

Product datasheet for **TA370110**

IMPA1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 500-2000 WB positive control: Human cerebrum tissue lysate IHC: 25-100 Positive control: Human liver cancer Predicted cell location: Cytoplasm and Nucleus
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Fusion protein of human IMPA1
Formulation:	pH7.4 PBS, 0.05% NaN ₃ , 40% Glycerol
Concentration:	lot specific
Purification:	Antigen affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C.
Stability:	1 year
Predicted Protein Size:	30 kDa
Gene Name:	inositol monophosphatase 1
Database Link:	Entrez Gene 3612 Human P29218



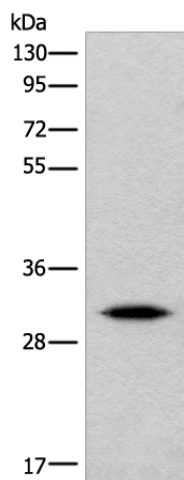
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Background:

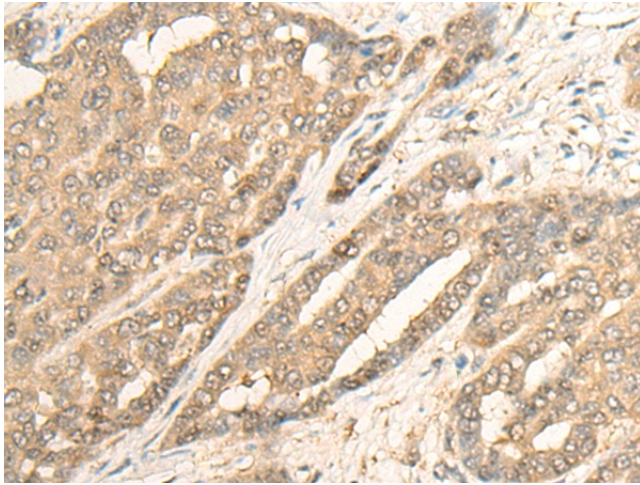
This gene encodes an enzyme that dephosphorylates myo-inositol monophosphate to generate free myo-inositol, a precursor of phosphatidylinositol, and is therefore an important modulator of intracellular signal transduction via the production of the second messengers myoinositol 1,4,5-trisphosphate and 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.

Synonyms:

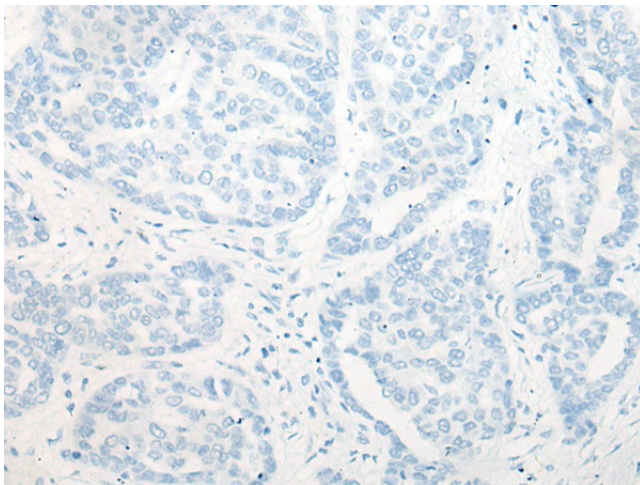
IMP; IMPA; IMPase

Product images:

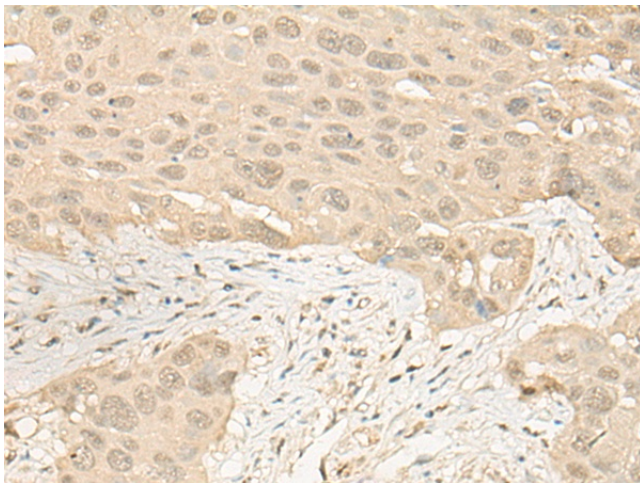
Gel: 8%SDS-PAGE
Lysate: 40 µg
Lane: Human cerebrum tissue lysate
Primary antibody: TA370110 (IMPA1 Antibody) at dilution 1/360
Secondary antibody: Goat anti rabbit IgG at 1/8000 dilution
Exposure time: 5 seconds



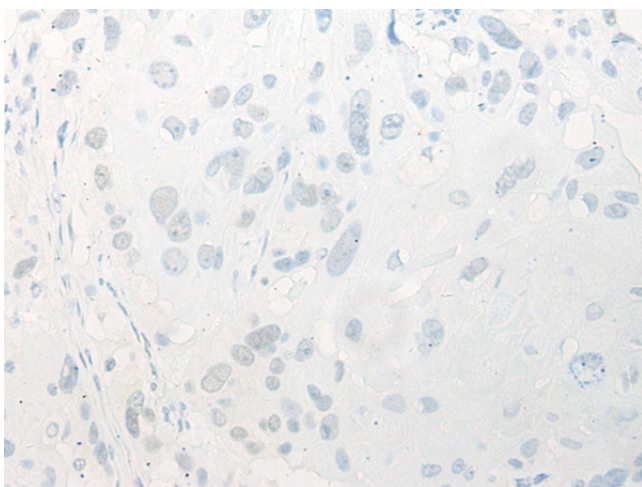
Immunohistochemistry of paraffin-embedded Human liver cancer tissue using TA370110 (IMPA1 Antibody) at dilution 1/25 (Original magnification: $\times 200$)



Immunohistochemistry of paraffin-embedded Human liver cancer tissue using TA370110 (IMPA1 Antibody) at dilution 1/25, treated with fusion protein. (Original magnification: $\times 200$)



Immunohistochemistry of paraffin-embedded Human esophagus cancer tissue using TA370110 (IMPA1 Antibody) at dilution 1/25 (Original magnification: $\times 200$)



Immunohistochemistry of paraffin-embedded Human esophagus cancer tissue using TA370110 (IMPA1 Antibody) at dilution 1/25, treated with fusion protein. (Original magnification: ×200)