



# Recombinant Protein Technical Manual

## Recombinant Human IMPA2/IMPase 2 Protein (His Tag)

RPES1504

### Product Data:

**Product SKU:** RPES1504

**Size:** 10µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** O14732

### Protein Information:

**Molecular Mass:** 33.5 kDa

**AP Molecular Mass:** 30 kDa

**Tag:** N-6His

**Bio-activity:**

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

**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°C.

**Formulation:** Supplied as a 0.2 µm filtered solution of 20mM Tris, 2mM DTT, pH 8.0.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Inositol Monophosphatase 2; IMP 2; IMPase 2; Inositol(or 4)-Monophosphatase 2; Myo-Inositol Monophosphatase A2; IMPA2; IMP.18P

## Immunogen Information:

**Sequence:** Met 1-Lys288

## Background:

Inositol monophosphatase 2, also known as Inositol(or 4)-monophosphatase 2, Myo-inositol monophosphatase A2 and IMPA2, is an enzyme which belongs to the inositol monophosphatase family. IMPA2 catalyzes the dephosphorylation of inositol monophosphate with cofactor Magnesium and Inhibited by high  $\text{Li}^+$  and restricted  $\text{Mg}^{2+}$  concentrations. IMPA2 plays an important role in phosphatidylinositol signaling. IMPA2 can use the myo-inositol monophosphates, scylloinositol 1,4-diphosphate, glucose-phosphate, beta-glycerophosphate, and 2'-AMP as substrates. IMPA2 is a pharmacological target for lithium  $\text{Li}^+$  action in brain, it is considered to have a role in schizophrenia and bipolar disorder.