Recombinant Mouse GLIPR1 Protein (His Tag)

Catalog Number: PKSM040455

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

| Description | |
|---------------------|--|
| Species | Mouse |
| Source | HEK293 Cells-derived Mouse GLIPR1 protein Met1-Thr223, with an C-terminal His |
| Calculated MW | 25.1 kDa |
| Observed MW | 28-32 kDa |
| Accession | NP_082884.1 |
| Bio-activity | 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 $< -20^{\circ}$ 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% Tween 80 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. |



| KDa | М |
|------|--------|
| 116 | - 1881 |
| 66.2 | - 111 |
| 45.0 | - 11 |
| 35.0 | - 11 |
| 25.0 | - |
| 18.4 | - |
| 14.4 | - |
| | |

> 85 % as determined by reducing SDS-PAGE.

Background

Elabscience®

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 involved in the regulation of the growth, survival, and invasion of glioma cells. GLIPR1 / RTVP-1 is a potential therapeutic target in gliomas.