عنوان مقاله:

CircRNA_۰۱۰۹۲۹۱ regulates cell growth and migration in oral squamous cell carcinoma and its clinical significance

محل انتشار:

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خلاصه مقاله:

Objective(s): Circular RNAs (circRNAs), a new class of non-coding RNAs, have emerged as important regulators during tumorigenesis. However, the functions of circRNAs have not been completely clarified in the progression of cancers. In our study, a novel circRNA hsa_circ_۰۱۰۹۲۹۱ was investigated in oral squamous cell carcinoma (OSCC) tissues and cell lines. Materials and Methods: The expression profile of circRNAs in OSCC tumor tissues was performed by high-throughput sequencing. The CCK-۸ wound healing and apoptosis assay were measured in OSCC cell lines after transfection with si-۰۱۰۹۲۹۱ or si-NC. Results: We discovered that hsa_circ_۰۱۰۹۲۹۱ was significantly increased in OSCC tissues and cell lines compared with their corresponding control group. Knockdown of hsa_circ_۰۱۰۹۲۹۱ inhibited proliferation and migration of OSCC cell lines in vitro. In addition, inhibition of hsa_circ_۰۱۰۹۲۹۱ dramatically induced apoptosis of OSCC cells. We further found that high hsa_circ_۰۱۰۹۲۹۱ levels in OSCC patients resulted in a poorer prognosis than in patients with low hsa_circ_۰۱۰۹۲۹۱ levels. Conclusion: These findings indicated that hsa_circ_۰۱۰۹۲۹۱ correlated with the progression of OSCC and might be a new therapeutic .target for the treatment of OSCC

کلمات کلیدی:

Apoptosis, CircRNA, Hsa_circ_۰۱۰۹۲۹۱, Oral squamous cell carcinoma, Prognosis

لینک ثابت مقاله در پایگاه سیویلیکا: