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

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

Catalog Number: PKSM041326



Description Species Mouse Mol Mass 34.3 kDa Accession O80V26 Not validated for activity **Bio-activity Properties** > 95 % as determined by reducing SDS-PAGE. Purity Endotoxin < 1.0 EU per µg of the protein as determined by the LAL method. Store at  $< -20^{\circ}$ C, stable for 6 months. Please minimize freeze-thaw cycles. Storage Shipping This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at  $< -20^{\circ}$ C. Formulation Supplied as a 0.2 µm filtered solution of 50mM Tris-HCl, 150mM NaCl, 10% Glycerol, pH 7.5. Reconstitution Not Applicable Data kDa MK R 120 90 60

## Background

40 30

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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.

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