论著

用噬菌体十二肽库筛选日本血吸虫病诊断抗原

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摘要
　　目的　从噬菌体十二肽库中筛选出特异、灵敏的日本血吸虫病诊断抗原。　方法　以日本血吸虫急感患者血清免疫球蛋白(Ig)作为靶分子,免疫筛选噬菌体随机十二肽库。经过3轮吸附洗脱扩增的淘筛过程,随机挑取10个蓝色噬菌斑扩增,用ELISA检测其免疫活性,并通过对并殖吸虫病及旋毛虫病患者血清的检测分析其诊断日本血吸虫病的价值。　结果　6个克隆可以与日本血吸虫急感患者血清免疫球蛋白(Ig)特异结合。其中A492值最高的克隆(SjA1)具有较好的特异性和灵敏性。　结论　从噬菌体随机十二肽库中筛选到的克隆对日本血吸虫病具有较高的诊断价值。

关键词　　日本血吸虫病　　噬菌体肽库　　诊断抗原
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Screening of Schistosomiasis japonica Diagnostic Antigen with Phage 12-mer Peptide Library

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Abstract
　Objective To obtain the mimic epitope of specific and sensitive diagnostic antigen in schistosomiasis japonica from phage 12-mer peptide library. Methods Specific Ig was purified from sera of patients with acute schistosomiasis and used to immunoscreen the phage peptide library (PH.D.-12). After 3 rounds of panning, 10 positive plaques were selected and amplified. The immunoactivity of each clone was examined by ELISA. The sensitivity and specificity of immunoactive clones were confirmed by detecting the sera of patients with different parasitosis. Results Six clones could bind to the specific Ig purified from sera of patients with acute schistosomiasis. One clone with the highest A 492 value showed a high sensitivity and specificity. Conclusion The clone (SjA1) identified by the specific Ig from the library played a better part in the immunodiagnosis of schistosomiasis.

Key words　　schistosomiasis japonica　　phage peptide library　　diagnostic antigen

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