

## Supplementary Information

**Table S1.** Analysis of variance (ANOVA) for optimization of palmitic acid

Source	Sum of Squares	d.f.	Mean Square	F-Value	Probability (p) > F
Model	439.12	9	48.79	39.98	< 0.0001
Lack of fit	7.87	3	2.62	15.49	0.0115
Pure error	0.6771	4	0.1693		
Corrected total	447.66	16			

$R^2 = 0.9809$   $R^2_{adj} = 0.9564$   $CV (\%) = 14.55$



(A)



(B)

**Figure S1.** Collection of marine fishes, (A) Obtuse barracuda and (B) Indian oil sardine.



**Figure S2.** Separation of palmitic acid