

实验研究

微小隐孢子虫DNA探针的制备

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摘要

目的: 制备一种高度特异敏感的隐孢子虫检测探针。方法: 应用聚合酶链反应(PCR)扩增微小隐孢子虫的一段核苷酸片段, 扩增产物452bp DNA用半抗原地高辛标记制备成探针。结果: 经敏感性试验, 该探针可检测2pg水平的隐孢子虫DNA。用该探针与隐孢子虫DNA和溶组织内阿米巴、贾第虫、大肠杆菌及痢疾杆菌等相关生物的DNA和隐孢子虫宿主的DNA进行斑点杂交试验, 该探针只与隐孢子虫DNA杂交。结论: 该探针具有高度特异性和较高敏感性。

关键词 [微小隐孢子虫, DNA探针, 杂交](#)

分类号

PREPARATION OF DNA PROBE FOR CRYPTOSPORIDIUM PARVUM

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Abstract

AIM: To prepare a probe with high specificity and sensitivity for the detection of *Cryptosporidium parvum*. METHODS: Using PCR method, a fragment from the DNA of *C. parvum* was amplified. The PCR product, 452 bp DNA, was labeled with hapten digoxigenin. RESULTS: Examination of sensitivity showed that the DNA probe could detect as low as 2 pg DNA from *C. parvum*. The dot blot hybridization assay showed that the probe hybridized with the DNA of *C. parvum*, but not hybridized with DNA of *E. histolytica*, *G. lamblia*, *E. coli* and *D. bacilli*. CONCLUSION: The probe was highly specific and sensitive for the detection of *C. parvum*.

Key words [Cryptosporidium parvum](#) [DNA probe](#) [hybridization](#)

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