

论文

柔嫩艾美耳球虫端粒DNA重复序列的Southern 印迹杂交分析

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摘要:

为进一步确定柔嫩艾美耳球虫(*E. tenella*)端粒DNA的重复序列,为下一步端粒酶活性检测奠定基础,根据已克隆发表的*E. tenella*端粒DNA重复序列信息,设计了由4个端粒重复序列串联的寡聚核苷酸探针(TTTAGGG)₄,并以生物素地高辛标记。将该探针与经BAL31 EcoR I酶切后的*E. tenella*基因组DNA进行Southern印迹杂交分析。结果显示:*E. tenella*基因组DNA与探针杂交获得了清晰的杂交条带,随BAL31酶切时间的延长,杂交信号逐渐减弱,进一步证明了*E. tenella*端粒DNA重复序列为5'-TTTAGGG-3',且此重复序列在*E. tenella*染色体的末端。

关键词: 柔嫩艾美耳球虫 端粒DNA Southern印迹杂交

Southern Blotting Analysis of Telomeric Repetitive DNA Sequences in *Eimeria tenella*

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Abstract:

In order to identify *E. tenella* telomeric repetitive DNA sequences and detect the activity of telomerase, an oligonucleotide probe composed of (TTTAGGG)₄ telomeres was designed according to the *E. tenella* telomeric repetitive DNA sequence (5'-TTTAGGG-3') which had been previously cloned in our laboratory and labeled by digoxin. The probe was hybridized with the products of *E. tenella* genomic DNA digested with BAL31 and EcoR I and then analyzed by Southern blotting. The results indicated that the hybridization of the probe and the *E. tenella* genomic DNA produced clear bands. With the delay of BAL31 digestion, hybridization signal decreased gradually. It further proved that *E. tenella* telomeric repetitive DNA sequences were 5'-TTTAGGG-3' and located in the terminal region of *E. tenella* chromosome.

Keywords: *Eimeria tenella* telomeric DNA Southern blotting

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