

Table S1. Identities and accession numbers of phages used for comparative analyses.

<b>IMG ID</b>	<b>full name</b>	<b>GB acc</b>
641210038	Staphylococcus phage tp310-2 provirus	NC_009762
641209970	Staphylococcus phage tp310-1 provirus	NC_009761
642978062	Staphylococcus phage phiSauS-IPLA35	NC_011612
641204912	Staphylococcus phage phiPVL108	NC_008689
645046073	Staphylococcus phage phiPVL-CN125	NC_012784
641206518	Staphylococcus phage phiETA3	NC_008799
641206450	Staphylococcus phage phiETA2	NC_008798
642976413	Staphylococcus phage phi2958PVL	NC_011344
641205308	Staphylococcus phage PH15	NC_008723
641205245	Staphylococcus phage CNPH82	NC_008722
641208734	Staphylococcus phage 80alpha	NC_009526
638297097	Staphylococcus aureus phage phi 12	NC_004616
638284543	Staphylococcus aureus bacteriophage PVL	NC_002321
641510114	Listeria phage B054	NC_009813
638290276	Listeria phage 2389	NC_003291
641202568	Geobacillus phage GBSV1	NC_008376
642976997	Clostridium phage phiCD27	NC_011398
641207493	Clostridium phage phiC2	NC_009231
642976321	Clostridium phage 39-O	NC_011318
638319424	Clostridium difficile bacteriophage phi CD119	NC_007917
638292480	Bacteriophage phi3626	NC_003524
638312133	Bacillus thuringiensis phage GIL16c	NC_006945
638295403	Bacillus phage SPP1	NC_004166
638286350	Bacillus phage GA-1	NC_002649
642977436	Bacillus phage AP50	NC_011523
638310406	Bacillus clarkii bacteriophage BCJA1c	NC_006557

Table S2. Basic genome characteristics and accession numbers.

<b>Genome</b>	<b>Accession number</b>	<b>Genes</b>	<b>w/ Func Pred</b>	<b>KEGG Orthology (KO)</b>	<b>COG</b>	<b>Pfam</b>	<b>GC Perc</b>	<b>Bases</b>
ΦCP13O	JF67208	55	23	2	14	24	30.0%	38326
ΦCP26F	GQ443085	49	18	2	11	18	30.0%	39188
ΦCP34O	JF767209	52	20	2	12	21	31.0%	38309
ΦCP9O	JF767210	49	18	2	11	18	30.0%	39594