

HIF-1 α 对人肝癌Hep G₂细胞生长的影响

刘址忠¹,林菊生^{1*},蔡晓坤¹,李孝生²,黄文英³

1. 430022 武汉,华中科技大学同济医学院附属同济医院肝病研究所;2. 华中科技大学同济医学院附属协和医院神经外科;3. 湖南省郴州市第一人民医院硕士)(* 通讯作者)

Effects of Hypoxia-inducible Factor-1alpha on Human Hepatic Cancer Cell Line Hep G₂ in Viv

LIU Zhi-zhong¹, LIN Ju-sheng^{1*}, CAI Xiao-kun¹, LI Xiao-sheng², HUANG Wen-ying³

1. Hepatic Diseases Department of Tongji Hospital, Tongji Medical College, Wuhan 430022, China; 2. Department of Neural Surgery, Huazhong University of Science and Technology; 3. The First People's Hospital of Chenzhou City (* Corresponding Author)

- 摘要
- 参考文献
- 相关文章

全文: [PDF](#) (561 KB) [HTML](#) (0 KB) 输出: [BibTeX](#) | [EndNote \(RIS\)](#) [背景资料](#)

摘要

目的 研究缺氧诱导因子-1 α (HIF-1 α)对人肝癌细胞株HepG₂体内生长的影响,并探讨其可能机制。方法 将HIF-1 α 转入人HepG₂中,建立人肝癌裸鼠模型,观察其生长。切除瘤灶、称瘤重。标本用免疫组化和Western-blot检测HIF-1 α 和血管内皮生长因子(VEGF)蛋白的表达。结果 HepG₂细胞对HIF-1 α 敏感,细胞生长速度加快。结论 HIF-1 α 体内可促进肝癌HepG₂的生长,其机制可能与其促血管生成有关。

关键词: 缺氧诱导因子-1 α 血管内皮生长因子 肝癌

Abstract: Objective To study the effect of hypoxia-inducible factor-1alpha (HIF-1 α) on hepatic cancer cell line Hep G₂ in vivo and its mechanisms. Methods Hep cells (1 (10⁶ / mouse) were inoculated subcutaneously into 20 nude mice. The growth rates of subcutaneous tumor were detected. The resected specimens were made into paraffin-embedded sections. The expression of HIF-1 α and vascular endothelial growth factor (VEGF) proteins were analyzed by Western blot and Immunohistochemistry (IHC). Results The growth rates of HIF-1 α treating hepatic cancer cells Hep G₂ were significantly increased. Conclusion HIF-1 α could promote hepatic cancer cell line Hep G₂ growth in vivo and its mechanism may be due to the fact that it can promote vascular growth.

Key words: Hypoxia-inducible factor-1alpha Vascular endothelial growth factor Hepatoma

收稿日期: 2004-05-13;

通讯作者: 刘址忠

引用本文:

刘址忠,林菊生,蔡晓坤等. HIF-1 α 对人肝癌Hep G₂细胞生长的影响[J]. 肿瘤防治研究, 2005, 32(6): 344-345.,

LIU Zhi-zhong, LIN Ju-sheng, CAI Xiao-kun et al. Effects of Hypoxia-inducible Factor-1alpha on Human Hepatic Cancer Cell Line Hep G₂ in Vivo. TUMOR PREVENTION AND TREATMENT, 2005, 32(6): 344-345.,

没有本文参考文献

- [1] 刘安文;蔡婧;张树辉 . MAP4K4对肝癌细胞生物学活性的影响及机制[J]. 肿瘤防治研究, 2012, 39(2): 140-145.
- [2] 杨素梅;刘可玲;王立敏;高建宏;李华;高玉霞 . 血管生成素-2及其受体在卵巢癌组织中的表达及与血管生成的关系[J]. 中国癌症杂志, 2006, 16(10): 1035-1038.
- [3] 彭兴春;余明华;骆志国;崔培林 . 褪黑素对肺癌A549细胞诱导的血管内皮细胞增殖的影响[J]. 肿瘤防治研究, 2011, 38(8): 89-92.
- [4] 吴晓慧;王顺祥;杨永江;李建坤 . YC-1对人肝细胞癌裸鼠移植瘤的影响及其机制 [J]. 肿瘤防治研究, 2011, 38(8): 89-92.
- [5] 潘宇亮;曹培国;张隽;符慧群 . 肝癌衍生生长因子在乳腺癌中的表达及其临床意义[J]. 肿瘤防治研究, 2011, 38(8): 92-95.

- [6] 刘培根;马利林;朱建伟. 氧化应激对大肠癌细胞迁移、血管内皮生长因子表达及细胞间通信的影响[J]. 肿瘤防治研究, 2011, 38(6): 675-678.
- [7] 尹明红;陆荫英;苏淑慧;高旭东;王春平;杨永平 . 氯氦刀冷冻消融治疗原发性肝癌术后常见并发症及防治[J]. 肿瘤防治研究, 2011, 38(6): 679-683.
- [8] 刘娟;姚树坤;殷飞 . 肝细胞肝癌组织中RBL2/P130的表达及其临床意义[J]. 肿瘤防治研究, 2011, 38(6): 675-678.
- [9] 郭宝平;岑洪;谭晓虹;陆永奎 . 慢病毒介导的siRNA干扰乳腺癌MCF-7细胞VEGF-C表达的实验 [J]. 肿瘤防治研究, 2011, 38(5): 38-41.
- [10] 何峰;李劲东;王志明 . 丹皮酚联合5-氟尿嘧啶对裸鼠人肝癌移植瘤的抑制作用及其机制 [J]. 肿瘤防治研究, 2011, 38(5): 38-41.
- [11] 刘海燕;齐元富;马吉祥;苏军英;徐爱强;李维卡. 培哚普利抗S180肉瘤生长的实验研究[J]. 肿瘤防治研究, 2011, 38(5): 38-41.
- [12] 张梅春;赵子文;曾军;刘朝晖 . 康艾注射液辅助化疗对晚期非小细胞肺癌患者血清VEGF表达的干预作用 [J]. 肿瘤防治研究, 2011, 38(5): 38-41.