

Recombinant Mouse GLIPR1 Protein (His Tag)

Catalog No. PKSM040455

Note: Centrifuge before opening to ensure complete recovery of vial contents.

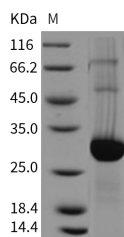
Description

Synonyms	2410114O14Rik;mRTVP-1;RTVP-1;RTVP1
Species	Mouse
Expression Host	HEK293 Cells
Sequence	Met1-Thr223
Accession	NP_082884.1
Calculated Molecular Weight	25.1 kDa
Observed molecular weight	28-32 kDa
Tag	C-His
Bioactivity	Not validated for activity

Properties

Purity	> 85 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 85 % as determined by reducing SDS-PAGE.

Background

Glioma pathogenesis-related protein 1, also known as Protein RTVP-1, GLIPR1 and GLIPR, is a single-pass membrane protein which belongs to the CRISP family. GLIPR1 / RTVP-1 was expressed in high levels in glioblastomas, whereas its

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expression in low-grade astrocytomas and normal brains was very low. Transfection of glioma cells with small interfering RNAs targeting GLIPR1 / RTVP-1 decreased cell proliferation in all the cell lines examined and induced cell apoptosis in some of them. Overexpression of GLIPR1 / RTVP-1 increased astrocyte and glioma cell proliferation and the anchorage-independent growth of the cells. In addition, overexpression of GLIPR1 / RTVP-1 rendered glioma cells more resistant to the apoptotic effect of tumor necrosis factor-related apoptosis-inducing ligand and serum deprivation. GLIPR1 / RTVP-1 regulated the invasion of glioma cells was evident by their enhanced migration through Matrigel and by their increased invasion in a spheroid confrontation assay. The increased invasive potential of the GLIPR1 / RTVP-1 overexpressors was also shown by the increased activity of matrix metalloproteinase 2 in these cells. The expression of GLIPR1 / RTVP-1 is correlated with the degree of malignancy of astrocytic tumors and that GLIPR1 / RTVP-1 is involved in the regulation of the growth, survival, and invasion of glioma cells. GLIPR1 / RTVP-1 is a potential therapeutic target in gliomas.