

## Recombinant Mouse IMPAD1/IMP3 Protein (His Tag)

**Catalog Number:** PKSM041326

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

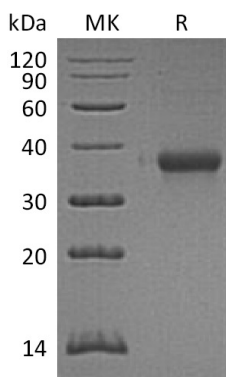
### Description

<b>Species</b>	Mouse
<b>Source</b>	HEK293 Cells-derived Mouse IMPAD1/IMP3 protein Glu51-His356, with an N-terminal His
<b>Calculated MW</b>	34.3 kDa
<b>Observed MW</b>	38 kDa
<b>Accession</b>	Q80V26
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Concentration</b>	Subject to label value.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
<b>Shipping</b>	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.
<b>Formulation</b>	Supplied as a 0.2 µm filtered solution of 50mM Tris-HCl, 150mM NaCl, 10% Glycerol, pH 7.5.

### Data



### Background

IMPAD1 protein (IMPA3, gPAPP or IMPase 3) belongs to the inositol monophosphatase family. It is found in Purkinje cells, brain stem, lung and chondrocytes. Mouse IMPAD1 gene encodes a type II transmembrane Golgi-embedded glycoprotein with 356 amino acid residues which generates a 306 amino acid residues mature protein after processing. It is expressed in embryo, and in theory may catalyze myo-inositol monophosphate to myo-inositol. Free myo-inositol is used to generate inositol phospholipid, an essential component of intracellular signaling pathways that mobilize calcium. Mouse IMPAD1 exhibits 91% sequence identity with the human homologue.