论著

含小鼠糖皮质激素受体第二外显子基因片段的克隆和结构分析

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收稿日期 1999-4-26 修回日期 1999-5-5 网络版发布日期:

摘要 克隆适于构建可调控基因打靶载体的小鼠糖皮质激素受体(GR)基因片段,为建立糖皮质激素受体基因 缺陷型小鼠模型奠定基础。用PCR 扩增小鼠GR 基因第二外显子上562bp 的核酸片段作为探针,筛选小鼠基因组 文库,共获得6 个阳性克隆。对C10 克隆进行详细的测序和酶切图谱和Southern 杂交分析后获得一6.5kb 的基因片段。该片段含完整的GR 基因第二外显子,左右分别有319kb 和114kb 的DNA 片段可作为下一步构建基因打靶载体的同源臂。

关键词 基因打靶 糖皮质激素受体基因

CLONING AND STRUCTURE ANALYSIS OF GENE FRAGMENT BEARING MOUSE GLUCOCORTICOID RECEPTOR GENE EXON II

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Abstract To clone a genomic DNA f ragment containing mouse glucocorticoid receptor (GR) gene for the const ruction of an inducible gene targeting vector used in the establishment of a GR gene dificient mouse model. The mouse genomic library was screened by using a 562bp PCR product from GR gene exon II as a probe. Six positive clones were got after screening. The DNA of positive clones was profoundly characterized by sequencing, rest riction mapping and Southern blotting to get the right f ragment . A 6. 5 kb DNA f ragment was separated from the C10 clone. The gene f ragment contains entire GR gene exon II, and two flanking f ragment s which are 3. 9 kb and 1. 4 kb respectively can be used as homologous arm in the const ruction of the targeting vector.

Keywords gene targeting glucocorticoid receptor gene

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