

论著

用噬菌体肽库筛选SjC-TPI的模拟抗原表位

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摘要

目的 筛选日本血吸虫中国大陆株磷酸丙糖异构酶 (SjC TPI)分子的模拟抗原表位,研究其免疫学特性。方法 用纯化的抗重组SjC TPI抗体 (IgG)筛选 12肽库,获取SjC TPI的模拟抗原表位,并研究其抗原特性。结果 获得SjC TPI分子的两个模拟抗原表位M1和M2,Westernblotting分析结果表明由这两个模拟抗原表位免疫小鼠产生的免疫血清能识别SjC TPI分子和含此两抗原表位的噬菌体外壳蛋白。DNA测序结果显示这两个模拟抗原表位的氨基酸序列与SjC TPI无同源性。结论 本研究获得的模拟抗原表位M1及M2为SjC TPI的空间构型抗原的模拟表位,具有较好的抗原性

关键词 [日本血吸虫](#) [磷酸丙糖异构酶](#) [模拟抗原表位](#)

分类号

Screening the Mimic Antigen Epitopes of Triosephosphate Isomerase of Schistosoma japonicum Chinese Strain (Sjc Tpi) with Random Phage Peptide Library

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Abstract

Objective To screen the mimic antigen epitopes of the triose phosphate isomerase of Schistosoma japonicum Chinese strain (SjC TPI) and investigate their immunogenicity. Methods The random phage peptide library (PH.D. 12) was screened with the purified antibody(IgG) against SjC TPI to get the positive phage which contained the mimic antigen epitopes of SjC TPI, and the immuno characterization of the mimic antigen epitopes were investigated. Results Two mimic antigen epitopes (M1, M2) of SjC TPI were obtained. The immuno sera of mice (Kunming strain) against the positive phages could recognize both the SjC TPI and the protein of the positive phages. The DNA sequencing data showed no homology between the sequences of the deduced amino acid of the two mimic antigen peptides and the amino acid of SjC TPI. Conclusion The two mimic antigen epitopes of SjC TPI obtained are imitative epitopes of the configuration antigen of SjC TPI.

Key words [Schistosoma japonicum](#) [triose phosphate isomerase\(TPI\)](#) [mimic antigen epitope](#)

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