

SUMMARY

[0005a] In one aspect, there is provided an immunogenic composition comprising: a) one or more antigens of *M. hyorhinis* and one or more antigens of *M. hyosynoviae*; and b) a pharmaceutically acceptable carrier.

[0005b] In another aspect, there is provided an immunogenic composition obtained by a method comprising a) cultivation of a mycoplasma bacteria selected from the group consisting of *M. hyorhinis*, *M. hyopneumoniae*, *M. hyosynoviae*, and any combinations thereof, in a serum-reduced, eukaryotic cell system; b) obtaining an antigen of such mycoplasma bacteria; and c) addition of a pharmaceutically acceptable carrier.

[0005c] In another aspect, there is provided an immunogenic composition that comprises a) one or more mycoplasma antigens of mycoplasma bacteria selected from the group consisting of *M. hyorhinis*, *M. hyopneumoniae*, *M. hyosynoviae* and any combination thereof; and b) one or more components of an eukaryotic cell system.

[0005d] In another aspect, there is provided an immunogenic composition as defined herein for use in immunizing a subject.

[0005e] In another aspect, there is provided use of the immunogenic composition as defined herein in the manufacture of a medicament for the treatment and/or prophylaxis of mycoplasma infections in a subject.

[0005f] In another aspect, there is provided the immunogenic composition as defined herein for use in a method for the treatment and/or prophylaxis of mycoplasma infections in a subject.

38. The immunogenic composition of any one of claims 1 to 37, wherein said pharmaceutically acceptable carrier is a water-in-oil-in-water emulsion or a carbomer.

39. ~~An method for immunizing a subject comprising administering to such subject an~~ immunogenic composition of any one of claims 1 to 38 for use in immunizing a subject.

40. The immunogenic composition ~~method~~ of claim 39, wherein said subject is selected from the list consisting of swine, cattle, cat and dog.

41. The immunogenic composition ~~method~~ of claim 39 or 40, wherein the immunogenic composition is to be administered once.

42. The immunogenic composition ~~method~~ of any one of claims 18 to 24, wherein said ~~method results in an improvement in an efficacy parameter selected from the group consisting shorter duration of bacteremia, and a lower bacterial load, or combinations thereof,~~ is improved in comparison to a subject of a non-immunized control group of the same species.

43. The immunogenic composition ~~method~~ of any one of claims 39 to 42, wherein said method is suitable for a subject of three weeks of age or older.

44. Use of the immunogenic composition of any one of claims 1 to 38 in the manufacture of a medicament for the treatment and/or prophylaxis of mycoplasma infections in a subject.

45. The immunogenic composition of any one of claims 1 to 38 for use in a method for the treatment and/or prophylaxis of mycoplasma infections in a subject.