



# Recombinant Protein Technical Manual

## Recombinant Human IMP1/IMPA1 Protein (His Tag)

RPES1485

### Product Data:

**Product SKU:** RPES1485

**Size:** 10µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** P29218

### Protein Information:

**Molecular Mass:** 32.3 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 PB, 150mM NaCl, pH 7.25.

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

**Application:**

**Synonyms:** Inositol Monophosphatase 1; IMP 1; IMPase 1; Inositol(or 4)-Monophosphatase 1; Lithium-Sensitive Myo-Inositol Monophosphatase A1; IMPA1; IMPA

## Immunogen Information:

**Sequence:** Met 1-Asp277

## Background:

Inositol Monophosphatase 1 (IMPA1) belongs to the inositol monophosphatase family. IMPA1 is responsible for the provision of inositol required for synthesis of phosphatidylinositol and polyphosphoinositides, IMPA1 can use myo-inositol,3-diphosphate, myo-inositol,4-diphosphate, scyllo-inositol-phosphate, glucose-phosphate, glucose-6-phosphate, fructose-phosphate, beta-glycerophosphate, and 2-AMP as substrates. IMPA1 has been implicated as the pharmacological target for lithium action in brain. IMPA1 shows magnesium-dependent phosphatase activity and is inhibited by therapeutic concentrations of lithium. In addition, IMPA1 plays a important role in intracellular signal transduction.