

Supplementary Table 2 Characteristics of complete host-phage networks included in the present study, including additional information on biological context of each study (1-37).

ID	Reference	Bacteria	Phage	Majority source	Additional source	Isolation Habitat	Bacterial association	Bacterial trophy	Geography
1	(1) Abe (2007)	<i>Escherichia coli</i>	<i>T2 and PP01</i>	ecological	artificial		human pathogen	heterotrophic	
2	(2) Barrangou (2002)	<i>Leuconostoc</i>	<i>Caudovirales</i>	ecological	artificial	sauerkraut	free	heterotrophic	North Carolina, USA
3	(3) Braun-Brenton (1981)	<i>Escherichia coli</i>	λ	experimental		lab-agar plates	human symbiont	heterotrophic	
4	(4) Campbell (1995)	<i>Pseudomonas</i>	<i>Myoviridae</i>	experimental	ecological	barley roots	plant symbiont	heterotrophic	Hojbakkegaard, Denmark
5	(5) Capparelli (2010)	<i>Salmonella</i>		ecological		gastroenteritis patients	human pathogen	heterotrophic	Europe
6	(6) Caso (1995)	<i>Lactobacillus</i>	<i>Siphoviridae</i>	experimental		food, fresh water, soil, sewage	free	heterotrophic	Spain
7	(7) Ceyssens (2009)	<i>Pseudomonas aeruginosa</i>		artificial		hospital sewage, fresh water	human pathogen	heterotrophic	global
8	(8) Comeau (2005)	<i>Vibrio</i>		experimental		marine	human pathogen / oysters	heterotrophic	British Columbia, Canada
9	(9) Comeau (2006)	<i>Vibrio</i>	<i>Siphoviridae and Podoviridae</i>	experimental		marine	human pathogen	heterotrophic	British Columbia, Canada
10	(10) DePaola (1998)	<i>Vibrio vulnificus</i>	<i>Podoviridae, Sphaerotilidae, and Myoviridae</i>	ecological		marine	human pathogen / oysters	heterotrophic	Gulf of Mexico
11	(11) Doi (2003)	<i>Lactobacillus</i>	<i>Siphoviridae and Myoviridae</i>	artificial		silage (fermented bovine feed)	free	heterotrophic	Japan
12	(12) Duplessis (2001)	<i>Streptococcus thermophilus</i>	<i>Myoviridae and Siphoviridae</i>	artificial		Industrial cheese plants	free	heterotrophic	Quebec, Canada
13	(13) Gamage (2004)	<i>Escherichia coli</i>		ecological		human and animal fecal isolates	human pathogen	heterotrophic	Ohio, USA
14	(14) Goodridge (2003)	<i>Enterobacteriaceae</i>	<i>Myoviridae</i>	ecological		human and animal	human pathogen	heterotrophic	global
15	(15) Hansen (2007)	<i>Campylobacter</i>	<i>Myoviridae</i>	ecological		poultry intestine	human pathogen	heterotrophic	Denmark
16	(16) Holmfeldt (2007)	<i>Flavobacteriaceae</i>	<i>Myoviridae, Siphoviridae, and Podoviridae</i>	artificial	ecological	marine	free	heterotrophic	Scandinavia
17	(17) Kankila (1994)	<i>Rhizobium</i>		ecological		soil	free	heterotrophic	Finland
18	(18) Krylov (2006)	<i>Escherichia and Salmonella</i>	<i>T-even superfamily</i>	ecological		sewage	human pathogen	heterotrophic	
19	(19) Kudva (1999)	<i>Enterobacteriaceae</i>		artificial		bovine and ovine feces	human pathogen	heterotrophic	North West USA
20	(20) Langley (2003)	<i>Burkholderia</i>	<i>T-even and λ - like</i>	ecological	artificial	soil, freshwater, plant	mycorrhizal	heterotrophic	global