



Recombinant Protein Technical Manual  
Recombinant Mouse MDGA2/MAMDC1 Protein (His  
Tag)  
RPES2225

Product Data:

**Product SKU:** RPES2225

**Size:** 10µg

**Species:** Mouse

**Expression host:** HEK293 Cells

**Uniprot:** P60755

Protein Information:

**Molecular Mass:** 103 kDa

**AP Molecular Mass:** 11020 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 90 % 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:** 6720489L24Rik;9330209L04Rik;Adp;Mamdc1

## Immunogen Information:

**Sequence:** Met 1-Asp 924

## Background:

MAM domain-containing glycosylphosphatidylinositol anchor protein 2, also known as MAM domain-containing protein 1, MDGA2 and MAMDC1, is a cell membrane protein which contains six Ig-like (immunoglobulin-like) domains and one MAM domain. Analyses of the full-length coding region of MDGA1 and MDGA2 indicate that they encode proteins that comprise a novel subgroup of the Ig superfamily and have a unique structural organization consisting of six immunoglobulin (Ig)-like domains followed by a single MAM domain. Biochemical characterization demonstrates that MDGA1 and MDGA2 proteins are highly glycosylated, and that MDGA1 is tethered to the cell membrane by a GPI anchor. The MDGAs are differentially expressed by subpopulations of neurons in both the central and peripheral nervous systems, including neurons of the basilar pons, inferior olive, cerebellum, cerebral cortex, olfactory bulb, spinal cord, and dorsal root and trigeminal ganglia. The similarity of MDGAs to other Ig-containing molecules and their temporal-spatial patterns of expression within restricted neuronal populations, for example migrating pontine neurons and D1 spinal interneurons, suggest a role for these novel proteins in regulating neuronal migration, as well as other aspects of neural development, including axon guidance.