

Supplemental Table 2. Novel LOS class description

orthologue	RAST ID	product	seq length (AA)
<i>C. coli</i> (153) Class X			
25	fig 6666666.94320.peg.358	lipopolysaccharide heptosyltransferase I	342
12	fig 6666666.94320.peg.357	lipid A biosynthesis lauroyl acyltransferase	295
16	fig 6666666.94320.peg.356	lipooligosaccharide biosynthesis glycosyltransferase, putative	516
1850	fig 6666666.94320.peg.355	putative glycosyltransferase	350
1668	fig 6666666.94320.peg.354	putative lipopolysaccharide 1,3-galactosyltransferase	399
8	fig 6666666.94320.peg.353	hypothetical protein	364
1	fig 6666666.94320.peg.352	hypothetical protein	406
2	fig 6666666.94320.peg.351	hypothetical protein	319
3	fig 6666666.94320.peg.350	UDP-N-acetylglucosamine 2-epimerase	373
1821	fig 6666666.94320.peg.349	hypothetical protein	147
1967	fig 6666666.94320.peg.348	hypothetical protein	138
1742	fig 6666666.94320.peg.347	hypothetical protein	340
1743	fig 6666666.94320.peg.346	hypothetical protein	292
10	fig 6666666.94320.peg.345	putative glucosyltransferase	278
23	fig 6666666.94320.peg.344	ADP-heptose--LPS heptosyltransferase II	321
<i>C. coli</i> (138) Class XI			
25	fig 195.111.peg.264	lipopolysaccharide heptosyltransferase I	342
12	fig 195.111.peg.263	lipid A biosynthesis lauroyl acyltransferase	295
16	fig 195.111.peg.262	lipooligosaccharide biosynthesis glycosyltransferase, putative	516
1850	fig 195.111.peg.261	putative glycosyltransferase	350
1668	fig 195.111.peg.260	putative lipopolysaccharide 1,3-galactosyltransferase	399
8	fig 195.111.peg.259	hypothetical protein	364
1	fig 195.111.peg.258	hypothetical protein	406
2	fig 195.111.peg.257	hypothetical protein	319
3	fig 195.111.peg.256	hypothetical protein	373
1821	fig 195.111.peg.255	hypothetical protein	147
1920	fig 195.111.peg.254	hypothetical protein	131
1742	fig 195.111.peg.253	hypothetical protein	340
1743	fig 195.111.peg.252	hypothetical protein	292
10	fig 195.111.peg.251	putative glucosyltransferase	278
23	fig 195.111.peg.250	ADP-heptose--LPS heptosyltransferase II	321
<i>C. coli</i> (99) class XII			
25	fig 195.104.peg.1519	lipopolysaccharide heptosyltransferase I	342
12	fig 195.104.peg.1518	lipid A biosynthesis lauroyl acyltransferase	295
16	fig 195.104.peg.1517	lipooligosaccharide biosynthesis glycosyltransferase, putative	516
1850	fig 195.104.peg.1516	putative glycosyltransferase	350
8	fig 195.104.peg.1515	hypothetical protein	364
1790	fig 195.104.peg.1514	hypothetical protein	355
4	fig 195.104.peg.1513	methyltransferase type 12	216
5	fig 195.104.peg.1512	hypothetical protein	211
7	fig 195.104.peg.1511	phosphoserine phosphatase	199
2965	fig 195.104.peg.1510	hypothetical protein	333
1821	fig 195.104.peg.1509	hypothetical protein	147
1920	fig 195.104.peg.1508	hypothetical protein	131
1742	fig 195.104.peg.1507	hypothetical protein	340
1743	fig 195.104.peg.1506	hypothetical protein	292
10	fig 195.104.peg.1505	putative glucosyltransferase	278
23	fig 195.104.peg.1504	ADP-heptose--LPS heptosyltransferase II	321