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论著

旋毛虫部分抗原表位的识别与分析

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摘要

[目的]筛选旋毛虫肌幼虫可溶性抗原中具有免疫显性的表位。 [方法]采用杂交瘤技术 ,获得 15株特异性单克隆抗体 ,随后用酶联免疫吸附试验 (ELISA)、免疫印迹法 (Westernblotting)和间接免疫荧光试验(IFA)对部分免疫显性抗原进行分析。 [结果]Westernblotting试验显示 ,6株单抗与旋毛虫肌幼虫可溶性抗原反应显示有特异条带 ,分子量为 40～ 70kDa ;而多抗血清则可识别 2 0～ 2 0 0kDa之间 10条条带。IFA可观察到 ,6株单抗中有 4株单抗的靶抗原定位在旋毛虫肌幼虫表皮层上 ,另 2株定位于杆状体 (stichosome)及表皮层。 [结论]识别与分析部分旋毛虫肌幼虫可溶性抗原中具有免疫显性的表位 ,为纯化旋毛虫的抗原及疫苗靶抗原的研制提供了有价值的实验依据。

关键词 旋毛虫 表位 单克隆抗体 免疫印迹法 免疫荧光

分类号

LOCALIZATION AND CHARACTERIZATION OF PARTIAL IMMUNODOMINANT ANTIGEN EPITOPES OF TRICHINELLA SPIRALIS

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Abstract

Objective] To screen and characterize immunodominant antigen epitopes on the soluble antigens of Trichinella spiralis (T s) . [Methods]15 monoclonal antibodies (McAbs) against T s muscle larva(ML) soluble antigens were obtained by using hybridoma technique. The reactivity of monoclonal and polyclonal antibodies were tested by ELISA, Western blotting and indirect immunofluorescence assay(IFA). [Results] The Western blotting result showed that of the 15 McAbs, 6 could bind to the T s ML antigens displaying molecular weights of 40～70 kDa. Polyclonal sera could react with more than 10 bands having molecular weights of 20～200 kDa. Among the 6 McAbs, 4 could recognize epitopes on the cuticle surface and the other two could recognize epitopes on both the cuticle surface and the stichosome. [Conclusion]The antigen epitopes of T s recognized by 6 McAbs had been characterized.

Key words

Trichinella spiralis epitope monoclonal antibody Western blotting immunofluoscence

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