**A**



**B**



**S2 Fig**. **Specificity of RPA-LFD and real-time PCR. A; The specificity of RPA-LFD was assed using genomic DNA from common bacterial pathogens and parasites.** Lane 1 to 46, *Mycoplasma ovipneumoniae* (positive control), *Mycoplasma ovipneumoniae*-16 (field isolate), *Mycoplasma ovipneumoniae*-90 (field isolate), *Mycoplasma ovipneumoniae*-103 (field isolate), *Mycoplasma bovis* (PG45), *Mycoplasma dispar*, *Mycoplasma bovirhinis* (17D0278), *Mycoplasma bovoculi*, *Mycoplasma bovigenitalium*, *Mycoplasma canis*, *Mycoplasma gallinarum*, *Mycoplasma putrefaciens*, *Mycoplasma capricolum capripneumoniae*, *Mycoplasma mycoides* subsp. *capri*, *Mycoplasma feriruminatoris*, *Mycoplasma leachii*, *Mannheimia haemolytica*, *Pasteurella multocida*, *Staphylococcus aureus*, *Streptococcus uberus*, *Streptococcus pyogenes*, *Streptococcus agalactiae*, *Salmonella typhimurium*, *Escherichia coli* O157:H7, *Enterobacter aerogenes*, *Pseudomonas aeruginosa*, *Bacillus subtilis*, *Bacillus cereus*, *Mycobacterium bovis*, *Mycobacterium paratuberculosis* K-10, *Mycobacterium paratuberculosis* C-type (field isolate), *Mycobacterium paratuberculosis* S-type (field isolate), *Clostridium tetani*, *Clostridium perfringens* Type C, *Clostridium novyi*, *Clostridium chauvoei*, *Clostridium septicum*, *Clostridium hemolyticum*, *Trueperella pyogenes*, *Listeria monocytogenes*, *Leptospira interrogans* serovar *Hardjo*, *Klebsiella pneumoniae*, *Haemonchus contortus*, *Teladorsagia circumcincta*, *Bos taurus*, *Ovis aries*, and Lane NC: H2O, B, the specificity of real-time PCR was assessed against the same bacterial pathogens. Only *Mycoplasma ovipneumoniae* (positive control), *Mycoplasma ovipneumoniae*-16 (field isolate), *Mycoplasma ovipneumoniae*-90 (field isolate), *Mycoplasma ovipneumoniae*-103 (field isolate) gave positive signals and all the remaining samples were negative. The PCR products were run on 2% agarose gel with a 100 bp ladder. Lane 1-92 shows PCR product for each sample run in duplicate with H2O (NC) control.