

IMPA1 抗原（重组蛋白）

中文名称：IMPA1 抗原（重组蛋白）

英文名称：IMPA1 Antigen (Recombinant Protein)

别名：inositol monophosphatase 1; IMP; IMPA

储存：冷冻（-20℃）

相关类别：抗原

概述

Fusion protein corresponding to a region derived from 1-215AA amino acids of human IMPA1

技术规格

Full name:	inositol monophosphatase 1
Synonyms:	IMP; IMPA
Swissprot:	P29218
Gene Accession:	BC009565
Purity:	>85%, as determined by Coomassie blue stained SDS-PAGE
Expression system:	Escherichia coli
Tags:	His tag C-Terminus, GST tag N-Terminus
Background:	This gene encodes an enzyme that dephosphorylates myo-inositol monophosphate to generate free myo-inositol, a precursor of phosphatidylinositol, and is therefore an important modulator of intracellular signal transduction via the production of the second messengers myoinositol 1,4,5-trisphosphate and diacylglycerol. This enzyme can also 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. This enzyme shows magnesium-dependent phosphatase activity and is inhibited by therapeutic concentrations of lithium. Inhibition of inositol monophosphate hydrolysis and subsequent depletion of inositol for phosphatidylinositol synthesis may explain the anti-manic and anti-depressive effects of lithium administered to treat bipolar disorder. Alternative splicing results in multiple transcript variants encoding distinct isoforms. A pseudogene of this gene is also present on chromosome 8q21.13.