



Figure S1. Experimental design. 200-250 g female Hartley guinea pigs were randomly separated into three treatment groups and were vaccinated with  $1 \times 10^9$  CFU/100  $\mu$ l *Brucella abortus* S19 (n=6) or *Brucella melitensis* 16M  $\Delta$ vjbR + 10  $\mu$ g Quil-A (n=6) by subcutaneous injection in the right inguinal region. Control animals were sham vaccinated with 100  $\mu$ l sterile PBS + 10  $\mu$ g Quil-A (n=5). At 6-weeks post-vaccination, female guinea pigs were co-housed with unvaccinated male Hartley guinea pigs for breeding at a ratio of 3:1. After 2-weeks, females were evaluated for pregnancy by abdominal palpation. When guinea pigs were at approximately 30-35 days of gestation, they were transferred to the BSL-3 and challenged with  $1 \times 10^7$  *B. melitensis* IT. Blood was collected from the saphenous vein on the day of vaccination (week 0), and at 4-, 12-, 14-, and 16-weeks post-vaccination. All pregnant guinea pigs were euthanized at the time of parturition or 4-weeks post-challenge. Tissue samples were collected for bacteriological culture and histology. Figure generated with [www.Biorender.com](http://www.Biorender.com).