miR 103

miR-103 is abnormally expressed in various human cancer types. However, the detailed expression pattern, biological functions and underlying molecular mechanism of miR-103 in glioma remain unclear. Therefore, the present study aimed to investigate the expression, biological roles and underlying mechanisms of miR-103 in glioma. Results of the present study demonstrated that miR-103 was significantly down-regulated in glioma tissues and cell lines. Functional experiments demonstrated that miR-103 overexpression inhibited the proliferation and invasion of glioma cells in vitro. Additionally, brain-derived neurotrophic factor (BDNF) was identified as a direct functional target of miR-103 in glioma. Furthermore, mRNA and protein expression levels of BDNF were highly upregulated in glioma tissues compared with normal brain tissues. Spearman's correlation analysis indicated a negative association between miR-103 and BDNF mRNA expression levels in glioma tissues. Furthermore, rescue experiments demonstrated that BDNF up-regulation reversed the suppressive effects of miR-103 on glioma cell proliferation and invasion. Therefore, the authors of the present study hypothesized that the interaction between miR-103 and BDNF serves a role in glioma progression and, in the future, may serve as a therapeutic target for glioma treatment [1].

1)
Wang L, Liu Y, Song J. MicroRNA-103 suppresses glioma cell proliferation and invasion by targeting the brain-derived neurotrophic factor. Mol Med Rep. 2017 Dec 15. doi: 10.3892/mmr.2017.8282. [Epub ahead of print] PubMed PMID: 29257320.

From:
https://neurosurgerywiki.com/wiki/ - **Neurosurgery Wiki**

Permanent link:
https://neurosurgerywiki.com/wiki/doku.php?id=mir_103

Last update: **2024/06/07 02:51**