

论著

以重组蛋白为抗原的ELISA法检测旋毛虫抗体

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摘要

目的 寻求特异性强、敏感性高的旋毛虫病诊断抗原。方法 以旋毛虫新生幼虫期特异性T668基因在 *E. coli* 高效表达的重组蛋白为抗原, 分别以兔、猪和健康者血清及旋毛虫病阳性血清为一抗, 以辣根过氧化物酶 (HRP) 标记的山羊抗兔IgG、山羊抗猪IgG和山羊抗人IgG为二抗, 建立检测旋毛虫抗体的间接ELISA方法, 并以旋毛虫肌幼虫排泄物分泌 (ES) 抗原作为检测对照。结果 以T668重组蛋白为抗原, 对兔、猪和人旋毛虫病血清进行检测, 阳性检出率为100%, 且敏感性高 (0.016 μg / 孔), 与ES抗原检测结果完全一致。结论 T668重组抗原有望替代ES抗原检测旋毛虫抗体。

关键词 [旋毛虫](#) [重组蛋白](#) [新生幼虫期特异性基因](#) [间接ELISA](#)

分类号

Detection of Anti-*Trichinella spiralis* Antibody by Indirect ELISA Using Recombinant Protein as Antigen

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Abstract

Objective To study the specificity, sensitivity of diagnostic antigen for *Trichinella spiralis* (T. s). Methods T668 recombinant protein from highly efficient expression of newborn larvae stage-specific gene of T. s in *E. coli* as diagnostic antigen. By using negative and positive sera from rabbit, pig, human as the first antibody, and goat-anti-rabbit IgG, goat-anti-pig IgG, goat-anti-human IgG labeled with HRP as the secondary antibody, indirect ELISA method was established for detecting anti-T. s antibody, while excretory-secretory (ES) antigen of T. s muscle larvae was used as control. Results Sera from rabbit, pig and human were detected by T668 recombinant protein as antigen, which showed a positive rate of 100% with 0.016 μg/well. There was no difference on the results between the T668 recombinant antigen and the ES antigen for diagnosing T. s-infection. Conclusion The T668 recombinant antigen is promising in substituting ES antigen in the detection of anti-T. s antibody.

Key words [Trichinella spiralis](#) [Recombinant protein](#) [Newborn larvae \(NBL\) stage-specific gene](#) [Indirect ELISA](#)

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