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论著

日本血吸虫22.6 kDa重组抗原的高效融合表达及特性鉴定

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摘要

目的： 大量获得纯化的日本血吸虫２２ ６ ｋ Ｄａ 重组抗原。方法： 用 Ｐ Ｃ Ｒ 方法将其编码基因序列经改造后亚克隆入载体质粒ｐ Ｇ Ｅ Ｘ １λＴ 进行表达。结果： 得到了融合表达的蛋白抗原。此融合蛋白表达量大， 用凝血酶酶切后易大量制备纯化的重组２２ ６ ｋ Ｄａ 抗原。结论： 以此融合蛋白免疫的小鼠抗血清进行免疫印迹试验， 表明 Ｓｊ２２ ６／ Ｓｊ２６ Ｇ Ｓ Ｔ 融合重组蛋白具有与 Ｓｊ２２ ６ 蛋白一样的免疫学活性。

关键词 日本血吸虫 22.6kDa抗原 重组抗原 融合表达

分类号

EXPRESSION AND IDENTIFICATION OF RECOMBINANT 22.6 kDa FUSION PROTEIN OF SCHISTOSOMA JAPONICUM

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Abstract

AIM: To obtain a large amount of purified 22.6 kDa antigen of Schistosoma japonicum (Sj 22.6) in large quantity.METHODS: The sequence of the gene fragment encoding Sj 22.6 was reformed by PCR and subcloned into plasmid vector pGEX-1λT that coded for the 26 kDa GST antigen of Schistosoma japonicum (Sj 26 GST). The recombinant plasmid was transformed into E.coli TG 2 and then the positive recombinant clone was expressed by induction with IPTG. RESULTS: The recombinant Sj 22.6/ Sj 26 GST fusion protein was expressed in 5.1% of total bacterial protein and was easy to be purified with glutathione sepharose 4B. Moreover, the purified recombinant Sj 22.6 antigen could be cut off easily from the fusion protein with thrombin and had high immunogenicity. CONCLUSION: The purified recombinant Sj 22.6 protein and Sj 22.6/ Sj 26 GST fusion protein had the same immunological activity as the native Sj 22.6 kDa protein .

Key words Schistosoma japonicum 22.6kDa antigen recombinant antigen fusion expression

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