

# Human GLIPR1 / RTVP1 Protein (His Tag)

Catalog Number: 10873-H08H



**Sino Biological Inc.**  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

CRISP7; GLIPR; RTVP1; 2410114O14Rik; mRTVP-1; RTVP-1; RTVP1

### Protein Construction:

A DNA sequence encoding the human GLIPR1 (NP\_006842.2) extracellular domain (Met 1-Arg 232) was expressed, with a C-terminal polyhistidine tag.

**Source:** Human

**Expression Host:** Human Cells

## QC Testing

**Purity:** > 97 % as determined by SDS-PAGE

### Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** Ala 22

### Molecular Mass:

The secreted recombinant human GLIPR1 comprises 222 amino acids and has a predicted molecular mass of 25.7 kDa. rhGLIPR1 migrates as an approximately 27 kDa band in SDS-PAGE under reducing conditions.

### Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Storage:

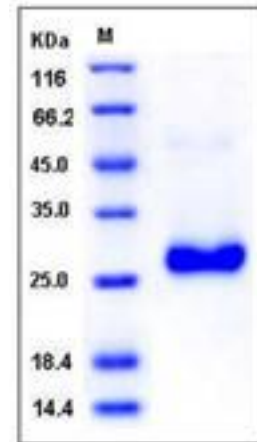
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

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 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.

## References

1. Murphy E.V., et al., 1995, Gene. 159:131-5.
2. Rich T., et al., 1996, Gene. 180:125-30.
3. Rosenzweig, T. et al., 2006, Cancer Res. 66 (8):4139-48.

**Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.**

**Fax :+86-10-51029969 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>**