

Table S1 Quantification of the PG molecular species distribution found in the PG of strains grown in the thigh model. Multiple spectra were obtained using the methods outlined in Fig. 3, the percentage of each peak was calculated and the percent distribution determined.

PG Species	% Total PG (Mean \pm SD)					
	AH1263 (WT) Luria broth	AH1263 (WT) Thigh	JLB2 ($\Delta fakA$) Thigh	JLB31 ($\Delta fakB1 \Delta fakB2$) Thigh	JLB27 ($\Delta fakB1$) Thigh	JLB30 ($\Delta fakB2$) Thigh
30:0-PG	21.71 \pm 2.40	3.16 \pm 0.61	15.24 \pm 1.58	13.60 \pm 1.31	3.11 \pm 0.51	2.97 \pm 0.18
31:0-PG	0.64 \pm 0.11	19.29 \pm 1.44	13.55 \pm 0.34	11.90 \pm 0.95	7.22 \pm 0.80	25.66 \pm 1.92
32:0-PG	55.29 \pm 2.52	4.91 \pm 0.64	19.77 \pm 2.00	21.11 \pm 2.06	5.91 \pm 1.48	5.54 \pm 0.32
33:1-PG	ND ^a	21.58 \pm 1.26	ND	ND	26.78 \pm 0.92	ND
33:0-PG	7.70 \pm 0.66	23.46 \pm 0.85	24.32 \pm 0.97	24.52 \pm 1.32	15.19 \pm 1.10	37.02 \pm 1.41
34:0-PG	11.58 \pm 0.90	3.86 \pm 1.32	9.95 \pm 2.75	13.25 \pm 2.43	8.36 \pm 0.93	3.60 \pm 0.36
35:1-PG	ND	9.33 \pm 0.91	ND	ND	21.76 \pm 1.06	ND
35:0-PG	3.08 \pm 0.43	14.41 \pm 0.98	17.16 \pm 2.49	15.63 \pm .91	11.67 \pm 0.95	26.64 \pm 1.27

^aND means not detected