

Accepted Manuscript

Circular RNA ciRS-7 accelerates ESCC progression through acting as a miR-876-5p sponge to enhance MAGE-A family expression

Meixiang Sang, Lingjiao Meng, Yang Sang, Shina Liu, Pingan Ding, Yingchao Ju, Fei Liu, Lina Gu, Yishui Lian, Juan Li, Yunyan Wu, Xiaochong Zhang, Baoen Shan



PII: S0304-3835(18)30253-2

DOI: [10.1016/j.canlet.2018.03.049](https://doi.org/10.1016/j.canlet.2018.03.049)

Reference: CAN 13840

To appear in: *Cancer Letters*

Received Date: 30 January 2018

Revised Date: 21 March 2018

Accepted Date: 29 March 2018

Please cite this article as: M. Sang, L. Meng, Y. Sang, S. Liu, P. Ding, Y. Ju, F. Liu, L. Gu, Y. Lian, J. Li, Y. Wu, X. Zhang, B. Shan, Circular RNA ciRS-7 accelerates ESCC progression through acting as a miR-876-5p sponge to enhance MAGE-A family expression, *Cancer Letters* (2018), doi: 10.1016/j.canlet.2018.03.049.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Abstract

As the most well-known circular RNA, ciRS-7 (also termed CDR1as) has been reported to act as a miR-7 sponge, resulting in reduced miR-7 activity and increased miR-7-targeted transcripts. Here, we showed that ciRS-7 is up-regulated in esophageal squamous cell carcinoma (ESCC), and is associated with the poor clinicopathological parameters of ESCC patients. Moreover, over-expression of ciRS-7 increased the proliferation, migration and invasion of ESCC cells. Mechanistic studies revealed that ciRS-7 contains nineteen miR-876-5p binding sites and acts as a miR-876-5p sponge. Over-expression of ciRS-7 resulted in the reduced tumor-repressive function of miR-876-5p on its downstream target MAGE-A family. In animal experiments, enforced ciRS-7 increased ESCC tumor growth and metastasis through targeting miR-876-5p/MAGE-A family axis. Collectively, our study provided novel evidence that ciRS-7 accelerates ESCC progression by acting as a miR-876-5p sponge to enhance MAGE-A family expression.

Keywords: ESCC; circular RNA; ciRS-7; miR-876-5p; MAGE-A

Download English Version:

<https://daneshyari.com/en/article/8434422>

Download Persian Version:

<https://daneshyari.com/article/8434422>

[Daneshyari.com](https://daneshyari.com)