论著

# 日本血吸虫26 kDa基因重组蛋白免疫小鼠抗体内血吸虫生殖的作用

蒋健敏1 屠乐鸣1 张素娥1 徐敏源1 刘述先2

- 1 浙江省医学科学院寄生虫病研究所 杭州 310013
- 2 中国预防医学科学院寄生虫病研究所 上海 200025

收稿日期 修回日期 网络版发布日期 接受日期 摘要

目的:探讨日本血吸虫 2 6 k D a 基因重组蛋白(r S j c 2 6 G S T ) 抗日本血吸虫生殖作用及其免疫机制。方法:小鼠经 r S j c 2 6 G S T 免疫,攻击感染日本血吸虫尾蚴 4 0 ± 1 条,于 6 w k 后解剖检虫体,计算虫数与肝组织和脾组织内的虫卵数,并对虫体主要生殖器官作透射电镜超微结构的观察。结果:证明 r S j c 2 6 G S T 具有明确的抗生殖免疫作用。与对照组相比,免疫鼠减虫率为 3 0 . 0 %,肝组织和脾组织内虫卵减少率分别为 5 7 . 1 %与 7 9 . 9 %,透射电镜观察显示免疫鼠体内雌虫的卵黄腺及雄虫的睾丸组织均产生不同程度的抑制作用,主要表现为卵黄细胞胞质中卵黄球、卵黄滴、脂滴和睾丸组织中精细胞、支持细胞胞质中的脂滴数量均有明显减少。结论: r S j c 2 6 G S T 有抗日本血吸虫生殖的作用,使虫体生殖器官受到损害

关键词 日本血吸虫,rSjc26 GST,免疫,抗生殖作用

分类号

# IN VIVO ANTI FECUNDITY EFFECT OF RECOMBINANT Sjc26 GST AGAINST SCHISTOSOMA JAPONICUM IN IMMUNIZED MICE \*

JIANG Jianmin <sup>1</sup>, TU Leming <sup>1</sup>, ZHANG Su e <sup>1</sup>, XU Minyuan <sup>1</sup>, LIU Shuxian <sup>2</sup>

Institute of Parasitic Diseases; Zhejiang Academy of Medical Sciences; Hangzhou 310013 2 Institute of Parasitic Diseases; Chinese Academy of Preventive Medicine; Shanghai 200025

#### Abstract

AIM: To observe the anti fecundity effect of recombinant Sjc26 GST against Schistosoma japonicum and its mechanism.METHODS:Male ICR mice were immunized with rSjc26 GST.Five days after final injection, mice of the immunization and control groups were challenged with 40±1 S.japonicum cercariae. All mice were sacrificed at 6 weeks after challenge.RESULTS: The worm reduction rate was 30 0%, and the egg reduction rates in the liver and in the spleen were 57 1% and 79 9%, respectively. Inhibition of the vitelline gland and testis was also observed by transmission electron microscopy. The number of vitelline globes, vitelline droplets and lipid droplets in the cytoplasm of vitelline cell and the number of lipid droplets in the supporting cells and the number of spermatids in the testis were apparently reduced.CONCLUSION: The damage of the main reproductive organs of Schistosoma japonicum was one of the factors responsible for rSjc26 GST bound anti fecundity action.

Key words Schistosoma japonicum recombinant Sjc26 GST immune anti fecundity action

DOI:

# 通讯作者

作者个人主 页

蒋健敏1 屠乐鸣1 张素娥1 徐敏源1 刘述先2

# 扩展功能

### 本文信息

- Supporting info
- ▶ PDF(282KB)
- ▶ [HTML全文](OKB)
- ▶参考文献[PDF]
- ▶ 参考文献

# 服务与反馈

- ▶ 把本文推荐给朋友
- ▶加入我的书架
- ▶加入引用管理器
- ▶ 复制索引
- ► Email Alert
- ▶ 文章反馈
- ▶ 浏览反馈信息

## 相关信息

- ▶ <u>本刊中 包含"日本血吸虫,rSjc26</u> GST,免疫,抗生殖作用"的 相关文章
- ▶本文作者相关文章
- · 蒋健敏屠乐鸣张素娥徐敏源刘述先