研究简报

构建间日疟原虫红内期全长cDNA文库

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【提要】 采集未经治疗的间日疟患者血样,滤去白细胞后浓集含虫红细胞,提取总RNA,用SMART cDNA文库构建试剂盒构建间日疟原虫红内期全长cDNA文库。测定cDNA文库库容,蓝白斑筛选,计算重组率。随机挑选48个菌落,用M13+/一引物进行PCR鉴定插入片段大小。构建的间日疟原虫红内期全长cDNA文库原始库容为1.14×106,重组率为97.2%,重组子插入cDNA片段大小为900~2 500 bp。

关键词 间日疟原虫;红内期;cDNA文库

分类号

Construction of Full-length cDNA Library of Erythrocytic Stage Plasmodium vivax

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[Abstract] Blood samples were collected from vivax malaria patients without antimalarial drug therapy. After filtration through Plasmodipur filter to remove white blood cells, Plasmodium vivax-infected RBCs were enriched by Percoll. Total RNA of P. vivax in red blood cells was isolated. A full-length cDNA library of erythrocytic stage P. vivax was constructed by the SMART cDNA library construction kit. The volume and recombinant rate of the library were evaluated. The inserted fragments were identified by PCR amplification. The titer of cDNA library was 1.14×106. The length of inserted fragment ranged from 900 to 2 500 bp, and the recombination efficiency accounted for 97.2%.

Key words Plasmodium vivax; Erythrocytic stage; cDNA library

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