

新疆维吾尔自治区畜牧科学院科技伦理委员会
伦理审查审批表

编号：新疆畜牧科学院兽医所动伦[2024] 第 08 号 （No.2024-08）

研究项目名称	Effect of antiserum against recombinant EGr_09888 on the in vitro development of Echinococcus granulosus protoscoleces
项目来源	国家重点研发计划（No. 2023YFD1802401）
研究内容及意义	Expressed the EGr_09888 protein, which is related to the reproductive development of Echinococcus granulosus, prepared Rabbit anti-EGr09888 high-immune serum. This serum was then applied to the protoscoleces of Echinococcus granulosus cultured in vitro for 3, 6, and 10 weeks. It was found that the Rabbit anti-EGr09888 high-immune serum has a lethal effect on protoscoleces developing towards adult worms. RT-qPCR identification also found that the relative expression of EGr_09888 in the protoscoleces of Echinococcus granulosus treated with the anti-EGr_09888 hyperimmune serum was significantly downregulated. This study offers more practical and feasible measures for the development of canine vaccines for the prevention and treatment of echinococcosis, as well as a reference for the prevention and treatment of parasites.
项目负责人	赵莉
科技伦理审查意见： ☒ 同意 ☐ 修改后同意 ☐ 不同意	
科技伦理委员会审批意见： 该项目运用生物信息分析软件预测 EGr_09888 抗原的 T-B 结合表位，并表达纯化 EGr_09888 蛋白，制备兔抗 EGr_09888 高免血清，并分别作用于体外培养不同天数的 PSCs，计算 PSCs 存活率，并分析 PSCs EGr_09888 基因的表达水平，棘球绦虫原头蚴向成虫发育过程中起到干扰作用，该研究为进一步研究该蛋白的功能及调控机制提供一定基础，为棘球蚴病防治开发犬用疫苗提供参考。 经审核，该项目动物实验方案符合动物保护、动物福利和伦理原则，符合国家实验动物福利伦理的相关规定。 科技伦理委员会（签章）：	

By the Science and Technology Ethics Committee of
Xinjiang Academy of Animal Sciences
: Xinjiang Academy of Animal Sciences Veterinary
Institute Animal Ethics [2024] No. 08 (No.2024-08)
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Research Project Name

Project Source

Research
Content and
Significance

Project Leader

Approval Opinion
of the Science and
Technology Ethics
Committ :

研究项目 名 称	Effect of antiserum against recombinant EGr_09888 on the in vitro development of Echinococcus granulosus protoscoleces		
项目来源	国家重点研发计划（No. 2023YFD1802401） Key R & D Program of the 14th Five - Year Plan of China (No.2023YFD1802401)		
研究内容 及意义	Expressed the EGr_09888 protein, which is related to the reproductive development of Echinococcus granulosus, prepared Rabbit anti-EGr09888 high-immune serum. This serum was then applied to the protoscoleces of Echinococcus granulosus cultured in vitro for 3, 6, and 10 weeks. It was found that the Rabbit anti-EGr09888 high-immune serum has a lethal effect on protoscoleces developing towards adult worms. RT-qPCR identification also found that the relative expression of EGr_09888 in the protoscoleces of Echinococcus granulosus treated with the anti-EGr_09888 hyperimmune serum was significantly downregulated. This study offers more practical and feasible measures for the development of canine vaccines for the prevention and treatment of echinococcosis, as well as a reference for the prevention and treatment of parasites.		
项目负责人	赵莉 Zhao Li		
科技伦理审查意见： ☒ 同意 ☐ 修改后同意 ☐ 不同意 Science and Technology Ethics Review Opinion : ☒ Approve ☐ Approve after Revision ☐ Disapprove			
科技伦理委员会审批意见： This project uses bioinformatics analysis software to predict the T - B binding epitopes of the EGr_09888 antigen, expresses and purifies the EGr_09888 protein, and prepares rabbit anti - EGr_09888 hyperimmune serum. The serum is then applied to PSCs (protoscoleces) cultured in vitro for different days to calculate the survival rate of PSCs and analyze the expression level of the EGr_09888 gene in PSCs. The antiserum plays an interfering role in the development of Echinococcus granulosus protoscoleces into adult worms. This study provides a certain foundation for further research on the function and regulatory mechanism of this protein, and offers a reference for the development of canine vaccines for the prevention and treatment of echinococcosis. After review, the animal experiment plan of this project complies with the principles of animal protection, animal welfare, and ethics, and conforms to the relevant regulations on laboratory animal welfare and ethics in China. Signature of the Chairperso: [Signature] Date: October 28, 2024 Seal: Laboratory Animal Ethics Committee of Veterinary Research Institute, Xinjiang Academy of Animal Sciences 科技伦理委员会（签章）： 			