

论著

## 碱性成纤维细胞生长因子对ECV304细胞迁移的影响

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**摘要** 目的: 观察不同浓度的碱性成纤维细胞生长因子(bFGF)对体外培养中划痕损伤后ECV304细胞迁移的影响。方法: 在体外细胞划痕损伤模型中应用显微电视电脑图像处理系统定量测定不同浓度(0、5、10、15  $\mu\text{g/L}$ )bFGF引起的ECV304细胞迁移的变化, 用光镜与扫描电镜观察bFGF引起的迁移细胞的形态变化。结果: 与不加bFGF的对照组比较, 低浓度(5  $\mu\text{g/L}$ )时bFGF对ECV304细胞的迁移呈促进作用; 高浓度时(15  $\mu\text{g/L}$ )呈抑制作用。迁移细胞表面有众多丝状伪足。结论: bFGF对体外培养的ECV304细胞的迁移有双相调节作用, 低浓度时(5  $\mu\text{g/L}$ )促进细胞迁移, 高浓度时(15  $\mu\text{g/L}$ )抑制细胞迁移。迁移细胞表面伪足丰富, 以丝状伪足为主。

**关键词** [成纤维细胞生长因子2](#); [ECV304细胞](#); [细胞运动](#); [丝状伪足](#)

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## Influence of basic fibroblast growth factor on ECV304 cell migration

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### Abstract

<FONT face=Verdana>AIM: To observe the influence of basic fibroblast growth factor (bFGF) at different concentrations on migration of ECV304 cells after scratch wound. METHODS: Cell migration of ECV304 was monitored by computer assisted video microscopy with an image analysis system after treatment with bFGF at concentrations of 0, 5, 10 and 15  $\mu\text{g/L}$ . The morphological changes induced by bFGF were observed under light microscope and scanning electron microscope. RESULTS: bFGF increased the cell migration at low concentration (5  $\mu\text{g/L}$ ), and inhibited at high concentration (15  $\mu\text{g/L}$ ). The surface of migration cells exhibited numerous filopodia. CONCLUSION: bFGF has double direction adjustment effects on migration of ECV304 cells. The surface of migration cells exhibits affluent pseudopods, which are mainly filopodia. </FONT>

**Key words** [Fibroblast growth factor 2](#) [ECV304 cells](#) [Cell movement](#) [Filopodium](#)

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