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ACCEPTED MANUSCRIPT

Long Non-Coding RNA LINC01617 Promotes Proliferation and Metastasis of Esophageal Cancer Cells Through AKT pathway

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Abstract

Objective

To investigate the clinical significance of long non-coding RNA LINC01617 in esophageal cancer and explore the effect of LINC01617 on the proliferation and metastasis of esophageal cancer cells.

Methods

Real time fluorescence PCR was used to detect the expression of LINC01617 in 142 cases of esophageal cancer and adjacent tissues. The relationship between the expression level of LINC01617 and the survival rate of esophageal cancer patients was analyzed. The function of LINC01617 was detected in esophageal cancer cell lines. The tumor growth ability test was carried out in the nude mice.

Results

We found that LINC01617 was overexpressed in esophageal cancer, and its expression was associated with poor prognosis of esophageal cancer. In vitro experiments confirmed that knockout of LINC01617 significantly inhibited the proliferation, migration and invasion of esophageal cancer cells. Moreover, knockout of LNC01617 can inhibit the growth of esophageal cancer in nude mice. The Akt pathway may be involved in the regulation of cell activity in esophageal cancer.

Conclusions

LINC01617 may be involved in the occurrence and development of esophageal cancer, suggesting that LINC01617 can be used as a biomarker and potential therapeutic target for esophageal cancer.

Key words

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