

Table S1. Comparative genome analyses of A-LPS biosynthesis related genes.

Strain	<i>man</i>	<i>hypothetical</i>	<i>vimA</i>	<i>porR</i>
<i>P. gin</i> ATCC33277	PGN_0242	PGN_0663	PGN_1056	PGN_1236
<i>P. gin</i> W83	PG0129	PG0621	PG0882	PG1138
<i>P. gin</i> TDC60	PGTDC60_0406	PGTDC60_1749	PGTDC60_0810	PGTDC60_1075
<i>P. asa</i> DSM20707	Poras_1033	Poras_1142	Poras_0672	Poras_0235 Poras_0456 Poras_0968
<i>P. uenosis</i> 60-3	PORUE0001_0304 PORUE0001_1218	PORUE0001_1022	PORUE0001_1328	PORUE0001_0620 PORUE0001_1509
<i>P. endo</i> ATCC35406	POREN0001_0178	POREN0001_0416	POREN0001_1221	POREN0001_0099 POREN0001_0534
<i>P. int</i> 17	PIN17_A1289	PIN17_A1908	ND	PIN17_A1561 PIN17_A1764
<i>T. for</i> ATCC43037	BFO_0475	BFO_2611	BFO_2568	BFO_0923 BFO_1073
<i>F. joh</i> UW101	Fjoh_0326 Fjoh_1035 Fjoh_2513	Fjoh_3498	ND	Fjoh_0323 Fjoh_0334 Fjoh_1727 Fjoh_2237
<i>B. fragilis</i> NCTC9343	BF0920	BF3731	ND	BF0734 BF0752 BF1376 BF2604
<i>B. the</i> VPI-5482	BT_4282 BT_4304	BT_3927	ND	BT_0612 BT_2885 BT_3376

Strain	<i>wzy</i>	<i>gtfB</i>	<i>rfa</i>	<i>waal</i>
<i>P. gin</i> ATCC33277	PGN_1242	PGN_1251	PGN_1255	PGN_1302
<i>P. gin</i> W83	PG1142	PG1149	PG1155	PG1051
<i>P. gin</i> TDC60	PGTDC60_1070	PGTDC60_1060	PGTDC60_1065	PGTDC60_0972
<i>P. asa</i> DSM20707	Poras_0568	Poras_1033 Poras_1145 Poras_1514	ND	Poras_0494
<i>P. uenosis</i> 60-3	PORUE0001_1456	PORUE0001_0103	ND	PORUE0001_1746
<i>P. endo</i> ATCC35406	POREN0001_1267	ND	POREN0001_1404	POREN0001_0324
<i>P. int</i> 17	PIN17_A1783	PIN17_A1552	PIN17_A0550	ND
<i>T. for</i> ATCC43037	ND	BFO_1049	BFO_1088	ND
<i>F. joh</i> UW101	Fjoh_2813	Fjoh_0341 Fjoh_2243	Fjoh_1046	Fjoh_0291
<i>B. fragilis</i> NCTC9343	BF1018 BF3456 BF3686	BF2052 BF2595	ND	ND
<i>B. the</i> VPI-5482	BT_1343 BT_1710	BT_0053 BT_1180 BT_2866	BT_3362	ND

Strain	wzz	wzx	wbaP
P. gin ATCC33277	PGN_2005	PGN_1033	PGN_1896
P. gin W83	PG0056	PG0912 PG0117	PG1964
P. gin TDC60	PGTDC60_0338	PGTDC60_0836	PGTDC60_0237
P. asa DSM20707	Poras_0604	Poras_0962	Poras_0564
P. uenosis 60-3	PORUE0001_0693	PORUE0001_0631	PORUE0001_0240
P. endo ATCC35406	POREN0001_1785	POREN0001_1270	POREN0001_0361
P. int 17	PIN17_A1781	PIN17_A1782	PIN17_A1560 PIN17_A1779
T. for ATCC43037	ND	BFO_1985	BFO_1803 BFO_3047
F. joh UW101	Fjoh_0352	Fjoh_0345	Fjoh_4994
B. fragilis NCTC9343	BF1708	BF1369 BF1556 BF1900 BF2055 BF2598 BF2791 BF4298	BF1377
B. the VPI-5482	BT_1355 BT_1653 BT_1722	BT_0040 BT_0047 BT_1354	BT_0480

man, putative mannosyl transferase

ND, not detected

P. gin, *Porphyromonas gingivalis* ATCC33277, W83 or TDC60

P. asa, *Porphyromonas asaccharolytica* DSM20707

P. uenosis, *Porphyromonas uenosis* 60-3

P. endo, *Porphyromonas endodontalis* ATCC35406

P. int, *Prevotella intermedia* 17

T. for, *Tannerella forsythia* ATCC43037

F. joh, *Flavobacterium johnsoniae* UW101

B. fragilis, *Bacteroides fragilis* NCTC9343

B. the, *Bacteroides thetaiotaomicron* VPI-5482