

1

Supplementary Table S1 Source of sample for bacteriophage isolation against *S. aureus*

Sample	Location	Type of sample	Coordinate
A	Universiti Teknologi Malaysia T02 building	Lake water	1°33'51.4"N 103°39'15.0"E
B	Universiti Teknologi Malaysia recreation park	Lake water	1°33'17.4"N 103°38'16.2"E
C	Mutiara Rini recreation park	Lake water	1°30'30.9"N 103°37'58.6"E
D	Crossroad junction of Gambang	Lake water	3°42'33.4"N 103°07'19.6"E
E	Gambang Resort City	Lake water	3°42'34.3"N 103°03'13.3"E
F	Kuantan River	River water	3°47'54.9"N 103°19'24.6"E
G	Sewage treatment plant at Universiti Malaysia Pahang	Sewage water	3°43'14.2"N 103°07'29.4"E
H	Sewage treatment plant at Residential college 4, Universiti Malaysia Pahang	Sewage water	3°43'54.8"N 103°07'31.9"E
I	Indah Water sewage treatment plant at housing area of Makmur Fajar Jaya	Sewage water	3°43'32.1"N 103°08'48.2"E
J	Berkelah waterfall, Gambang	Waterfall sample	3°45'12.6"N 102°58'46.7"E

2

3

4

5

Supplementary Table S2. Bacterial strains used in this study

Name	Characteristics	Source
<i>Staphylococcus aureus</i> ATCC 6538	Human lesion isolate. Biosafety level 2, Gram positive bacteria	American Type Culture Collection
<i>Staphylococcus aureus</i> ATCC 25923	Clinical isolate, biosafety level 2, Gram positive bacteria	American Type Culture Collection
<i>Staphylococcus aureus</i> ATCC 29123	Clinical isolate, biosafety level 2, Gram positive bacteria	American Type Culture Collection
<i>Staphylococcus aureus</i> ATCC 43300 (MRSA)	Clinical isolate, biosafety level 2, Gram positive bacteria	American Type Culture Collection
<i>Bacillus cereus</i> ATCC 11778	Biosafety level 1, Gram positive bacteria	American Type Culture Collection
<i>Serratia marcescens</i> ATCC 13880	Pond water isolate, biosafety level 1, Gram negative bacteria	American Type Culture Collection
<i>Escherichia coli</i> ATCC 10536	Biosafety level 1, Gram negative bacteria	American Type Culture Collection
<i>Acinetobacter baumannii</i> ATCC 1960	Urine isolate, biosafety level 2, Gram negative bacteria	American Type Culture Collection

10
11

Supplementary Table S3. Reaction mixture of restriction enzyme digestion of phage DNA

Component	Volume
10x CutSmart™ buffer	2µl
DNA	2µl
Sterilised deionised water	13µl
SacII	1µl
HindIII	1µl
NaeI	1µl

12

13