ES细胞(MESPU13)嵌合体小鼠的GPI分析

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收稿日期 修回日期 网络版发布日期 接受日期

摘要 为了评判小鼠ES细胞系MESPU13的分化潜能,我们对19只嵌合小鼠的心、肝、脾、肺、肾、胰腺、生殖腺、肌肉和血液的GPI (磷酸葡萄糖异构酶)进行了分析。在这些样品中,来源于ES细胞的A型条带的检出情况和小鼠的毛色嵌合率成正比关系。当毛色嵌合率低于40%时,除了少数小鼠的肾脏外,没有看到A型的条带。当毛色嵌合率大于85%时,几乎所有的器官组织都检测到A型条带,显示了ES细胞在发育形成内、中、外胚层的细胞方面具有很高的分化潜能。另外,在毛色嵌合率大于85%的其中的6只嵌合鼠的肌肉中,只观察到A型的条带,表明这些肌肉只单独来源于ES细胞。

关键词 ES细胞 嵌合小鼠 GPI 分化潜能

分类号

The Analysis of GPI in Chimeric Mice of ES Cells(MESPU 13)

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Abstract

To estimate the differential potentiality of ES (Embryonic Stem) cell line MESPU13, the heart, liver, spleen, lung, kidney, pancreas, gonad, muscle and blood of 19 chimeric mice were analyzed for GPI (Glucose Phosphate Isomras) marker, in these studies, type A band from the ES cells, appeared parallel to the coat color chimerism of the mice. When coat color chimerism is below 40%, type A band was not seen except in the kidney of a few mice. Type A band was detected in nearly all the organs and tissues, when coat color chimerism was over 85%, indicated the ES cellhas a fairly high potential to differentiate into cells of endoderm, mesoderm and ectoderm, In addition, only type A band was observed in the muscles of 6 mice which coat color chimerism is over 85%, the results indicated that these muscles were differentiated only from ES cells.

Key words ES cells Chimeric mice GPI Differential potentiality

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