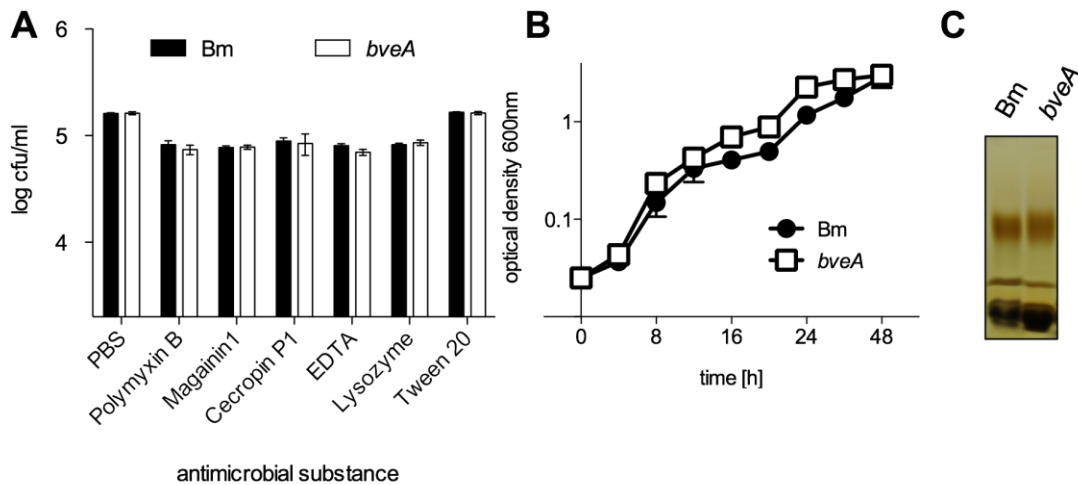


**Supplementary Data for “A Phospholipase A1 modulates cell envelope phospholipid content of *Brucella melitensis*, contributing to polymyxin resistance and pathogenicity”**

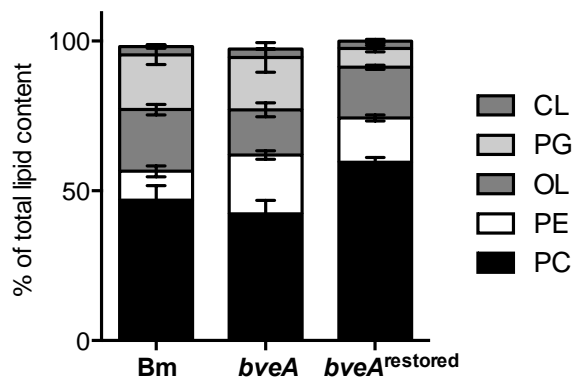
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**Figure S1:** (A) Survival of  $1 \times 10^5$  wild type *B. melitensis* (Bm, black bars) and the *bveA* mutant (*bveA*, white bars) in a killing assay using various antimicrobial substances according (5) with the exception of  $25 \mu\text{g}$  of polymyxin, magainin 1 and cecropin P1 as well as 1% Tween20. (B) Growth of wild type *B. melitensis* 16M (Bm, ●) and the *bveA*-mutant (*bveA*, □) in TSB (pH=7.4) under standard growth conditions. (C) Silver-stained 18%-SDS-PAGE of LPS preparations from wild type *B. melitensis* (Bm) and the *bveA*-mutant (*bveA*) extracted according to reference 1.

Reference

1. Needham BD, Trent MS. 2013. Fortifying the barrier: the impact of lipid A remodeling on bacterial pathogenesis. *Nature Reviews Microbiology* 11:467-481.



**Figure S2:** Lipid content of cell membranes from *B. melitensis* 16M wild type, a *bveA*-mutant and a wild type restoration. Relative abundance (percentage) of individual membrane lipids based on densitometry of 2D-TLC of PC, PE, OL, PG, and CL of cell envelopes of wild type *B. melitensis* (Bm), *bveA* mutant (*bveA*) and a chromosomal restoration of *bveA* (*bveA*<sup>restored</sup>)

**Table S1** BveA homologues based on Phyre 2.0 prediction

	pdb entry	Description based on pdb database
1	c2qjwA	putative hydrolase <i>Xanthomonas campestris</i> pv. <i>campestris</i>
2	c2rauA	putative lipase from <i>Sulfolobus solfataricus</i>
3	d1hlga	gastric lipase
4	c2o2gA	dienelactone hydrolase from <i>Anabaena variabilis</i> ATCC 29413

**Table S2** Comparison of p-values of Student's t-test of arcsin transformed percentages of PC, PE, OL, PG and CL in phospholipid extraction from cell envelopes of the *B. melitensis* 16M (Bm), a *bveA* mutant (*bveA*; CMR27) and the chromosomally complemented *bveA* strain TOK09 (*bveA*<sup>restored</sup>) bold values represent *p* values < 0.05.

	Bm versus <i>bveA</i>	<i>bveA</i> versus <i>bveA</i> <sup>restored</sup>	Bm versus <i>bveA</i> <sup>restored</sup>
PC	0.526	<b>0.025</b>	0.073
PE	<b>0.018</b>	<b>0.049</b>	0.099
OL	0.153	0.563	0.112
PG	0.971	0.053	<b>0.016</b>
CL	0.994	0.519	0.621