



# Recombinant Protein Technical Manual

## Recombinant Mouse GLIPR1 Protein (His Tag)

RPES4058

### Product Data:

**Product SKU:** RPES4058

**Size:** 20µg

**Species:** Mouse

**Expression host:** HEK293 Cells

**Uniprot:** NP\_082884.1

### Protein Information:

**Molecular Mass:** 25.1 kDa

**AP Molecular Mass:** 28-32 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 85 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg of the protein as determined by the LAL method.

**Storage:** 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

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** 2410114O14Rik;mRTVP;RTVP;RTVP1

## Immunogen Information:

**Sequence:** Met1-Thr223

## Background:

Glioma pathogenesis-related protein 1, also known as Protein RTVP, GLIPR1 and GLIPR, is a single-pass membrane protein which belongs to the CRISP family. GLIPR1 / RTVP was expressed in high levels in glioblastomas, whereas its expression in low-grade astrocytomas and normal brains was very low. Transfection of glioma cells with small interfering RNAs targeting GLIPR1 / RTVP decreased cell proliferation in all the cell lines examined and induced cell apoptosis in some of them. Overexpression of GLIPR1 / RTVP increased astrocyte and glioma cell proliferation and the anchorage-independent growth of the cells. In addition, overexpression of GLIPR1 / RTVP rendered glioma cells more resistant to the apoptotic effect of tumor necrosis factor-related apoptosis-inducing ligand and serum deprivation. GLIPR1 / RTVP 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 overexpressors was also shown by the increased activity of matrix metalloproteinase 2 in these cells. The expression of GLIPR1 / RTVP is correlated with the degree of malignancy of astrocytic tumors and that GLIPR1 / RTVP is involved in the regulation of the growth, survival, and invasion of glioma cells. GLIPR1 / RTVP is a potential therapeutic target in gliomas.