

脂质体介导外源基因体外转染牛胎儿成纤维细胞条件的优化

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摘要 通过脂质体 (FuGENE-6) 介导, 将真核表达载体pEGFP-C1成功导入体外培养的牛胎儿成纤维细胞, 探讨影响外源基因转染效率的参数, 如DNA和脂质体的用量、转染的细胞数量以及细胞暴露于DNA与脂质体复合物的时间长度。通过实验发现, 绿色荧光蛋白 (green fluorescent protein, GFP) 基因的表达随DNA、脂质体量的增加而增加, 延长细胞暴露时间反而使转染效率下降, 转染细胞数适当才能得到较高的转化率。

Optimization of Parameters of Exogene Transfection of Bovine Fetal Fibroblasts in vitro Mediated by Liposome

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Abstract: pEGFP-C1 eucaryon expression vector was successfully transfected by liposome into bovine fetal fibroblasts. We investigated the effect of parameter such as the dose of DNA and liposome, number of cell transfected and exposure time of the cell to the DNA-liposome complexes. It was indicated that GFP (green fluorescent protein) expression was enhanced as the dose of DNA and liposome increased and on decline as the exposure time was prolonged. The improvement of transfection efficiency depend on the suitable cell number.

Key words: liposome; GFP; bovine fetal fibroblasts; transfection

关键词 [脂质体](#) [绿色荧光蛋白](#) [牛胎儿成纤维细胞](#) [转染](#)

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