

Linc00961在恶性黑素瘤中表达及其对细胞侵袭及转移的影响

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Title: Expression of Linc00961 in malignant melanoma and its effects on migration and invasion of malignant melanoma cells

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摘要: 目的: 检测潜在长链非编码RNA Linc00961在恶性黑素瘤组织及细胞中的表达, 及其对恶性黑素瘤A375细胞迁移和侵袭能力的影响。方法: 采用聚合酶链式反应方法检测恶性黑素瘤组织及细胞中Linc00961的表达水平; 分析Linc00961在不同TNM分期恶性黑素瘤组织中的表达; 构建Linc00961过表达慢病毒质粒上调A375细胞中Linc00961表达, 细胞划痕实验检测Linc00961对A375细胞迁移距离的影响, Transwell实验检测Linc00961对A375细胞迁移侵袭的影响。结果: Linc00961在恶性黑素瘤组织及A375细胞中的表达低于良性痣及正常黑素HEMa-LP细胞。TNM IV期恶性黑素瘤组织中的Linc00961表达水平显著低于TNM I、II、III期。过表达A375细胞中Linc00961后, 细胞迁移距离降低, 细胞迁移及侵袭数目减少 ($P < 0.05$)。结论: Linc00961在恶性黑素瘤组织及细胞中低表达, 并可抑制恶性黑素瘤细胞迁移及侵袭。

Abstract: Objective: To investigate the expression of long non-coding RNA Linc00961 in malignant melanoma tissues and cells, and explore the effects of Linc00961 on cell migration and invasion of malignant melanoma A375 cells. Methods: qPCR was performed to detect the expression of Linc00961 in malignant melanoma tissues and cells. Variance analysis was used to analyze the expression of Linc00961 in different TNM stage of malignant melanoma. Upregulating Linc00961 expression by constructing Linc00961 overexpressed lentivirus plasmid in A375 cells. Wound healing assays were performed to detect the effects of Linc00961 on cell migrative distance of A375 cells, and transwell assays were performed to detect the effects of Linc00961 on cell number of migrative and invasive A375 cells. Results: Compared to benign nevi or normal epidermal melanocytes HEMA-LP cells, Linc00961 was downregulated in tissues of malignant melanoma or A375 cells. Compared to TNM I, II and III, the expression of Linc00961 in TNM IV stage of malignant melanoma was significantly down-regulated. The relative cell migrative distance, and number of migrative and invasive cells were decreased after upregulating the expression of Linc00961 in A375 cells. Conclusion: Linc00961 is down-regulated in malignant melanoma tissues and cells, and Linc00961 could inhibit cell migrative and invasive ability of malignant melanoma cells.

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