CLAIMS

What is claimed is:

1. An immunogenic composition for protecting a subject against *Actinobacillus suis* infection, comprising

   a) an inactivated, filtered supernatant collected from one or more *A. suis* cultures grown to between ~~0.650 OD_{650}~~ 0.775 OD_{600} and ~~0.850 OD_{650}~~ 0.815 OD_{600}; and

   b) an adjuvant.

2. The immunogenic composition of claim 1, wherein the supernatant is ~~essentially~~ free from *A. suis* cells.

~~3. The immunogenic composition of claim 1, wherein the supernatant is inactivated.~~

~~4.~~3. The immunogenic composition of claim ~~3~~1, wherein the supernatant is formalin inactivated.

~~5.~~4. The immunogenic composition of claim 1, wherein the adjuvant is ~~Emulsigen®~~ ~~D~~an oil-in-water emulsion.

~~6.~~5. The immunogenic composition of claim 1, wherein the subject is a porcine.

~~7.~~6. The immunogenic composition of claim 1 for use in provoking an immune response against *Actinobacillus* in a subject.

~~8.~~7. The immunogenic composition of claim ~~7~~6, wherein the subject is a porcine.

~~9.~~8. The immunogenic composition of claim 1 for use in reducing the incidence of or severity of a clinical sign associated with *Actinobacillus suis* infection, wherein the reduction of the incidence of or the severity of a clinical sign is relative to a subject not receiving the immunogenic composition.

~~10.~~9. The immunogenic composition of claim ~~9~~8, wherein the clinical sign is selected from the group consisting of meningitis, septicemia, metritis, pneumonia, crysipelas-like lesions, and abortion.

~~11.~~10. The immunogenic composition of claim ~~9~~8, wherein the *Actinobacillus suis* infection is an *A. suis* ISU-8594 infection.

~~12.~~11. The immunogenic composition of claim ~~9~~8, wherein the subject is a porcine.

~~13.~~12. A method of preparing the immunogenic composition of claim 1 comprising

   a) growing an *Actinobacillus suis* culture to between 0.775 OD_{600} ~~0.650 OD_{650}~~ and 0.815 OD_{600} ~~0.850 OD_{650}~~;

   b) collecting a supernatant from the culture;

c) filtering the supernatant to yield a filtrate; ~~and~~

d) inactivating the filtrate; and

~~d)~~e) mixing the inactivated filtrate with an adjuvant.

~~14. The method of claim 13, further comprising inactivating the supernatant.~~

~~15. The method of claim 14, wherein the supernatant is inactivated prior to mixing with adjuvant.~~

~~16.~~13. The method of claim ~~13~~12, wherein the adjuvant is ~~Emulsigen®~~ ~~D~~an oil-in-water emulsion.

~~17.~~14. A method of diagnosing *Actinobacillus suis* infection in a subject, comprising

a) providing an inactivated, filtered supernatant prepared by growing an *A. suis* culture to between 0.775 OD_{600} ~~0.650 OD_{650}~~ and 0.815 OD_{600}~~0.850 OD_{650}~~, collecting supernatant from the culture, ~~and~~ filtering the supernatant, and inactivating the filtered supernatant;

b) contacting the inactivated, filtered supernatant with a sample obtained from the subject; and

c) identifying the subject as having an *A. suis* infection if an antibody capable of binding a component in the inactivated, filtered supernatant is detected in the sample.

~~18.~~15. The method of claim ~~17~~14, wherein the binding is detected using a second antibody capable of binding the antibody in the sample.

~~19.~~16. A kit comprising

a) an inactivated, filtered supernatant prepared by growing an *Actinobacillus suis* culture to between 0.775 OD_{600} ~~0.650 OD_{650}~~ and 0.815 OD_{600}~~0.850 OD_{650}~~, collecting a supernatant of the culture, ~~and~~ filtering the supernatant, and inactivating the filtered supernatant;

b) an adjuvant; and

c) a container for packaging the inactivated, filtered supernatant and adjuvant.

~~20.~~17. The kit of claim ~~19~~16, further comprising instructions for use of the kit.

~~21.~~18. The kit of claim ~~19~~16, further comprising a means of administering the inactivated, filtered supernatant to a subject.

~~22.~~19. A kit for preparing the immunogenic composition of claim 1 comprising (i) the inactivated, filtered supernatant and (ii) the adjuvant, wherein (i) and (ii) are packaged separately.

~~23.~~20. The kit of claim ~~22~~19, further comprising instructions for use of the kit.