

实验研究

东方田鼠血清IgG抗体的快速纯化法

蒋守富,潘彩娥,何艳燕,朱民,李浩,石耀军,魏梅雄

上海市疾病预防控制中心,中国农业科学院上海家畜寄生虫病研究所,农业部动物寄生虫学重点开放实验室,上海 200232,上海 200336

收稿日期 修回日期 网络版发布日期 接受日期

摘要

目的 探索快速、高效纯化东方田鼠血清IgG抗体的方法。方法 采用G蛋白或A蛋白亲和层析法,对3种东方田鼠血清IgG抗体进行纯化,比较抗体纯度和回收率。结果 获得的IgG抗体纯度和回收率均以G蛋白亲和层析法为高。纯化的抗体活性高,与酶标二抗的吸附力分别为非IgG洗脱物的8.5倍和未纯化血清IgG的3.1倍。结论 G蛋白亲和层析法纯化东方田鼠血清IgG快速、活性高,具有实用价值。

关键词 [东方田鼠](#) [亲和层析](#) [G蛋白](#) [IgG](#)

分类号

A Rapid Procedure to Purify Serum IgG from *Microtus fotis*

JIANG Shou-fu,PAN Cai-e,HE Yan-yan,ZHU Min,LI Hao,SHI Yao-jun,WEI Mei-xiong

1 Shanghai Municipal Center for Disease Control & Prevention; Shanghai 200336
2 Shanghai Institute of Veterinary Parasitology, Chinese Academy of Agricultural Sciences, Key Laboratory of Animal Parasitology, Ministry of Agriculture, Shanghai 200232

Abstract

Objective To evaluate the procedure to purify IgG antibodies from *Microtus fotis* serum. Methods IgG antibodies from sera of three groups of *Microtus fotis* were purified by protein G or protein A affinity chromatography, their purity and binding capacity were compared. Results The protein G affinity chromatography was more efficient than protein A affinity chromatography. The antibodies isolated from protein G affinity chromatography showed a higher purity and better activity than that from protein A affinity chromatography monitored by SDS-PAGE and ELISA. The ability of the purified IgG to bind the second antibodies were 8.5 times and 3.1 times that of non-IgG proteins and unpurified sera, respectively. Conclusion The protein G affinity chromatography is a rapid, convenient and reliable procedure for *Microtus fotis* serum IgG purification.

Key words [Microtus fotis](#) [affinity chromatography](#) [protein G](#) [IgG](#)

DOI:

通讯作者

作者个人主页

蒋守富;潘彩娥;何艳燕;朱民;李浩;石耀军;魏梅雄

扩展功能

本文信息

- ▶ [Supporting info](#)
- ▶ [PDF \(234KB\)](#)
- ▶ [\[HTML全文\]\(OKB\)](#)
- ▶ [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

- ▶ [本刊中 包含“东方田鼠”的 相关文章](#)
- ▶ 本文作者相关文章

- [蒋守富](#)
- [潘彩娥](#)
- [何艳燕](#)
- [朱民](#)
- [李浩](#)
- [石耀军](#)
- [魏梅雄](#)