

## Recombinant Mouse MDGA2/MAMDC1 Protein (His Tag)

**Catalog Number:** PKSM040686

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

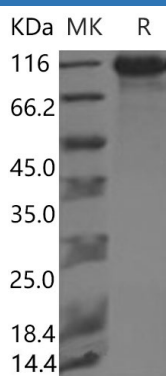
### Description

<b>Species</b>	Mouse
<b>Source</b>	HEK293 Cells-derived Mouse MDGA2/MAMDC1 protein Met 1-Asp 924, with an C-terminal His
<b>Calculated MW</b>	103 kDa
<b>Observed MW</b>	110-120 kDa
<b>Accession</b>	P60755-1
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 90 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	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.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 90 % as determined by reducing SDS-PAGE.

### Background

### For Research Use Only

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.