

*Supplementary information*

# Properties of a Novel *Salmonella* Phage L66 and its Application Based on Electrochemical Sensor-Combined AuNPs to Detect *Salmonella*

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**Table S1.** Host spectrum of phage L66.

Number	G <sup>+</sup> /G <sup>-1</sup>	Strain	Source	R/S	Species	Lytic ability
1	G <sup>-</sup>	SJTUF 10978	LC	S	<i>S. Enteritidis</i>	+++
2	G <sup>-</sup>	SJTUF 10984	LC	S	<i>S. Enteritidis</i>	++
3	G <sup>-</sup>	38	LC	R	<i>S. Enteritidis</i>	+++
4	G <sup>-</sup>	39	LC	R	<i>S. Enteritidis</i>	+++
5	G <sup>-</sup>	42	LC	R	<i>S. Enteritidis</i>	+++
6	G <sup>-</sup>	201	LC	R	<i>S. Enteritidis</i>	+
7	G <sup>-</sup>	211	LC	R	<i>S. Enteritidis</i>	++
8	G <sup>-</sup>	10960	LC	R	<i>S. Enteritidis</i>	++
9	G <sup>-</sup>	11561	LC	R	<i>S. Enteritidis</i>	+++
10	G <sup>-</sup>	ATCC 14028	ATCC	S	<i>S. Typhimurium</i>	+++
11	G <sup>-</sup>	ATCC 13311	ATCC	S	<i>S. Typhimurium</i>	+
12	G <sup>-</sup>	30	LC	R	<i>S. Typhimurium</i>	—
13	G <sup>-</sup>	36	LC	R	<i>S. Typhimurium</i>	—
14	G <sup>-</sup>	114	LC	R	<i>S. Typhimurium</i>	++
15	G <sup>-</sup>	172	LC	R	<i>S. Typhimurium</i>	+
16	G <sup>-</sup>	206	LC	R	<i>S. Typhimurium</i>	+++
17	G <sup>-</sup>	10855	LC	R	<i>S. Typhimurium</i>	++
18	G <sup>-</sup>	SJTUF 13306	LC	R	<i>S. Typhimurium</i>	++
19	G <sup>-</sup>	SJTUF 13277	LC	R	<i>S. Typhimurium</i>	+
20	G <sup>-</sup>	SJTUF 13336	LC	R	<i>S. Typhimurium</i>	++
21	G <sup>-</sup>	SJTUF 13337	LC	R	<i>S. Typhimurium</i>	++
22	G <sup>-</sup>	SJTUF 13350	LC	R	<i>S. Typhimurium</i>	++
23	G <sup>-</sup>	UK-1	LC	S	<i>S. Typhimurium</i>	+++
24	G <sup>-</sup>	NCTC 12900	NCTC	S	<i>E. coli</i>	—
25	G <sup>-</sup>	ATCC 25923	ATCC	S	<i>E. coli</i>	—
26	G <sup>-</sup>	12900	LC	S	<i>E. coli</i>	—
27	G <sup>-</sup>	ATCC 29544	ATCC	S	<i>E. coli</i>	—
28	G <sup>-</sup>	DH5 $\alpha$	LC	S	<i>E. coli</i>	—
29	G <sup>-</sup>	CICC10662	CICC	S	<i>E. coli</i>	—
30	G <sup>-</sup>	CICC10664	CICC	S	<i>E. coli</i>	—
31	G <sup>-</sup>	CICC10667	CICC	S	<i>E. coli</i>	—
32	G <sup>-</sup>	CICC10669	CICC	S	<i>E. coli</i>	—

33	G <sup>-</sup>	17	LC	R	<i>S. Agonistes</i>	+
34	G <sup>-</sup>	19	LC	R	<i>S. Agonistes</i>	+
35	G <sup>-</sup>	21	LC	R	<i>S. Agonistes</i>	+
36	G <sup>-</sup>	3710	LC	S	<i>S. Dublin</i>	++
37	G <sup>-</sup>	3723	LC	S	<i>S. Dublin</i>	++
38	G <sup>-</sup>	CVCC 534	CVCC	S	<i>S. Pullorum</i>	++
39	G <sup>-</sup>	CVCC 519	CVCC	S	<i>S. Pullorum</i>	+++
40	G <sup>-</sup>	13500	LC	R	<i>S. Indiana</i>	++
41	G <sup>-</sup>	13520	LC	R	<i>S. Indiana</i>	++
42	G <sup>-</sup>	ATCC 9270	ATCC	S	<i>S. Duck</i>	+
43	G <sup>-</sup>	ATCC 10708	ATCC	S	<i>S. Choleraesuis</i>	—
44	G <sup>+</sup>	ATCC 19114	ATCC	S	<i>Listeria monocytogenes</i>	—
45	G <sup>-</sup>	33846	ATCC	S	<i>Vibrio parahaemolyticus</i>	—
46	G <sup>+</sup>	260031	CMCC	S	<i>S. aureus</i>	—
47	G <sup>+</sup>	25923	ATCC	S	<i>S. aureus</i>	—
48	G <sup>+</sup>	ATCC 29213	ATCC	S	<i>S. aureus</i>	—
49	G <sup>+</sup>	ATCC 6538	ATCC	S	<i>S. aureus</i>	—

Note: G<sup>+</sup>for Gram-positive bacteria, G<sup>-</sup> for Gram-negative bacteria. R for Resistant strain, S for Sensitive strain. "++++, ++, +, -,"refer to the different ability to infest different host bacteriophages of phages. "++++" indicates very transparent and clear phage spot, "++" indicates clear and transparent phage spot, "+" indicates a hazy background of phage spot, and "—" indicates no phage spot phenomenon. "LC"refer to Laboratory collection.