



## Supplementary Material

**Supplementary Figure 1. Map antigen detection by immunoblot.** (A). Anti-IgG reactivity. Strips of Map protein extract incubated with pools of serum of each experimental group at each time point, (B) Anti-IgA reactivity. Strips of Map protein extract incubated with pools of serum of each experimental group at each time point. Strips were incubated with serum pool dilution at 1:50; Recombinant protein G peroxidase at 1:800 and Goat Anti-Rabbit IgA alpha chain peroxidase at 1:5000.



**Supplementary Figure 2. Immunohistochemistry**. Representative micrographs of the immunostaining in sacculus rotundus for each experimental group (**A-D**) challenged control; CC, (**E-H**) commercial vaccine; CV), (**I-L**) commercial vaccine in combination with probiotic; CV-PR and (**M-P**) treated with probiotic; PR and marker A, E, I and M are CD163; B, F, J and N are TNF- $\alpha$ ; C, G, K and O are IFN $\gamma$  and D, H, L and P are MAC387-calprotectin. (scale bar=50 µm).