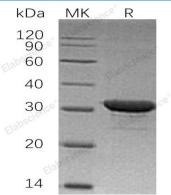
## Recombinant Human IMP1/IMPA1 Protein (His Tag)

## Catalog Number: PKSH032590

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

Description	
Species	Human
Source	E.coli-derived Human IMP1; IMPA1 protein Met 1-Asp277, with an N-terminal His
Calculated MW	32.3 kDa
Observed MW	30 kDa
Accession	P29218
<b>Bio-activity</b>	Not validated for activity
Properties	
Purity	> 95 % as determined by reducing SDS-PAGE.
Concentration	Subject to label value.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Store at $< -20^{\circ}$ 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 $< -20^{\circ}$ C.
Formulation	Supplied as a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.25.
Data	



> 95 % as determined by reducing SDS-PAGE.

## 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 myoinositol-1,3-diphosphate, myo-inositol-1,4-diphosphate, scyllo-inositol-phosphate, glucose-1-phosphate, glucose-6phosphate, fructose-1-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 improtant role in intracellular signal transduction.