

The Effect of *Brucella abortus* Lipopolysaccharide Subunit Vaccine in Adjuvant Montanide ISA 70 in Sheep Antibody Titer and Levels of IFN- γ

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ABSTRACT

The aims of this study is to determine the effect of vaccine sub unit lipopolysaccharide *Brucella aborus* in adjuvant Montanid ISA 70 in sheep antibody titer and levels of IFN- γ with different doses. This study used 18 sheep as experimental animals, whit 3 different treatments groups for each treatments group consist of 6 sheep. Group P0 : control, treatment group P1 : 50 μg / ml of LPS *Brucella abortus* in adjuvant Montanide ISA 70, treatment group P2 : 100 μg / ml LPS *Brucella abortus* in adjuvant montanide ISA 70. Observation were done at 2nd and 4th week post vaccination. In this study, data of antibody titer and data of IFN- γ level were analyzed by ANOVA Univariate test followed by Tukey test. The results showed that the sub-unit of *Brucella abortus* lipopolysaccharide vaccine in adjuvant Montanide ISA 70 had an effect on antibody titer and IFN- γ level. Different doses have an effect on the value of antibody titers and levels of IFN- γ . At a dose of 100 μg / ml showed an antibody titer higher than the 50 μg / ml dose. At a dose of 50 μg / ml showed higher IFN- γ values than did doses of 100 μg / ml. Post vaccination in the 2nd and 4th weeks did not have a significant effect on the antibody titer and the level of gamma interferon.

Keywords : LPS *Brucella abortus*, Montanide ISA 70, Antibody Titer, IFN- γ , Sheep