

عنوان مقاله:

MAGI۲-AS۳ restrains proliferation, glycolysis, and triggers apoptosis in acute lymphoblastic leukemia via regulating miR-۴۵۲-۵p/FOXN۳ pathway

محل انتشار:

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خلاصه مقاله:

Objective(s): MAGI۲-AS۳ is a cancer suppressor gene of multiple malignancies. Acute lymphoblastic leukemia (ALL) is an important type of leukemia that especially occurs in children. Our work evaluated the modulation of MAGI۲-AS۳ in ALL. Materials and Methods: qPCR and Western blotting were adopted for detection of target molecular expression. Growth and apoptosis were determined by CCK۸ assay and Annexin V/PI staining. Glycolysis was detected by commercial kits. The direct binding between miR-۴۵۲-۵p and MAGI۲-AS۳ or FOXN۳ was assessed by luciferase reporter assay. Tumor growth was measured in nude mice in vivo. Results: MAGI۲-AS۳ was down-regulated in ALL. Enforced expression of MAGI۲-AS۳ inhibited growth and glycolysis while promoting apoptosis of ALL cells. Moreover, MAGI۲-AS۳ up-regulated FOXN۳ via sponging miR-۴۵۲-۵p. FOXN۳ depletion abrogated MAGI۲-AS۳-mediated anti-cancer action. More importantly, MAGI۲-AS۳ repressed ALL cell growth in nude mice through regulation of miR-۴۵۲-۵p/FOXN۳. Conclusion: MAGI۲-AS۳ inhibits ALL development via modulating miR-۴۵۲-۵p/FOXN۳.

کلمات کلیدی:

ALL, Apoptosis, FOXN۳, Glycolysis, Growth, MAGI۲-AS۳, miR-۴۵۲-۵p

لینک ثابت مقاله در پایگاه سیویلیکا:

