

Recombinant Human IMP1/IMPA1 Protein (His Tag)

Catalog No. PKSH032590

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

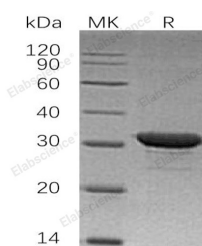
Description

Synonyms	Inositol Monophosphatase 1;IMP 1;IMPase 1;Inositol-1(or 4)-Monophosphatase 1;Lithium-Sensitive Myo-Inositol Monophosphatase A1;IMPA1;IMPA
Species	Human
Expression Host	E.coli
Sequence	Met 1-Asp277
Accession	P29218
Calculated Molecular Weight	32.3 kDa
Observed molecular weight	30 kDa
Tag	N-His
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein 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	Not Applicable

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 myo-inositol-1,3-diphosphate, myo-inositol-1,4-diphosphate, scyllo-inositol-phosphate, glucose-1-phosphate, glucose-6-phosphate, 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

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inhibited by therapeutic concentrations of lithium. In addition, IMPA1 plays a important role in intracellular signal transduction.