miR-1306-5p

MiR-1306-5p is involved in the progression of acute heart failure, but its role in ischemic stroke remains unclear. Here, SH-SY5Y cells were exposed to oxygen-glucose deprivation (OGD) for 4, 8, and 12 h, respectively, and then reoxygenation for 12 h to construct OGD/R induced cell injury model. Cell viability, cell death, and cell apoptosis were assessed with CCK-8 assay, LDH assay, flow cytometry, and caspase-3 activity assay. The target gene of miR-1306-5p was confirmed by luciferase reporter assay. We found miR-1306-5p expression was significantly down-regulated in OGD/R-induced SH-SY5Y cell model. Moreover, miR-1306-5p protected SH-SY5Y cell against OGD/R-induced injury. Mechanistically, Bcl2-interacting killer (BIK) was the direct target gene of miR-1306-5p. Furthermore, BIK knockdown mimicked, while overexpression reversed the protective effects of miR-1306-5p against OGD/R induced injury. Our findings thus provide an experimental basis miR-1306-5p targeting BIK-based therapy for cerebral I/R injury [1)]

1)
Chen X, Li C, Li J, Sheng L, Liu X. Upregulation of miR-1306-5p decreases cerebral ischemia/reperfusion injury in vitro by targeting BIK. Biosci Biotechnol Biochem. 2019 Aug 28:1-8. doi: 10.1080/09168451.2019.1654846. [Epub ahead of print] PubMed PMID: 31460837.