

论著

重组日本血吸虫26kDa GST抗原诱导水牛产生抗体及减少排卵的初步观察

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摘要

目的 观察rSjc2 6GST抗原诱导水牛产生特异性抗体水平以及排卵数量的减少。方法 20头水牛随机分为两组,每组10头。试验组免疫rSjc2 6GST抗原,对照组注射佐剂,攻击感染日本血吸虫尾蚴后,定期检测抗rSjc2 6GST抗体、粪检虫卵和毛蚴。结果 水牛免疫rSjc2 6GST抗原后1个月,产生抗rSjc2 6GST抗体,至12个月一直维持较高水平。试验组水牛感染后50~90d,粪便EPG和MPG几何均值明显低于对照组,但在100d以后两组的EPG和MPG均逐渐降低,至330d均为0。结论 水牛免疫rSjc2 6GST抗原后能产生特异性抗体,维持较高水平至12个月,在感染后3个月内有显著的减卵效果,此后排卵量逐渐下降至阴性。

关键词 [日本血吸虫](#) [rSjc26GST抗原](#) [水牛](#) [特异性抗体](#) [免疫保护力](#)

分类号

Preliminary Observation on Specific Antibody Level and Reduction of Ovulation Induced by Recombinant *Schistosoma japonicum* 26 kDa GST Antigen in Water Buffaloes

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Abstract

Objective To observe the specific antibody level and reduction of egg laying induced by a recombinant *Schistosoma japonicum* 26 kDa GST antigen (rSjc26 GST) in water buffaloes. Methods 20 water buffaloes were randomly divided into two groups, the vaccination group and control group, with 10 buffaloes each. The subjects in vaccination group were immunized with rSjc26 GST antigen while the control received adjuvant only. After challenged with *S. japonicum* cercariae, the anti rSjc26 GST antibody level and the numbers of eggs and miracidia in stool were detected. Results The anti rSjc26 GST antibody appeared 1 month after immunization with rSjc26 GST antigen and maintained a high level for 12 months. Numbers of eggs (EPG) and miracidia (MPG) in vaccination group were significantly lower than those in control group during the period of day 50 to day 90 post challenge. However, EPG and MPG tended to decrease starting from day 100 post challenge in both groups. The difference of EPG and MPG between the two groups diminished progressively, and both groups showed zero egg count from day 330 on post challenge. Conclusion The specific anti rSjc26 GST antibody was detected in vaccinated water buffaloes and maintained a high level for 12 months. The vaccination showed a significant effect to the reduction of ovulation in the first three months after *S. japonicum* cercariae challenge.

Key words [Schistosoma japonicum](#) [rSjc26 GST antigen](#) [water buffalo](#) [specific antibody](#) [protective immunity](#)

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