

定量PCR的非同源对照模板的构建 Generation of Non-homologous Competitor DNA for Competitive Quantitative PCR

陈燃, 金裘, 毛裕民 CHEN Ran, JIN Zhe, MAO Yu-min

复旦大学生命科学学院遗传所遗传工程国家重点实验室, 上海 200433 State Key Lab of Genetic Engineering, Institute of Genetics, School of Life Sciences, Fudan University, Shanghai 200433, China

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摘要 建立了HCVRNA和hTERTmRNA的竞争定量PCR系统。对照模板的构建方法是: 利用计算机辅助优选设计连接引物, 低严谨型扩增大肠杆菌DNA, 回收并克隆预期的DNA片段。该片段与靶序列除两端引物序列完全相同外, 无同源性, 因此可作为非同源对照模板。这种构建非同源对照模板的方法, 简便易行, 适应面广。

Abstract: It cannot be neglected sometimes that the error caused by the "heteroduplex DNA" that occurs accompanying with the homologous competitor DNA which is usually used in the competitive quantitative PCR (CQ-PCR). Here a method is developed to generate non-homologous competitor DNA for CQ-PCR detection of the interest DNA, based on low-stringency amplification of cross-species DNA with a pair of linker-primers which are designed according to partly homologous sites of the interest DNA primers in cross-species' DNA. With the method, the non-homologous competitor DNAs for the HCV RNA and hTERT mRNA are generated from E. coli DNA respectively, then the CQ-PCR systems are established for the 2 species RNAs with the RRTR (Repeated reverse transcription reaction). The method is multi-adaptive and easy to apply.

关键词 [竞争定量PCR](#) [对照模板](#) [异源双链](#) **Keywords** [competitive quantitative PCR](#) [competitor DNA](#) [heteroduplex DNA](#)

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