV=1	Virulent	1.0945
101	>tr Q8F161 Q8F161_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3276 PE=4 SV=2	Virulent	1.0003
102	>tr D4YVY8 D4YVY8_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3286a PE=4 SV=1	Virulent	1.0693
103	>tr Q8F108 Q8F108_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3332 PE=4 SV=2	Virulent	1.0563

104	>tr Q8F104 Q8F104_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3336 PE=4 SV=2	Virulent	1.1083
105	>tr Q8F103 Q8F103_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3337 PE=4 SV=1	Virulent	1.0075
106	>tr Q8F0U4 Q8F0U4_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3397 PE=4 SV=2	Virulent	1.0804
107	>tr Q8F0L7 Q8F0L7_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3475 PE=4 SV=1	Virulent	1.037
108	>tr Q8F0L6 Q8F0L6_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3476 PE=4 SV=1	Virulent	1.0597
109	>tr Q8F0L5 Q8F0L5_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3477 PE=4 SV=1	Virulent	1.0396
110	>tr Q8F0K3 Q8F0K3_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3490 PE=4 SV=1	Virulent	1.088
111	>tr Q8F0I9 Q8F0I9_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3504 PE=4 SV=2	Virulent	1.0229
112	>tr Q8F0I8 Q8F0I8_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3505 PE=4 SV=1	Virulent	0.96
113	>tr Q8F0F0 Q8F0F0_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3545 PE=4 SV=1	Virulent	1.0234
114	>tr Q8EZZ0 Q8EZZ0_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3711 PE=4 SV=1	Virulent	0.9998
115	>tr Q8EZX0 Q8EZX0_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3731 PE=4 SV=2	Virulent	0.8443
116	>tr Q8EZQ5 Q8EZQ5_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3797 PE=4 SV=2	Virulent	0.8776
117	>tr Q8EZX5 Q8EZX5_LEPIN Ig-like domain-containing protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3848 PE=4 SV=1	Virulent	0.9536
118	>tr Q8EZJ1 Q8EZJ1_LEPIN SPOR domain-containing protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_3862 PE=4 SV=1	Virulent	1.0872

119	>tr Q8EZ35 Q8EZ35_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_4026 PE=4 SV=1	Virulent	1.0665
120	>tr Q8EYZ1 Q8EYZ1_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_4070 PE=4 SV=1	Virulent	0.938
121	>tr Q8EYV5 Q8EYV5_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_4108 PE=4 SV=1	Virulent	1.1004
122	>tr Q8EYT5 Q8EYT5_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_4128 PE=4 SV=1	Virulent	0.9837
123	>tr Q8EYC3 Q8EYC3_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LA_4293 PE=4 SV=1	Virulent	1.0778
124	>tr Q8EY10 Q8EY10_LEPIN Conserved hypothetical lipoprotein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LB_047 PE=4 SV=2	Virulent	1.0471
125	>tr Q8EXE9 Q8EXE9_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LB_264 PE=4 SV=1	Virulent	1.0438
126	>tr Q8EXE5 Q8EXE5_LEPIN Rubrerythrin domain-containing protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LB_268 PE=4 SV=1	Virulent	0.8904
127	>tr Q8EXD6 Q8EXD6_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LB_277 PE=4 SV=1	Virulent	0.9894
128	>tr Q8EXD3 Q8EXD3_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LB_280 PE=4 SV=2	Virulent	1.0932
129	>tr Q8EXA5 Q8EXA5_LEPIN Uncharacterized protein OS=Leptospira interrogans serogroup Icterohaemorrhagiae serovar Lai (strain 56601) OX=189518 GN=LB_309 PE=4 SV=2	Virulent	1.0216

Table S2 VaxiJen results for 80 proteins

S.no	Prtn id	VaxiJen score
1	Q8F9J2	0.1907
2	Q8F9B2	0.5425
3	Q8F973	0.2110
4	Q8F927	0.5382
5	Q8F918	0.5246
6	Q8F915	0.4240

7	Q8F8X8	0.5242
8	Q8F8Q5	0.6267
9	Q8F8M3	0.4982
10	Q8F8G8	0.5800
11	Q8F8D7	0.4142
12	Q8F8B3	0.5204
13	Q8F820	0.4183
14	Q8F7X4	0.3035
15	Q8F7V7	0.4344
16	Q8F7N9	0.8352
17	Q8F7E9	0.6056
18	Q8F7D6	0.5211
19	Q8F7D0	0.6203
20	Q8F796	0.4263
21	Q8F789	0.4852
22	Q8F783	0.6853
23	Q8F782	0.6989
24	D4YW28	1.0137
25	Q8F6Y1	0.6396
26	Q8F6U1	0.3909
27	Q8F6A9	0.4521
28	Q8F6A7	0.3794
29	Q8F6A5	0.5467
30	Q8F644	0.2428
31	Q8F614	0.3360
32	Q8F5E5	0.6762
33	Q8F5C7	0.4605
34	Q8F5C1	0.4382
35	Q8F5C0	0.5270
36	Q8F543	0.8585
37	Q8F526	0.4496
38	Q8F4Y3	0.4412
39	Q8F4X1	0.4955
40	Q8F4W5	0.6264
41	Q8F4S2	0.5662
42	Q8F4G6	0.6911
43	Q8F439	0.4741
44	Q8F407	0.5087

45	Q8F3X7	0.6553
46	Q8F3X6	0.6226
47	Q8F3U9	0.2567
48	Q8F3Q8	0.3808
49	Q8F3N1	0.7507
50	Q8F3N0	0.3840
51	Q8F3G3	0.2989
52	Q8F3F9	0.2601
53	Q8F3F6	0.1576
54	Q8F316	0.8740
55	Q8F1Y6	0.7732
56	Q8F1Y3	0.7676
57	Q8F1S2	0.5333
58	Q8F1P0	0.3945
59	Q8F1I5	0.6863
60	Q8F166	0.4308
61	Q8F161	0.8179
62	D4YVY8	0.9755
63	Q8F108	1.0928
64	Q8F104	0.4509
65	Q8F103	0.5372
66	Q8F0U4	0.7421
67	Q8F0L7	0.6772
68	Q8F0L6	0.6920
69	Q8F0L5	0.6499
70	Q8F0K3	0.3840
71	Q8F0I9	0.5487
72	Q8F0F0	0.7395
73	Q8EZJ1	0.8526
74	Q8EZ35	0.2952
75	Q8EYV5	0.4661
76	Q8EYC3	0.6612
77	Q8EY10	0.7324
78	Q8EXE9	0.5412
79	Q8EXD3	0.5060
80	Q8EXA5	0.6488
81	LipL32	0.4325

Table S3 Linear epitopes predicted for 14 proteins by ElliPro

ID	No. epitopes	Position	Peptide	Score
Q8F7N9	4	1-32	MFQKKIAVALLLTLFFANCNSKKDDDDSTNLL	0.901
		204-213	SNMNDVDKAT	0.76
		150-170	EAIIDINSFDQNTGSFTYTMN	0.658
		78-113	PETTKDCSLGGSMKMSLGNLTEGQGANGSMILNYTG	0.649
D4YW28	5	231-248	RGSSSRKSPVTINKMRRD	0.795
		44-88	SSNTAGASSGTSTPKKKEKKRSKKKRSKSSSSIPNNLEETQKKN	0.743
		96-136	TSSGNNSNLNGSNGSSNTLESNGNVDEQQRVSASKMDLRDL	0.738
		156-170	YTVSQKSEQGSSFGS	0.635
		143-153	NEEVQIHPNNL	0.538
Q8F543	5	1-40	MSKAGLDPLNKSDVKNFLDKGNKSGVTHGGNSGTNNKTNA	0.835
		121-133	TKVDPLNGQPGKG	0.586
		86-91	YKSGSN	0.561
		98-103	LDKKPT	0.537
		73-78	GGNPGK	0.531
Q8F3N1	3	1-38	MITNNSLILVSKFSVRRGFNLIEVSIALALAGIAMT	0.818
		111-144	KDSQKPEDLLGGRDSEMNKLMRRSGQASQGAAT	0.726
		74-92	VSVLQSDKTTGDIPGYPGY	0.56
Q8F316	4	1-21	MNFKIKSFFILFIFLVLVGTS	0.849
		63-67	YKGNS	0.806
		84-97	DSTSLISNVQVGSY	0.711
		38-49	YELVSNPSAAFQ	0.585
Q8F1Y6	6	1-28	MISIRKLVISGISLIVLVWILFSSE	0.853
		216-232	QQVQKEKENAFKQAGIL	0.782
		81-100	IESDKGEPKEADPNAADADN	0.72
		51-65	SPSSGSGSSGGKTNE	0.71
		152-168	EAARNVFARTATHDQIR	0.682
		133-142	KKLSPAEKEA	0.589
Q8F1Y3	2	1-30	MTIDKIGGIGSGYEPKRTAPVKKTESKET	0.802
		64-71	PDDQDRSV	0.57
Q8F161	18	1-22	MNEDNVNHSNPGETFSNSGTRQ	0.832
		344-356	SGSLDGQILSGTQ	0.759
		54-66	SGSLDGQVQSGTQ	0.758
		402-414	SGNLDGQILTGTQ	0.757
		286-298	SGNLDGQALSGTQ	0.755
		112-124	SGNLDGQALSGTQ	0.751
		228-240	SGNLDGQALSGIQ	0.751
		170-182	LGNLDGQALSGIQ	0.749
		28-33	GVAGAS	0.745
		376-381	GIAGVS	0.736
		315-323	RLLGVAGQI	0.676
		306-312	DTGGNKQ	0.658
		83-91	RLLGVAGIQ	0.656
		190-207	DTGGNKQWTRLLGVAGQI	0.644
248-265	DTGGNKQWTRLLGVAGVS	0.645		

		132-149	DGSGNKQWTRLLGVAGAT	0.634
		74-80	DGNGNKQ	0.604
		364-370	DSGGNKQ	0.602
D4YVY8	2	1-7	MYSIVPS	0.718
		29-39	DSSNSASGVNT	0.671
Q8F108	4	66-76	PEHCGTTGAGE	0.778
		1-11	MSLFVVTSLPG	0.762
		52-61	GDSGDPKDG	0.628
		19-28	GGKDGDPPI	0.583
Q8F0U4	5	1-53	MSSKYFRFFISVSVSALFFLTFSISAQTNASKEEAKGNE LASAINDPKYQGDY	0.845
		151-180	ADTIVSVEQTQNSSTQSASARSREISANHH	0.766
		248-259	SEVSDNKDAQK	0.655
		103-116	NDALHYYYRRQYVV	0.63
		221-230	NLKPEEESKN	0.596
Q8F0F0	4	55-62	GNNIDLYI	0.756
		1-7	MSYMAVG	0.7
		14-27	SDSVAPATTGSSPR	0.613
		43-51	SVVSPGSP	0.608
Q8EZJ1	3	1-12	MKEKIFYVINLD	0.835
		58-160	QEIQSSIPFAEPGQIPTESNYKVASAEIPQANTNLPSTNSQDSVTFKNI PPATEVIDLKRKASTNVEKESHSSIETLSVKEPEESKTSKKIKRNEEKQSK	0.745
		37-48	VGKKRAADSGVD	0.513
Q8EY10	13	1-9	MKRFLAIV	0.843
		89-103	YQEKEDSATKKKVS	0.816
		374-439	KDGKKQFEIVSDSKAIEYDENGSKTGEGPIMVG TNKKNGCWTVGSGKVYYINGNENKRMGEMQGCK	0.802
		23-83	ENKGDLEVLPPNIRVEKYKETFMKAEGPVVTD CSGKPCSTEQLDGLKSDQIKKFKKN	0.776
		262-272	KLEPGTEKEKD	0.683
		147-151	KRDGV	0.626
		335-339	NKEGQ	0.608
		123-127	YETGE	0.596
		197-203	DPGQNGA	0.582
		311-315	WSNGN	0.557
		224-228	KDGST	0.542
		288-292	YKNGN	0.542
		248-252	YDN	0.513
O34094 LipL32	11	257-272	IAAEESLKKAASDATK	0.822
		33-49	FVLS EDTIPGTNETVKT	0.813
		1-25	MKKLSILAISVALFASITACGAFGG	0.763
		186-201	IPNPPKSFDDLKNIDT	0.746
		217-223	YKPGEVK	0.694
		114-131	SDAFKAATPEEKSMPHWF	0.669
		64-70	KPGQAPD	0.651
		153-158	KAKPVQ	0.648
		72-78	LVDGNKK	0.644
		140-150	MSAIMPDQIAK	0.578
		170-179	YKEERHNKYN	0.555

Table S4 Discontinuous epitopes predicted for 14 proteins by ElliPro

ID	No. epitopes	No. of residues	Residues	Score
Q8F7N9	5	10	A:I6, A:A7, A:V8, A:A9, A:L10, A:L11, A:L12, A:T13, A:L14, A:F15	0.927
		16	A:A17, A:N18, A:C19, A:N20, A:S21, A:K22, A:K23, A:D24, A:D25, A:D26, A:S27, A:T28, A:T29, A:N30, A:L31, A:L32	0.856
		65	A:G64, A:A65, A:Y66, A:S67, A:P78, A:E79, A:T80, A:T81, A:K91, A:S93, A:L94, A:G95, A:N96, A:L97, A:T98, A:E99, A:G100, A:Q101, A:G102, A:A103, A:N104, A:G105, A:S106, A:M107, A:I108, A:N110, A:T112, A:G113, A:E150, A:I152, A:I153, A:D154, A:I155, A:N156, A:S157, A:F158, A:D159, A:Q160, A:N161, A:T162, A:G163, A:S164, A:T166, A:T168, A:N170, A:K195, A:S197, A:N198, A:K200, A:S204, A:N205, A:M206, A:N207, A:D208, A:V209, A:D210, A:K211, A:A212, A:T213, A:E217, A:E221, A:K238, A:S242, A:F243, A:K244	0.69
		9	A:D83, A:C84, A:S85, A:L86, A:G87, A:G88, A:S89, A:Q119, A:N120	0.667
		3	A:T223, A:G224, A:K230	0.624
D4YW28	12	3	A:M245, A:R246, A:D248	0.988
		28	A:T96, A:S97, A:S98, A:G99, A:N100, A:N101, A:N102, A:S103, A:N104, A:L105, A:N106, A:G107, A:S108, A:N109, A:S110, A:G111, A:S112, A:S113, A:N114, A:T115, A:L116, A:E117, A:S118, A:G119, A:N120, A:V121, A:D122, A:E123	0.825
		15	A:S44, A:S45, A:N46, A:T47, A:A48, A:G49, A:A50, A:S51, A:S52, A:G53, A:T54, A:S55, A:T56, A:P57, A:K58	0.786
		4	A:K59, A:K60, A:E61, A:K63	0.779
		12	A:G232, A:S233, A:S234, A:S235, A:K237, A:S238, A:P239, A:V240, A:T241, A:I242, A:N243, A:K244	0.778
		17	A:S70, A:K71, A:K72, A:S73, A:S74, A:S75, A:S76, A:I77, A:P78, A:N79, A:N80, A:L81, A:E82, A:E83, A:T84, A:Q85, A:K86	0.774
		3	A:K161, A:S162, A:E163	0.759
		3	A:S65, A:K66, A:K67	0.634
		9	A:Q164, A:G165, A:S166, A:S167, A:G169, A:S170, A:S173, A:E174, A:K177	0.621
		7	A:Q124, A:V126, A:S127, A:A128, A:S129, A:K130, A:M131	0.589
		5	A:G155, A:T157, A:V158, A:S159, A:Q160	0.575
9	A:V146, A:Q147, A:I148, A:H149, A:P150, A:N151, A:N152, A:L153, A:Y156	0.529		
Q8F543	3	15	A:M1, A:S2, A:K3, A:A4, A:G5, A:L6, A:D7, A:P8, A:L9, A:N10, A:K11, A:S12, A:D13, A:V14, A:K15	0.906
		23	A:L18, A:D19, A:K20, A:G21, A:N22, A:K23, A:S24, A:G25, A:V26, A:T27, A:H28, A:G29, A:G30, A:N31, A:S32, A:G33, A:T34, A:N35, A:N36, A:K37, A:T38, A:N39, A:A40	0.793
		35	A:T58, A:K59, A:G60, A:Q63, A:D67, A:Y86, A:S88, A:G89, A:S90, A:N91, A:E94, A:S97, A:L98, A:D99, A:K100, A:K101, A:P102, A:T103, A:T121, A:K122,	0.571

			A:V123, A:D124, A:P125, A:L126, A:N127, A:G128, A:Q129, A:P130, A:G131, A:K132, A:G133, A:Q150, A:P151, A:L152, A:K153	
Q8F3N1	8	9	A:M1, A:I2, A:T3, A:N4, A:N5, A:N6, A:S7, A:L8, A:K9	0.963
		6	A:I10, A:L11, A:V12, A:S13, A:K14, A:F15	0.879
		6	A:S135, A:G136, A:Q137, A:A138, A:S139, A:Q140	0.797
		16	A:E117, A:D118, A:L119, A:L120, A:G121, A:G122, A:R123, A:D124, A:S125, A:E126, A:M127, A:N128, A:K129, A:L130, A:I131, A:M132	0.787
		22	A:S16, A:V17, A:R18, A:R19, A:G20, A:F21, A:N22, A:L23, A:I24, A:E25, A:V26, A:S27, A:I28, A:A29, A:L30, A:A31, A:L32, A:A33, A:G34, A:I35, A:M37, A:T38	0.757
		19	A:V74, A:S75, A:V76, A:L77, A:Q78, A:S79, A:D80, A:K81, A:T82, A:T83, A:G84, A:D85, A:I86, A:P87, A:G88, A:Y89, A:P90, A:G91, A:Y92	0.56
		5	A:G141, A:A142, A:A143, A:T144, A:A145	0.524
		4	A:K111, A:D112, A:S113, A:Q114	0.515
Q8F316	5	4	A:S7, A:F8, A:I10, A:L11	0.927
		20	A:T57, A:Y63, A:K64, A:G65, A:N66, A:S67, A:D84, A:S85, A:T86, A:S87, A:L88, A:I89, A:S90, A:N91, A:V92, A:Q93, A:V94, A:G95, A:S96, A:Y97	0.725
		9	A:F12, A:L15, A:V16, A:L17, A:V18, A:G19, A:T20, A:S21, A:L22	0.669
		10	A:V41, A:S42, A:N43, A:P44, A:S45, A:A46, A:K50, A:S75, A:G76, A:K77	0.64
		11	A:K106, A:D107, A:R108, A:E109, A:K111, A:N113, A:G114, A:T115, A:P116, A:I117, A:T118	0.601
Q8F1Y6	6	27	A:I2, A:S3, A:I4, A:R5, A:K6, A:L7, A:V8, A:I9, A:Y10, A:S11, A:G12, A:I13, A:S14, A:I15, A:S16, A:L17, A:I18, A:V19, A:L20, A:V21, A:W22, A:I23, A:L24, A:F25, A:S26, A:S27, A:E28	0.848
		33	A:E152, A:A153, A:R155, A:N156, A:V157, A:F158, A:A159, A:R160, A:T161, A:A162, A:T163, A:H164, A:D165, A:Q166, A:I167, A:R168, A:Y171, A:Q172, A:Q217, A:Q219, A:K220, A:E221, A:K222, A:E223, A:N224, A:A225, A:F226, A:K227, A:Q228, A:A229, A:G230, A:I231, A:L232	0.737
		16	A:G50, A:S51, A:P52, A:S53, A:S54, A:G55, A:S56, A:G57, A:S58, A:S59, A:G60, A:G61, A:K62, A:T63, A:N64, A:E65	0.683
		37	A:Y80, A:E82, A:S83, A:D84, A:K85, A:G86, A:E87, A:P88, A:K89, A:E90, A:A91, A:D92, A:P93, A:N94, A:A95, A:A96, A:D97, A:A98, A:D99, A:N100, A:T106, A:N107, A:K108, A:P109, A:T111, A:N112, A:K134, A:L135, A:S136, A:P137, A:A138, A:E139, A:K140, A:E141, A:A142, A:Q145, A:R149	0.651
		3	A:E198, A:E199, A:K202	0.601
		4	A:E209, A:K212, A:N213, A:Q216	0.594
Q8F1Y3	8	14	A:M1, A:T2, A:I3, A:D4, A:K5, A:I6, A:G7, A:G8, A:I9, A:G10, A:G11, A:S12, A:G13, A:Y14	0.92
		3	A:E15, A:P16, A:K17	0.804
		5	A:T19, A:A20, A:P21, A:V22, A:K23	0.772
		7	A:A97, A:D98, A:S101, A:E102, A:L105, A:G106, A:Q107	0.649
		8	A:P64, A:D65, A:D66, A:Q67, A:D68, A:S70, A:V71, A:K74	0.621
		4	A:T25, A:E26, A:S27, A:K28	0.593
		3	A:S89, A:P90, A:E91	0.564

		7	A:K81, A:N82, A:G83, A:D84, A:D86, A:N87, A:L88	0.53
Q8F161	5	3	A:M1, A:N2, A:E3	0.986
		173	A:G28, A:V29, A:A30, A:G31, A:A32, A:S33, A:S54, A:G55, A:S56, A:L57, A:D58, A:G59, A:Q60, A:V61, A:Q62, A:S63, A:G64, A:T65, A:Q66, A:L84, A:G86, A:V87, A:A88, A:G89, A:I90, A:Q91, A:S112, A:G113, A:N114, A:L115, A:D116, A:G117, A:Q118, A:A119, A:L120, A:S121, A:G122, A:T123, A:Q124, A:D125, A:T140, A:R141, A:L142, A:G144, A:V145, A:A146, A:G147, A:A148, A:T149, A:L170, A:G171, A:N172, A:L173, A:D174, A:G175, A:Q176, A:A177, A:L178, A:S179, A:G180, A:I181, A:Q182, A:D190, A:T191, A:G192, A:G193, A:N194, A:W197, A:T198, A:R199, A:L200, A:G202, A:V203, A:A204, A:G205, A:Q206, A:I207, A:D216, A:S217, A:S218, A:G219, A:N220, A:S228, A:G229, A:N230, A:L231, A:D232, A:G233, A:Q234, A:A235, A:L236, A:S237, A:G238, A:I239, A:Q240, A:D241, A:D248, A:T249, A:G250, A:G251, A:N252, A:T256, A:R257, A:L258, A:G260, A:V261, A:A262, A:G263, A:V264, A:S265, A:D274, A:S275, A:L276, A:G277, A:N278, A:S286, A:G287, A:N288, A:L289, A:D290, A:G291, A:Q292, A:A293, A:L294, A:S295, A:G296, A:T297, A:Q298, A:D306, A:T307, A:G308, A:G309, A:N310, A:L316, A:G318, A:V319, A:A320, A:G321, A:Q322, A:I323, A:S344, A:G345, A:S346, A:L347, A:D348, A:G349, A:Q350, A:I351, A:L352, A:S353, A:G354, A:T355, A:Q356, A:G376, A:I377, A:A378, A:G379, A:V380, A:S381, A:S402, A:G403, A:N404, A:L405, A:D406, A:G407, A:Q408, A:I409, A:L410, A:T411, A:G412, A:T413, A:Q414, A:D415	0.703
		25	A:D4, A:N5, A:V6, A:N7, A:H8, A:S9, A:N10, A:P11, A:G12, A:E13, A:T14, A:F15, A:S16, A:N17, A:S18, A:G19, A:T20, A:Q22, A:D390, A:S391, A:L392, A:G393, A:D394, A:K420, A:R422	0.701
		11	A:R83, A:D100, A:N101, A:L102, A:G103, A:N104, A:D132, A:G133, A:S134, A:G135, A:N136	0.529
		7	A:R25, A:D74, A:G75, A:N76, A:G77, A:N78, A:V418	0.527
D4YVY8	2	12	A:E28, A:D29, A:S30, A:S31, A:N32, A:S33, A:A34, A:S35, A:G36, A:V37, A:N38, A:T39	0.654
		5	A:S3, A:I4, A:V5, A:P6, A:S7	0.636
Q8F108	5	4	A:M1, A:S2, A:L3, A:F4	0.914
		9	A:H68, A:C69, A:G70, A:T71, A:T72, A:G73, A:A74, A:G75, A:E76	0.858
		8	A:V5, A:V6, A:T7, A:S8, A:L9, A:P10, A:G11, A:C12	0.632
		11	A:G52, A:D53, A:S54, A:G55, A:D56, A:P57, A:K58, A:D59, A:G60, A:N61, A:Q62	0.61
		10	A:G19, A:G20, A:K21, A:D22, A:G23, A:D24, A:P25, A:P26, A:W27, A:I28	0.583
Q8F0U4	8	5	A:M1, A:S2, A:S3, A:K4, A:Y5	0.986
		9	A:I10, A:S11, A:V12, A:S13, A:V14, A:S15, A:A16, A:L17, A:F18	0.944
		31	A:L20, A:T21, A:F22, A:S23, A:I24, A:S25, A:A26, A:Q27, A:T28, A:N29, A:A30, A:S31, A:K32, A:E34, A:A35, A:K36, A:G37, A:N38, A:E39, A:L40, A:A41, A:S42, A:A43, A:I44, A:N45, A:D46, A:P47, A:K48, A:Y49, A:G51, A:D52	0.794
		42	A:G148, A:A151, A:D152, A:T153, A:I154, A:V155, A:S156, A:V157, A:E158, A:Q159, A:T160, A:Q161,	0.714

			A:N162, A:S163, A:S164, A:T165, A:Q166, A:S167, A:A168, A:S169, A:A170, A:R171, A:S172, A:R173, A:E174, A:I175, A:S176, A:A177, A:N178, A:H179, A:H180, A:Q183, A:N221, A:L222, A:K223, A:P224, A:E225, A:E226, A:E227, A:S228, A:K229, A:N230	
		13	A:Y247, A:S248, A:E249, A:V250, A:S251, A:D252, A:N253, A:K254, A:D255, A:A256, A:Q257, A:K258, A:K259	0.633
		14	A:Q50, A:N103, A:D104, A:A105, A:L106, A:H107, A:Y108, A:Y109, A:Y110, A:R111, A:Q113, A:V115, A:V116, A:K120	0.624
		3	A:N96, A:S97, A:K100	0.56
		4	A:V88, A:Q89, A:G90, A:E93	0.501
Q8F0F0	4	3	A:M1, A:S2, A:Y3	0.93
		6	A:G55, A:N56, A:N57, A:I58, A:D59, A:Y61	0.688
		13	A:S14, A:D15, A:S16, A:V17, A:A18, A:P19, A:A20, A:T21, A:T22, A:G23, A:S24, A:S25, A:P26	0.636
		10	A:V42, A:S43, A:V44, A:V45, A:S46, A:P47, A:G48, A:S49, A:P50, A:P51	0.577
Q8EZJ1	12	3	A:I5, A:F6, A:Y7	0.923
		12	A:E141, A:P142, A:E143, A:E144, A:S145, A:K146, A:T147, A:S148, A:K149, A:K150, A:I151, A:K152	0.832
		21	A:K120, A:A121, A:S122, A:S123, A:T124, A:N125, A:V126, A:E127, A:K128, A:E129, A:S130, A:H131, A:S132, A:S133, A:I134, A:E135, A:T136, A:L137, A:S138, A:V139, A:K140	0.809
		26	A:K79, A:V80, A:A81, A:S82, A:A83, A:E84, A:I85, A:P86, A:Q87, A:A88, A:N89, A:T90, A:N91, A:L92, A:P93, A:S94, A:N95, A:T96, A:N97, A:S98, A:Q99, A:D100, A:S101, A:V102, A:T103, A:F104	0.795
		13	A:F66, A:A67, A:E68, A:P69, A:G70, A:Q71, A:I72, A:P73, A:T74, A:E75, A:S76, A:N77, A:Y78	0.745
		5	A:R153, A:N154, A:E155, A:E156, A:K157	0.739
		6	A:V8, A:I9, A:N10, A:L11, A:D12, A:R15	0.649
		14	A:K105, A:N106, A:I107, A:P108, A:P109, A:A110, A:T111, A:E112, A:V113, A:I114, A:D115, A:L116, A:K117, A:R118	0.616
		8	A:Q58, A:E59, A:I60, A:Q61, A:S62, A:S63, A:I64, A:P65	0.611
		3	A:Q158, A:S159, A:K160	0.533
		7	A:A42, A:A43, A:D44, A:S45, A:G46, A:V47, A:D48	0.521
		3	A:V37, A:G38, A:K40	0.502
Q8EY10	8	7	A:E93, A:D94, A:S95, A:A96, A:T97, A:K98, A:K99	0.952
		68	A:I368, A:P369, A:K374, A:D375, A:G376, A:K377, A:K378, A:Q379, A:F380, A:E381, A:I382, A:V383, A:S384, A:D385, A:S386, A:K387, A:A388, A:I389, A:E390, A:Y391, A:D392, A:E393, A:N394, A:G395, A:S396, A:K397, A:T398, A:G399, A:E400, A:G401, A:P402, A:I403, A:M404, A:V405, A:G406, A:T407, A:N408, A:K409, A:K410, A:N411, A:G412, A:C413, A:W414, A:T415, A:V416, A:G417, A:S418, A:G419, A:K420, A:V421, A:Y422, A:Y423, A:I424, A:N425, A:G426, A:N427, A:E428, A:N429, A:K430, A:R431, A:M432, A:G433, A:E434, A:M435, A:Q436, A:G437, A:C438, A:K439	0.795
		81	A:V22, A:E23, A:N24, A:K25, A:G26, A:K27, A:D28, A:L29, A:E30, A:V31, A:Q32, A:I33, A:L34, A:P35, A:P36, A:N37, A:I38, A:R39, A:V40, A:E41, A:K42, A:Y43, A:K44, A:E45, A:T46, A:F47, A:N48, A:M49,	0.729

			A:K50, A:A51, A:E52, A:G53, A:P54, A:V55, A:V56, A:T57, A:D58, A:C59, A:S60, A:G61, A:K62, A:P63, A:C64, A:S65, A:T66, A:E67, A:Q68, A:L69, A:D70, A:G71, A:L72, A:K73, A:S74, A:D75, A:Q76, A:I77, A:K78, A:K79, A:F80, A:K81, A:K82, A:N83, A:Y89, A:E91, A:K92, A:K100, A:V101, A:S102, A:V103, A:K111, A:D112, A:D113, A:K114, A:V135, A:G136, A:G137, A:V138, A:E140, A:K159, A:A160, A:N16	
		7	A:F4, A:C5, A:L6, A:A7, A:I8, A:V9, A:T10	0.718
		9	A:K262, A:L263, A:E264, A:P265, A:G266, A:T267, A:E268, A:K269, A:E275	0.688
		4	A:K147, A:D149, A:G150, A:V151	0.622
		6	A:Y123, A:E124, A:T125, A:G126, A:E127, A:R148	0.604
		26	A:Y248, A:D249, A:N250, A:G251, A:S252, A:Y288, A:K289, A:N290, A:G291, A:N292, A:W311, A:S312, A:N313, A:G314, A:N315, A:N335, A:K336, A:E337, A:G338, A:Q339, A:D354, A:E355, A:A356, A:T357, A:N358, A:E359	0.528
O34094 LipL32	7	16	A:V34, A:L35, A:S36, A:E37, A:D38, A:T39, A:I40, A:P41, A:G42, A:T43, A:N44, A:E45, A:T46, A:V47, A:K48, A:T49	0.845
		18	A:P239, A:G240, A:I257, A:A258, A:A259, A:E260, A:E261, A:S262, A:L263, A:K264, A:K265, A:A266, A:A267, A:S268, A:D269, A:A270, A:T271, A:K272	0.779
		20	A:L4, A:S5, A:I6, A:L7, A:A8, A:I9, A:S10, A:V11, A:A12, A:L13, A:F14, A:A15, A:S16, A:I17, A:T18, A:A19, A:C20, A:G21, A:A22, A:F23	0.757
		17	A:I186, A:P187, A:N188, A:P189, A:P190, A:K191, A:S192, A:F193, A:D194, A:D195, A:L196, A:K197, A:N198, A:I199, A:D200, A:T201, A:L204	0.723
		5	A:A149, A:K150, A:K153, A:N248, A:E250	0.638
		61	A:G24, A:G25, A:L26, A:K64, A:P65, A:G66, A:Q67, A:A68, A:P69, A:D70, A:L72, A:D74, A:G75, A:N76, A:K77, A:K78, A:S99, A:P100, A:T101, A:G102, A:E103, A:I104, A:G105, A:E106, A:P107, A:V113, A:S114, A:D115, A:A116, A:K118, A:A119, A:A120, A:T121, A:P122, A:E123, A:E124, A:K125, A:S126, A:M127, A:P128, A:H129, A:W130, A:F131, A:D132, A:D165, A:Y170, A:K171, A:E172, A:E173, A:R174, A:H175, A:N176, A:K177, A:Y178, A:Y217, A:K218, A:P219, A:G220, A:E221, A:V222, A:K223	0.607
		14	A:M140, A:S141, A:A142, A:I143, A:M144, A:D146, A:Q147, A:A154, A:K155, A:P156, A:V157, A:Q158, A:R207, A:Q253	0.581

Table S1. Protparam-Expsy analysis of the shortlisted 129 proteins

In the molar extinction coefficient prediction, values with assume all pairs of Cys residues form cystines whereas values with * assume that all Cys residues are reduced**

S.no	UNIPROT ID	KEGG id	Size	Mol Wt	PI	Negative residues	positive residues	No. of atoms	Extinction coeff	Half life	Instability index	Aliphatic index	GRAVY
1	Q8F9K7	LA0188	65	7588.67	5.7	9	8	1074	2980	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	30.70-stable	82.46	-0.429
2	Q8F9J2	LA0203	204	23092.29	5.21	23	17	3257	12950	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	53.76 unstable	91.27	-0.107
3	Q8F9J0	LA0205	495	54179.15	5.65	62	54	7561	50560** 50310*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	35.36 stable	75.68	-0.29
4	Q8F9B2	LA0283	477	53226.74	5.05	52	40	7435	67965** 67840*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	28.65 stable	87.65	-0.19
5	Q8F973	LA0323	142	16342.56	5.7	16	14	2296	36440	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	23.31 stable	85.85	-0.408

6	Q8F960	LA0337	167	19341.15	9.16	19	24	2727	21890	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	30.48 stable	76.41	-0.284
7	Q8F954	LA0343	135	15192.25	8.16	13	15	2102	24325**, 23950*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	26.51 stable	75.11	-0.406
8	Q8F932	LA0365	553	63290.42	8.43	103	107	8976	37485**, 37360*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	44.78 unstable	75.05	-0.947
9	Q8F927	LA0370	577	65560.03	8.65	66	71	9209	79315**, 79190*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	38.05 stable	76.69	-0.509
10	Q8F918	LA0379	511	57881.05	5.99	74	69	8110	67855**, 67730*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	38.06 stable	72.13	-0.704
11	Q8F915	LA0382	300	34013.07	9.37	28	38	4810	33015**, 32890*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	17.23 stable	80.27	-0.16
12	Q8F908	LA0389	304	34577.3	9.18	34	41	4894	33350	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	32.39 stable	94.08	-0.49
13	Q8F905	LA0392	266	31030.34	6.47	31	30	4350	38640**, 38390*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	46.33 unstable	80.26	-0.366

14	Q8F8X9	LA0420	181	20272.83	4.56	16	9	2805	28350** 27850*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	43.11 unstable	81.38	-0.154
15	Q8F8X8	LA0421	180	19990.74	5.13	16	14	2795	10805** 10430*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	42.52 unstable	87.78	-0.042
16	Q8F8Q5	LA0500	225	25825.27	6.98	27	27	3635	19370	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	34.40 stable	80.13	-0.463
17	Q8F8Q0	LA0505	366	39233	5.27	45	40	5539	20860	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	31.42 stable	82.84	-0.393
18	Q8F8M3	LA0532	299	34644.98	9.24	30	40	4907	39435** 39310*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	23.41 stable	81.74	-0.278
19	Q8F8L9	LA0536	339	39935.54	9.31	39	49	5609	63830	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	32.52 stable	72.45	-0.396
20	Q8F8I6	LA0570	279	31527.45	8.49	39	41	4530	16390	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	28.54 stable	105.48	-0.158
21	Q8F8G8	LA0589	632	71675.93	7.13	57	57	9929	160380** 159630*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	36.96 stable	76.61	-0.34
22	Q8F8E0	LA0617	170	19354.84	5.4	15	13	2661	31565	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	44.13 unstable	71.65	-0.331
23	Q8F8D7	LA0620	637	73037.6	8.95	55	67	10141	158890** 158140*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	42.45 unstable	72.84	-0.486

24	Q8F8B3	LA0644	466	52445.05	9.1	53	63	7434	68425** 68300*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	41.22 unstable	85.62	-0.37
25	Q8F895	LA0663	436	46846.61	6.05	25	22	6497	64120** 63370*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	26.60 stable	80.92	-0.087
26	Q8F850	LA0709	3088	337766.23	5.74	341	282	46816	350215** 348840*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	29.90 stable	73.9	-0.504
27	Q8F846	LA0713	890	101245.54	7.34	135	135	14185	85720	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	33.19 stable	68.7	-0.951
28	Q8F820	LA0769	602	69015.64	8.13	58	61	9584	152930** 152180*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	44.40 unstable	77.57	-0.467
29	Q8F7X4	LA0818	334	38216.71	8.39	42	44	5435	33350	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	37.08 stable	94.97	-0.35
30	Q8F7V7	LA0835	631	71736.04	6.72	60	59	9973	156370** 155620*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	42.15 unstable	80.46	-0.354
31	Q8F7N9	LA0905	244	26076.11	5.15	24	21	3618	15025** 14900*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	20.73 stable	68.36	-0.373
32	Q8F7F1	LA0994	522	59489.97	913	67	75	8450	73910	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	30.52 stable	88.43	-0.408
33	Q8F7E9	LA0996	255	27748.61	8.36	13	16	3882	47950** 47440*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	17.10 stable	89.06	0.114
34	Q8F7D6	LA1010	519	59364.17	8.21	64	67	8392	60085** 59710*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	39.55 stable	85.28	-0.229

35	Q8F7D1	LA1015	205	24066.42	6.74	24	24	3378	40925** 40800*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	39.17 stable	84.05	-0.481
36	Q8F7D0	LA1016	722	82145.12	7.17	100	100	11604	64750	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	28.69 stable	83.56	-0.572
37	Q8F796	LA1052	459	50007.3	5.08	48	37	7021	58455** 58330*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	30.47 stable	91.74	-0.109
38	Q8F789	LA1059	272	30482.92	8.88	28	33	4300	32680** 32430*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	28.14 stable	82.76	-0.327
39	Q8F783	LA1065	295	31594.8	5.71	26	22	4367	33015** 32890*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	22.23 stable	73.36	-0.373
40	Q8F782	LA1066	296	31524.73	5.6	28	24	4365	34505** 34380*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	31.90 stable	76.15	-0.348
41	D4YW28	LA1141a	248	27451.22	9.91	26	45	3914	11460	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	44.08 unstable	73.06	-0.809
42	Q8F6Y1	LA1168	139	15823.9	5.24	15	12	2166	11055** 10430*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	43.68 unstable	73.67	-0.068
43	Q8F6U1	LA1209	452	51734.6	9.13	48	57	7215	82640** 82390*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	39.65 stable	64.58	-0.48
44	Q8F6D3	LA1375	440	50552.44	7.98	45	47	6962	83935** 82310*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	36.76 stable	68.3	-0.659
45	Q8F6B1	LA1398	218	24585.45	9.46	24	32	3535	23950	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	36.80 stable	98.44	-0.261
46	Q8F6A9	LA1400	573	65457.56	8.65	54	61	9069	155910** 155160*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	37.29 stable	73.14	-0.532

47	Q8F6A7	LA1402	641	71904.24	8.95	54	66	9999	161410** 160660*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	39.71 stable	75.13	-0.409
48	Q8F6A5	LA1404	390	42180.47	5.78	31	29	5905	46995** 46870*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	25.62 stable	83.79	-0.052
49	Q8F644	LA1468	107	11402.2	7.73	5	6	1624	10095** 9970*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	26.37 stable	110.19	0.449
50	Q8F614	LA1498	273	30892.24	9.18	25	32	4470	21220** 20970*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	31.26 stable	123.52	-0.041
51	Q8F5X7	LA1538	160	17272.91	8.31	15	17	2434	4720** 4470*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	10.83 stable	85.38	0.002
52	Q8F5X6	LA1539	166	17379.93	8.87	15	19	2467	4720** 4470*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	17.57 stable	86.99	-0.003
53	GIUB24	LA1639	704	81751.5	9.32	77	97	11613	154030** 153780*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	32.66 stable	96.49	-0.28
54	Q8F5I7	LA1694	218	25136.9	6.36	33	22	3594	8940	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	37.18 stable	98.39	-0.456
55	Q8F5E5	LA1737	1538	183389.21	8.36	177	183	25545	366830	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	48.19 unstable	67.06	-0.459
56	Q8F5C7	LA1756	186	21200.02	5.63	24	21	2987	17545** 17420*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	39.93 stable	90.7	-0.281
57	Q8F5C4	LA1759	587	63757.56	5.87	41	38	8808	136485** 136360*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	23.95 stable	71.28	-0.271
58	Q8F5C3	LA1761	117	12333.71	3.99	14	5	1715	12490	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	22.36 stable	83.33	-0.256

59	Q8F5C2	LA1762	289	31753.76	7.74	22	23	4432	48025** 47900*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	29.83 stable	81.56	-0.197
60	Q8F5C1	LA1763	399	44011.48	8.62	32	35	6136	76905** 76780*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	26.13 stable	81.58	-0.239
61	Q8F5C0	LA1764	338	39587.89	8.52	43	46	5561	56965** 56840*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	25.04 stable	84.79	-0.572
62	Q8F590	LA1794	153	16597.81	9.82	14	25	2348	5960	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	7.57 stable	63.66	-0.864
63	Q8F543	LA1844	376	42294.72	6.01	38	34	5899	47580** 47330*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	28.68 stable	77.5	-0.293
64	Q8F526	LA1861	445	49166.26	5.74	33	30	6830	66490** 66240*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	29.66 stable	75.1	-0.08
65	Q8F4Y3	LA1905	178	20141.19	8.38	18	20	2858	13075** 12950*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	23.10 stable	93.15	0.017
66	Q8F4X6	LA1912	245	27744.89	7.83	33	34	3959	29910	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	33.66 stable	96.94	-0.251
67	Q8F4X1	LA1917	265	29816.68	5.78	38	35	4147	24660** 24410*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	36.27 stable	73.51	-0.438
68	Q8F4W5	LA1922	169	19733.76	7.8	21	22	2817	29910	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	40.87 unstable	100.95	-0.128
69	Q8CVE8	LA1963	468	54259.34	6.77	71	71	7732	46300	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	47.14 unstable	97.14	-0.389
70	Q8F4S5	LA1965	244	27623.11	5.82	26	23	3856	56840** 56840*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	32.29 stable	77.79	-0.425

71	Q8F4S2	LA1968	550	61283.91	6.97	54	54	8551	101190	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	25.29 stable	74.55	-0.393
72	Q8F4L5	LA2026	220	25586.71	9.08	23	28	3647	38415** 38390*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	59.84 unstable	98.27	-0.14
73	Q8F4I3	LA2059	439	53560.98	7.7	53	54	7480	147140	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	41.43 unstable	69.5	-0.406
74	Q8F4G6	LA2074	147	17416.06	5.05	24	16	2465	31065** 30940*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	52.69 unstable	96.8	-0.447
75	Q8F439	LA2208	535	61891.99	8.27	73	76	8641	100980** 100730*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	42.45 unstable	69.66	-0.761
76	Q8F407	LA2241	186	20956.99	5.96	22	20	2929	30285** 29910*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	42.50 unstable	86.94	-0.208
77	Q8F3X7	LA2272	270	29511.25	9.16	13	20	4211	13660** 13410*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	13.41 stable	110.04	0.308
78	Q8F3X6	LA2273	224	23963.47	8.42	12	14	3388	14565** 14440*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	22.16 stable	103.12	0.12
79	Q8F3V0	LA2300	226	24343.52	5.76	23	21	3411	25440	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	25.18 stable	79.78	-0.035
80	Q8F3U9	LA2301	224	24316.85	7.9	19	20	3418	27960	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	42.12 unstable	81.79	0.036
81	Q8F3Q8	LA2342	172	19833.32	4.79	21	13	2734	33140** 32890*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	51.80 unstable	78.2	-0.216

82	Q8F3N1	LA2370	178	19397.31	9.4	16	21	2751	10430	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	35.52 stable	89.89	-0.138
83	Q8F3N0	LA2371	173	19396.1	5.4	21	18	2750	20400	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	15.31 stable	98.67	-0.165
84	Q8F3G3	LA2443	488	56851.48	8.7	64	68	8243	37025** 36900*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	40.94 unstable	125.47	-0.305
85	Q8F3F9	LA2447	498	57222.65	6.74	58	58	8278	23045** 22920*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	51.05 unstable	122.75	-0.301
86	Q8F3F6	LA2450	633	72082.81	7.48	66	67	10428	36120** 35870*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	43.60 unstable	122.15	-0.331
87	Q8F316	LA2595	130	14214.55	9.3	9	14	2032	7575** 7450*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	24.03 stable	95.85	0.207
88	Q8F2M8	LA2742	413	45564.65	5.58	44	37	6673	59040** 58790*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	32.41 stable	81.38	-0.219
89	Q8F2H4	LA2797	242	27109.1	9.24	28	37	3860	25690** 25440*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	29.79 stable	81.74	-0.464
90	Q8F235	LA2942	400	43816.34	5.98	32	27	6154	34965** 34840*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	44.97 unstable	94.53	-0.143
91	Q8F1Y6	LA2992	232	25990.87	5.25	38	33	3633	15930	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	49.79 unstable	70.26	-0.886

92	Q8F1Y3	LA2995	107	11797.32	6.31	18	18	1678	2980	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	37.93 stable	78.41	-0.816
93	Q8F1W2	LA3016	90	10044.23	5.16	15	13	1411	11460	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	21.71 stable	67.22	-0.733
94	Q8F1S2	LA3056	320	37243.84	9.14	29	39	5228	90215** 89840*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	33.80 stable	79.84	-0.363
95	Q8F1R0	LA3069	1002	111329.02	9.34	105	127	15994	53875** 53750*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	26.78 stable	106.51	-0.063
96	Q8F1P0	LA3091	245	27888.9	5.86	31	29	3943	33015** 32890*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	34.86 stable	86.73	-0.156
97	Q8F1J0	LA3145	358	38992.22	5.15	36	30	5477	20775** 20400*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	25.03 stable	95.84	0.001
98	Q8F1I5	LA3150	124	14044.89	6.18	12	12	1924	17460** 16960*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	38.70 stable	66.13	-0.305
99	Q8F1D5	LA3201	250	30827.25	9.83	23	42	4237	107955** 107830*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	78.81 unstable	46.92	-1.41
100	Q8F166	LA3271	636	72414.71	7.87	55	57	10065	166910** 166160*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	37.99 stable	77.26	-0.381
101	Q8F161	LA3276	422	44087.34	5.03	31	26	6116	63830	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	12.25 stable	78.32	-0.306
102	D4YVY8	LA3286a	39	4096.4	3.37	4	0	559	1490	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	65.35 Unstable	77.44	-0.079

103	Q8F108	LA3332	76	7443.31	4.19	8	3	1020	5625** 5500*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	31.67 stable	62.76	-0.22
104	Q8F104	LA3336	433	46623.53	5.65	33	29	6509	65110** 64860*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	34.54 Stable	81.29	-0.077
105	Q8F103	LA3337	207	23830.59	8.91	26	29	3414	23950	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	57.69 Unstable	103.19	-0.237
106	Q8F0U4	LA3397	259	30150.65	8.84	35	39	4180	30830	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	47.95 Unstable	64.83	-0.861
107	Q8F0L7	LA3475	180	20679.3	4.62	21	13	2876	20985** 20860*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	57.39 unstable	75.83	-0.351
108	Q8F0L6	LA3476	179	20409.03	4.89	20	13	2837	21110** 20860*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	44.84Unstable	77.37	-0.334
109	Q8F0L5	LA3477	180	20465.04	4.53	22	12	2846	13535** 13410*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	50.63 Unstable	77.5	-0.313
110	Q9F0K3	LA3490	639	73154.35	6.61	61	58	10123	168400** 167650*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	38.93 Stable	72.18	-0.448
111	Q9F0I9	LA3504	133	15946.88	10.38	7	21	2220	50420	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	56.71 Unstable	62.41	-1.102
112	Q8F0I8	LA3505	269	31020.12	10.65	11	35	4318	86400	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	32.93 Stable	59.85	-0.727
113	Q8F0F0	LA3545	62	6442.14	4.36	5	3	896	2980	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	88.37 Unstable	78.55	-0.137
114	Q8EZZ0	LA3711	94	10390.93	8.81	7	12	1437	7950** 7450*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	19.76 stable	65.43	-0.11

115	Q8EZX0	LA3731	1059	112979.53	4.93	70	57	15602	159195* 157570*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	28.23 Stable	74.93	-0.099
116	Q8EZQ5	LA3797	356	40715.38	8.97	45	50	5764	22920	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	47.22 Unstable	87.89	-0.606
117	Q8EZX5	LA3848	238	25836.96	5.8	16	15	3563	36940** 36440*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	39.84 stable	69.62	-0.065
118	Q8EZJ1	LA3862	247	27324.03	9.57	31	42	3903	5960	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	54.47 Unstable	80.93	-0.603
119	Q8EZ35	LA4026	422	50060.19	8.67	50	55	7041	98235** 97860*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	48.54 Unstable	79.93	-0.421
120	Q8EYZ1	LA4070	371	42259.21	8.62	40	44	5959	46425** 46300*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	30.97 Stable	83.32	-0.217
121	Q8EYV5	LA4108	228	26760.89	8.21	26	28	3774	40130** 39880*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	30.70 Stable	86.84	-0.31
122	Q8EYT5	LA4128	114	12088.47	6.68	9	9	1639	7950** 7450*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	21.00 Stable	56.49	-0.18
123	Q8EYC3	LA4293	224	25154.74	6.64	30	30	3566	45045** 44920*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	35.24 Stable	88.3	-0.378
124	Q8EY10	LB047	439	49905.97	8.74	68	76	6926	90105** 89730*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	23.03 Stable	48.18	-1.134

125	Q8EXE9	LB264	305	34548.21	10.3	20	54	4978	20400	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	41.54 Unstable	83.11	-0.438
126	Q8EXE5	LB268	289	32144.89	9.68	36	56	4608	15930	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	41.58 Unstable	66.23	-0.803
127	Q8EXD6	LB277	229	25255.05	9.3	21	27	3581	15930	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	47.74 Unstable	85.07	-0.131
128	Q8EXD3	LB280	171	18804.41	5.65	16	14	2609	13450** 12950*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	54.96 Unstable	81.58	-0.208
129	Q8EXA5	LB309	400	43057.18	5.33	26	21	5920	75120** 74370*	30hrs in vitro, >20hrs in yeast, >10hrs in e.coli	30 Stable	72.25	-0.128