

عنوان مقاله:

miR-92a promotes hepatocellular carcinoma cells proliferation and invasion by FOXA2 targeting

محل انتشار:

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خلاصه مقاله:

Objective(s): MicroRNAs (miRNAs) are considered as powerful, post-transcriptional regulators of gene expression in hepatocellular carcinoma cells (HCC). However, the function of miR-92a is still unclear in HCC. **Materials and Methods:** Expression of miR-92a in human HCC cell lines was evaluated using qRT-PCR. MTT assay and transwell assay were used to examine the function of miR-92a in HepG2 and Huh7 cells. Bioinformatic analyses and luciferase reporter assays were used to validate FOXA2 as a direct target gene of miR-92a. Consistently, the biological outcome of miR-92a on regulating FOXA2 was examined by proliferation and invasion analysis in vitro. **Results:** Here, we detected the higher expression of miR-92a in human HCC cell lines, such as HepG2, Huh7 and Hep3B, compared with the normal human hepatocyte L02 cells. Overexpression of miR-92a significantly increased cell growth and invasion ability, while the knockdown of miR-92a could remarkably inhibit the growth and invasion possibility. We identified that miR-92a has specific targeting sites in the 3'-UTR of the FOXA2. By overexpressing miR-92a in HepG2 cells or Huh7 cells, the expression of FOXA2 was remarkably repressed. **Conclusion:** We demonstrated that miR-92a may play a critical role in HCC proliferation and invasion and may serve as a novel therapeutic target by the repression of FOXA2.

کلمات کلیدی:

miR-92a promotes HCC proliferation and invasion

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