

Table S2. Summary of prophages and integrative elements of O26, O111 and O103

Name	Position (start)	Position (end)	Length (bp)	Integration site	attL/R	Type	Virulence-related genes and other notable features
O26							
Prophages							
EC026_P01	612033	662218	50186	tRNA (<i>argU</i>)	45	lambda-like	<i>bor, lom, ompT</i> , hydrolase
EC026_P02	890186	942733	52549	<i>ybhC - ybhB</i>	15	lambda-like	<i>sfpA, lom, nleH. cifψ, nleG, espJ</i>
EC026_P03	1170970	1220174	49206	<i>yccA - ycdG</i>	65	lambda-like	tRNA (IRR), <i>pchABC</i> -homolog, <i>lom, tccP2, espVψ</i>
EC026_P04	1220222	1271596	51376	<i>yccA - ycdG</i>	11	lambda-like	tRNA (IRR), <i>pchABC</i> -homolog, <i>lom</i>
EC026_P05	1472794	1523542	50749	<i>potC</i>	12	lambda-like	tRNA (IRψR), <i>lom, espO, espK</i>
EC026_P06	1559000	1614503	55489	<i>wrbA</i>	13	lambda-like	<i>stxI, lom, nleI/nleG, nleG, nleG, espW, nleG, espM</i>
EC026_P07	1619447	1630545	11099	<i>ycfD - phoQ</i>	10	untypable (Sp7-like)	<i>pchE</i> -homolog
EC026_P08	1739930	1774688	34759	<i>ompW</i>	28	lambda-like	<i>paa/adfO</i> , tRNA (IRψR), <i>nleG, nleA/espIψ, nleH, nleF, espO, nleG, espM, nleG</i>
EC026_P09	1870372	1917976	47606	<i>ydaO</i>	43	lambda-like	<i>lom, nleG, nleG, nleG</i>
EC026_P10	2120369	2170396	49880	<i>ydfJ</i>	148	lambda-like	<i>lom</i>
EC026_P11	2170260	2217842	47583	<i>ydfJ</i>	20	lambda-like	<i>lom, nleC, pchABC</i> -homolog, tRNA (IRR)
EC026_P12	2239231	2253875	14645	<i>ydgG</i>	23	untypable (Sp7-like)	<i>pchE</i> -homolog
EC026_P13	2374989	2410628	35640	<i>btuC - ihfA</i>	25	P2-like	
EC026_P14	2532804	2582170	49367	<i>pphA - yebY</i>	32	lambda-like	<i>nleG, ospB, lom</i>
EC026_P15	2668166	2705497	37331	tRNA (<i>leuZ</i>)	121	P2-like	

EC026_P16	3041507	3050283	8777	tRNA (<i>proL</i>)	23	untypable (Sp7-like)	
EC026_P17	3089156	3138905	49750	<i>yfaT</i>	11	lambda-like	<i>nleG, nleG, lom, bor</i>
EC026_P18	3264205	3304868	40664	tRNA (<i>argW</i>)	16	P22-like	
EC026_P19	3604902	3659140	54239	tmRNA (<i>ssrA</i>)	25	lambda-like	<i>espK, espN, espX, lom, pchABC-homolog, tRNA (IRR)</i>
EC026_P20	4952596	4966595	14000	tRNA (<i>selC</i>)	17	P4-like	
EC026_P21	5524023	5538033	14011	tRNA (<i>leuX</i>)	18	P4 like	
Integrative elements							
ECO26_IE01	321433	333862	12430	tRNA (<i>thrW</i>)	21		
ECO26_IE02	1290655	1386761	96108	tRNA (<i>serX</i>)	19	SpLE1-like	urease operon, tellurium resistance, <i>iha, hecB, pchD</i> -homolog, siderophore biosynthesis operon, <i>aidA-I, traTψ</i>
ECO26_IE03	2753288	2784375	31088	tRNA (<i>asnT</i>)	5		siderophore biosynthesis
ECO26_IE04	3304869	3331559	26692	tRNA (<i>argW</i>)	19		<i>aidA-I</i>
ECO26_IE05	3659141	3665986	6846	tmRNA (<i>ssrA</i>)	ND		
ECO26_IE06	3894472	3903556	9085	tRNA (<i>glyU</i>)	17		
ECO26_IE07	4029622	4037548	7927	tRNA (<i>pheV</i>)	11		<i>iha</i>
ECO26_IE08	5328871	5387573	58703	tRNA (<i>pheU</i>)	17	LEE	T3SS machinery, <i>ospB, espG, espZ, espH, map, tir, espB, espF, efaI/lifA, nleE, nleB, espL</i>
ECO26_IE09	5538034	5583667	45634	tRNA (<i>leuX</i>)	18	□	Iron-transport system, <i>aidA-I</i>

O111

Prophages

ECO111_P01	607730	622448	14719	tRNA (<i>argU</i>)	45	lambda-like	<i>ompT</i> , hydrolase
ECO111_P02	850421	887546	37126	<i>ybhC</i> - <i>ybhB</i>	19	lambda-like	<i>sfpA</i> , <i>lom</i> , <i>nleH</i> , <i>cifψ</i> , <i>nleGψ</i> , <i>espJ</i>
ECO111_P03	1120777	1148352	25756	tRNA (<i>serT</i>)	65	lambda-like	tRNA (IRR), <i>pchABC</i> -homolog, <i>tccP2</i> , <i>espVψ</i>
ECO111_P04	1183556	1244155	60600	<i>wrbA</i>	13	lambda-like	tRNA (IRR), <i>bor</i> , <i>lom</i>
ECO111_P05	1435922	1493397	57699	<i>potC</i>	12	lambda-like	tRNA (IRψR), <i>lom</i> , <i>espX</i> , <i>espN</i> , <i>espO</i> , <i>espK</i>
ECO111_P06	1604962	1646735	41774	<i>ompW</i>	18	lambda-like	tRNA (Iψ), <i>lom</i> , <i>ospG</i>
ECO111_P07	1742478	1773420	30943	<i>ydaO</i>	43	lambda-like	<i>lom</i> , <i>nleG</i> , <i>nleG</i> , <i>nleG</i> , <i>sod</i>
ECO111_P08	1976596	1999287	22692	<i>ydfJ</i>	12	lambda-like	tRNA (IRψR), <i>nleG</i> , <i>ospB</i> , <i>paa/adjO</i>
ECO111_P09	2002865	2048861	45997	<i>tonB</i>	8	lambda-like	<i>nleG</i> , <i>espM</i> , <i>nleG</i> , <i>espO</i> , <i>nleFψ</i> , <i>nleH</i> , <i>nleGψ</i> , <i>lom</i>
ECO111_P10	2191144	2223436	32293	<i>btuC</i> - <i>ihfA</i>	17	P2-like	
ECO111_P11	2392300	2440434	48135	<i>yecE</i>	21	lambda-like	tRNA (IRR), <i>stx2</i> , <i>nleC</i> , <i>lom</i> , <i>sod</i> , serine protease
ECO111_P12	2535491	2585400	49910	tRNA (<i>serU</i>)	64	lambda-like	tRNA (IRR), <i>nleC</i> , <i>lom</i> , <i>pchABC</i> -homolog
ECO111_P13	2617488	2660928	43441	<i>dacD</i> - <i>sbcB</i>	15	lambda-like	tRNA (AT)
ECO111_P14	2855089	2864610	9522	tRNA (<i>proL</i>)	15	untypable	
ECO111_P15	2904032	2917820	13694	<i>yfaT</i>	10	lambda-like	<i>nleA/espI</i> , <i>nleG</i>
ECO111_P16	3316538	3346200	29663	tmRNA (<i>ssrA</i>)	ND	lambda-like	<i>stxI</i> , <i>lom</i>
ECO111_P17	4957389	5001514	44126	<i>yjbN</i>	16	lambda-like	tRNA (IRR), <i>pchABC</i> -homolog, <i>lom</i> , <i>nleGψ</i> , <i>espW</i> , <i>nleG</i> , <i>espM</i> ,

Integrative elements

ECO111_IE01	330269	345177	14909	tRNA (<i>thrW</i>)	ND		
-------------	--------	--------	-------	----------------------	----	--	--

ECO111_IE02	1263858	1349833	85977	tRNA (<i>serX</i>)	15	SpLE1-like	urease operon, tellurium resistance operon, <i>iha</i> , <i>pchD</i> -homolog, siderophore biosynthesis operon, <i>hecB</i>
ECO111_IE03	2586494	2589296	2803	tRNA (<i>asnT</i>)	ND		
ECO111_IE04	3346201	3351149	4949	tmRNA (<i>ssrA</i>)	14		
ECO111_IE05	3705294	3759468	54198	tRNA (<i>pheV</i>)	22	LEE	T3SS machinery, <i>espL</i> , <i>nleB</i> , <i>nleE</i> , <i>espG</i> , <i>espF</i> , <i>espB</i> , <i>tir</i> , <i>map</i> , <i>espH</i> , <i>espZ</i> ,
ECO111_IE06a	5086027	5105434	19408	<i>lysU</i> - <i>yjfZ</i>	ND	SpLE3/OI-122-like	<i>efa1/lifA</i> , <i>nleE</i> , <i>nleB</i> , <i>espLψ</i>
ECO111_IE06b	5170911	5181064	10154	tRNA (<i>pheU</i>)	ND	SpLE3/OI-122-like	<i>pagC</i>
ECO111_IE07	5245010	5265674	20665	tRNA (<i>leuX</i>)	ND		Lon protease-homolog

O103

Prophages

ECO103_P01	571907	618386	46527	tRNA (<i>argU</i>)	45	lambda-like	<i>bor</i> , <i>lom</i> , <i>ompT</i> , hydrolase
ECO103_P02	840062	881288	41227	<i>ybhC</i> - <i>ybhB</i>	14	lambda-like	<i>sfpA</i> , <i>lom</i> , <i>nleB</i> , <i>nleCψ</i> , <i>nlaH</i> , <i>cifψ</i> , <i>nleG</i> , <i>nleA/espI</i>
ECO103_P03	1268341	1321097	52757	<i>potC</i>	12	lambda-like	<i>lom</i> , <i>espX</i> , <i>espN</i> , <i>espK</i>
ECO103_P04	1325875	1336955	11081	<i>ycfD</i> - <i>phoQ</i>	10	untypable (Sp7-like)	<i>pchE</i> -homolog
ECO103_P05	1445519	1491434	45916	<i>ompW</i>	28	lambda-like	<i>lom</i> , <i>ospGψ</i>
ECO103_P06	1785654	1810082	24429	<i>ydfJ</i>	11	lambda-like	<i>paa/adfO</i> , <i>nleGψ</i> , <i>ospB</i> ,
ECO103_P07	1953662	1991638	37977	<i>btuC</i> - <i>ihfA</i>	25	P2-like	
ECO103_P08	2140858	2192142	51285	<i>yecE</i>	36	lambda-like	tRNA (IRR), <i>espM</i> , <i>nleG</i> , <i>espW</i> , <i>nleG</i> , <i>nleG</i> , <i>lom</i>
ECO103_P09	2282685	2334021	51338	tRNA (<i>serU</i>)	38	lambda-like	tRNA (IRR), <i>nleF</i> , <i>nleHψ</i> , <i>nleCψ</i> , <i>nleB</i> , <i>lom</i> , <i>pchABC</i> -homolog, <i>sod</i>

ECO103_P10	2334068	2387198	53132	tRNA (<i>serU</i>)	65	lambda-like	tRNA (IRR), <i>espK</i> , <i>espO</i> , <i>lom</i> , <i>pchABC</i> -homolog
ECO103_P11	2387169	2435990	48822	tRNA (<i>serU</i>)	64	lambda-like	tRNA (IR ψ R), <i>espVψ</i> , <i>tccP2</i> , <i>lom</i> , <i>pchABC</i> -homolog, <i>sod</i>
ECO103_P12	2861734	2924345	62612	tRNA (<i>argW</i>)	54	lambda-like	tRNA (IRR), <i>stx2</i> , <i>lom</i>
ECO103_P13	3143750	3186459	42710	<i>yfhL</i>	42	untypable	
ECO103_P14	4647362	4663093	15851	<i>yicC-dinD</i>	52	untypable (Sp7-like)	<i>pch</i> -homolog, <i>pch</i> -homolog
ECO103_P15	5364180	5418116	53937	<i>prfC</i>	44	lambda-like	<i>stx1</i> , <i>lom</i> , <i>nleG</i> , <i>nleGψ</i> ,

Integrative elements

ECO103_IE01	3244584	3250089	5506	tmRNA (<i>ssrA</i>)	ND		
ECO103_IE02	3501014	3506621	5608	tRNA (<i>glyU</i>)	23		
ECO103_IE03	3627153	3714574	87422	tRNA (<i>pheV</i>)	5	LEE	T3SS machinery, <i>pagC</i> , <i>espL</i> , <i>nleB</i> , <i>nleE</i> , <i>efa1/lifA</i> , <i>aidA-Iψ</i> , <i>espO</i> , <i>espK</i> , <i>nleG</i> , <i>espM</i> , <i>espF</i> , <i>espB</i> , <i>tir</i> , <i>map</i> , <i>espH</i> , <i>espZ</i> , <i>espG</i> , <i>ospB</i>
ECO103_IE04	3826718	3891310	64593	tRNA (<i>ileX</i>)	94	SpLE1-like	tellurium resistance, <i>traTψ</i> , urease operon ψ , autotransporter serine protease
ECO103_IE05	5073158	5119905	46748	tRNA (<i>pheU</i>)	17	SpLE3/OI-122-like	<i>aidA-I</i> , <i>efa1/lifA</i> , <i>nleE</i> , <i>nleB</i> , <i>espL</i> , <i>pagC</i>
ECO103_IE06	5256653	5290611	33959	tRNA (<i>leuX</i>)	17		

ND, not detected; ψ , pseudogene.