

Supplemental Table S1
List of Prophages in *Escherichia coli* K-12

1) Genes inside prophages

				No. genes								
Prophage		Left end	Right end	Length	Total	Known	Unknown	Pseudo	TF	IS	Length w/o IS	Insertion site
CP4-6		262182	296489	34,308	48	17	26	5	5	8	27,332	<i>thrW</i>
DLP12	Qsr	564025	585326	21,302	36	23	11	2	2	2	18,849	<i>argU</i>
e14		1195443	1210635	15,193	22	13	8	1	2	0	15,193	<i>icd</i>
Rac		1409923	1432982	23,060	33	18	12	3	2	1	21,865	<i>ttcA</i>
Qin	Kim	1630310	1650767	20,458	40	25	13	2		1	19,752	<i>(ydfI-rspB)</i>
CP4-44		2065378	2077055	11,678	19	6	9	4		2	9,152	<i>(insH-yeeX)</i>
PR-X		2165222	2165850	629	2	1	1	0		0	629	<i>(cyaR-yegR)</i>
CPS-53	KpLE1	2464407	2474621	10,215	18	7	10	1		0	10,215	<i>argW</i>
CPZ-55	Eut	2556721	2563483	6,763	9	1	8	0		0	6,763	<i>(eutB-eutA)</i>
CP4-57		2753979	2776008	22,030	28	4	22	2	2	0	22,030	<i>(ssrA-ypjA)</i>
KpLE2		4494108	4534178	21,302	49	22	21	6	3		40,071	
				Total	304	137	141	26	16			

Note: The functions of prophages are mostly predicted based on the sequence similarity to the phage genes.

2) Regulator genes inside prophages

Siigma	Known (1)	FecI
TF	Known (4)	AlpA, AppY, DicC, XynR
TF	Unknown (10)	PerR, RacR, SgcR, YagA, YbcM, YdaS, YfjR, Yjhl, YmfN, YmfT

Note: Regulatory functions have been experimentally identified only for FecI, AppY and XynR