

Study of FGF2 gene transfer and expression in mouse embryonic stem cells with lentiviral

Abstract

Genetically Modified is a set of technologies used to change the genetic makeup of cells, including the transfer of genes within and across species boundaries to produce improved or novel organisms . An efficient strategy for sustainable genetic modification, stem cell manipulation in vitro conditions that provide powerful new tools for fundamental research and application. In order to use this potential expression of numerous genes through the transfer have been studied in embryonic stem cells. For this purpose, the mice after superovulation and mating, Embryonic stem cells were prepared from the blastocyst embryos 5 days and then FGF2 gene synthesis were transfected stem cells by lentiviruse. FGF-2 secretion by embryonic stem cells was studied using ELISA kits and PCR . The results of the ELISA kit and PCR in transfected cells, Well demonstrated gene transfer. According to the expression of the growth factor FGF-2 And the ability of embryonic stem cells, This method can be used to produce chimeric mice And also be used in cell therapy .

Keywords: Genetic modification, embryonic stem cells, lentivirus, fibroblast growth factor.



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cells with lentiviral**

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