

## 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 mo<br>nophosphate to generate free myo-inositol, a precursor of phosphatid<br>ylinositol, and is therefore an important modulator of intracellular sig<br>nal transduction via the production of the second messengers myoin<br>ositol 1,4,5-trisphosphate and diacylglycerol. This enzyme can also use<br>myo-inositol-1,3-diphosphate, myo-inositol-1,4-diphosphate, scyllo-inos<br>itol-phosphate, glucose-1-phosphate, glucose-6-phosphate, fructose-1-<br>phosphate, beta-glycerophosphate, and 2'-AMP as substrates. This enzyme<br>shows magnesium-dependent phosphatase activity and is inhibite<br>d by therapeutic concentrations of lithium. Inhibition of inositol mono |



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phosphate hydroylosis and subsequent depletion of inositol for phosp hatidylinositol synthesis may explain the anti-manic and anti-depressiv e effects of lithium administered to treat bipolar disorder. Alternative splicing results in multiple transcript variants encoding distinct isofor ms. A pseudogene of this gene is also present on chromosome 8q21. 13.