IMPA1 Rabbit pAb

Catalog NO.: A6381

Basic Information

Observed MW
30kDa

Calculated MW
30kDa

Category
Polyclonal Antibodies

Applications
WB, IHC-P, IF/ICC, ELISA

Cross-Reactivity
Human, Mouse, Rat

Conjugation
Unconjugated

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 hydroylosis 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.

Recommended Dilutions

WB	1:500 - 1:2000
IHC-P	1:50 - 1:200
IF/ICC	1:10 - 1:100

ELISA
Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID
3612

Swiss Prot
P29218

Immunogen
Recombinant protein (or fragment).This information is considered to be commercially sensitive.

Synonyms
IMP; IMPA; MRT59; IMPA1

Contact

Product Information

order@abclonal.com
service@abclonal.com
www.abclonal.com

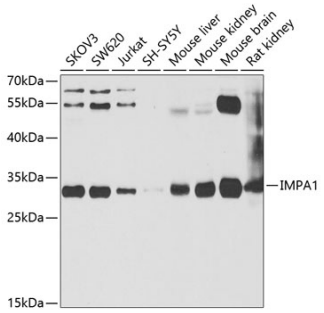
Source
Rabbit

Isotype
IgG

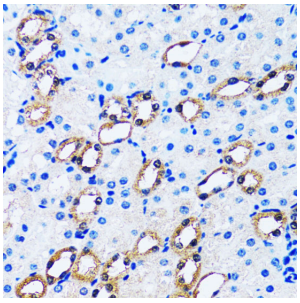
Purification
Affinity purification

Storage
Store at -20°C. Avoid freeze / thaw cycles.
Buffer: PBS containing 50% glycerol, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

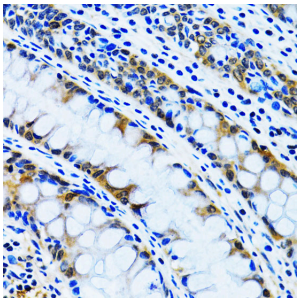
Validation Data



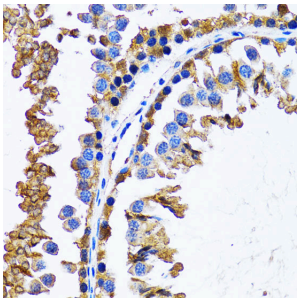
Western blot analysis of various lysates using IMPA1 Rabbit pAb (A6381) at 1:1000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 90s.



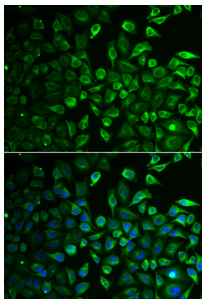
Immunohistochemistry analysis of paraffin-embedded Rat kidney using IMPA1 Rabbit pAb (A6381) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human colon using IMPA1 Rabbit pAb (A6381) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse testis using IMPA1 Rabbit pAb (A6381) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.



Immunofluorescence analysis of A549 cells using IMPA1 Rabbit pAb (A6381). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.