

# IMPA1 Polyclonal Antibody

Catalog No: tcba10117



## Available Sizes

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**Size:** 50ul

**Size:** 100ul

**Size:** 200ul



## Specifications

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**Application:**

WB,IHC,IF

**Research Area:**

Neuroscience,Cardiovascular,Cell Biology,Metabolism,Lipid Metabolism pathway,

**Species Reactivity:**

Human,Mouse,Rat

**Host Species:**

Rabbit

**Isotype:**

IgG

**Form:**

Liquid

**Storage Buffer:**

Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

**Recommended Dilution:**

WB 1:500 - 1:2000

IHC 1:50 - 1:200

IF 1:10 - 1:100

**Storage Instruction:**

Store at -20°C. Avoid freeze / thaw cycles.

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**Alternative Names:**

IMP;IMPA;MRT59

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**SwissProt:**

P29218

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**Gene ID:**

3612 (human);

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**Calculated Molecular Weight:**

21kDa/30kDa/36kDa

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**Purification:**

Affinity purification

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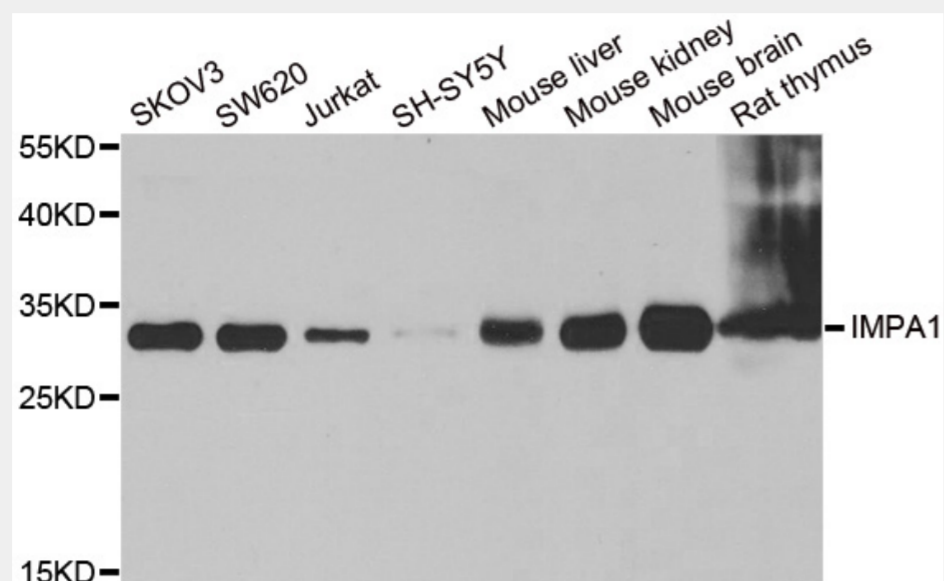
**Cellular Location:**

Cytoplasm,

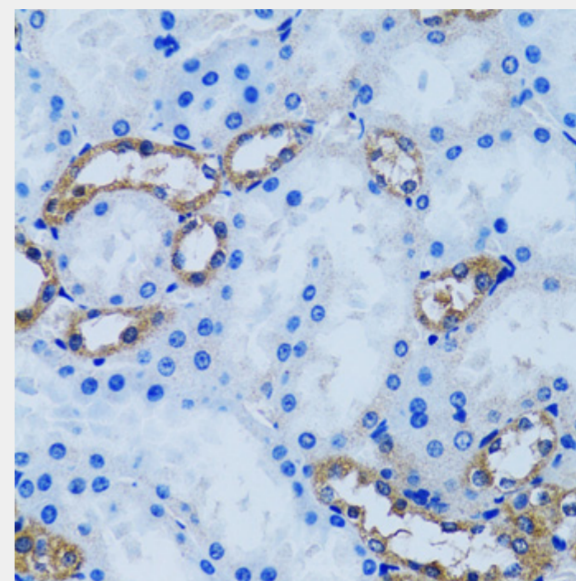
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**Product Description**

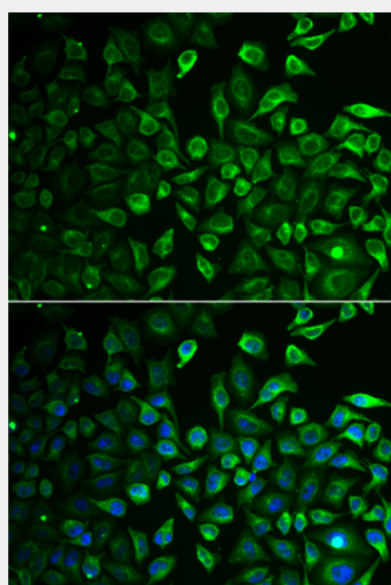
This gene encodes an enzyme that dephosphorylates myo-inositol monophosphate to generate free myo-inositol, a precursor of phosphatidylinositol, and is therefore an important modulator of intracellular signal transduction via the production of the second messengers myo-inositol 1,4,5-trisphosphate and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



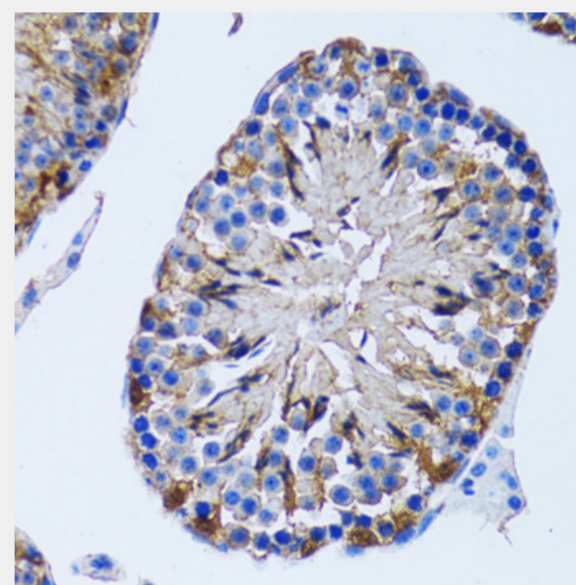
Western blot analysis of extracts of various cell lines, using IMPA1 antibody at 1:1000 dilution.  
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution.  
Lysates/proteins: 25ug per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection: ECL Basic Kit.  
Exposure time: 90s.



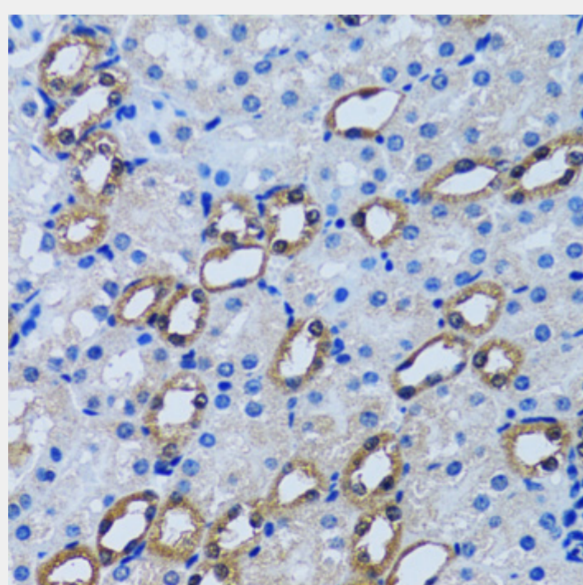
Immunohistochemistry of paraffin-embedded mouse kidney using IMPA1 antibody at dilution of 1:100 (40x lens).



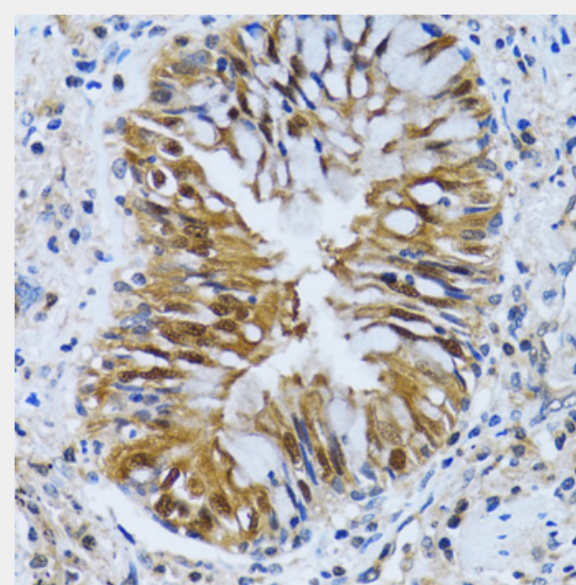
Immunofluorescence analysis of A549 cells using IMPA1 antibody. Blue: DAPI for nuclear staining.



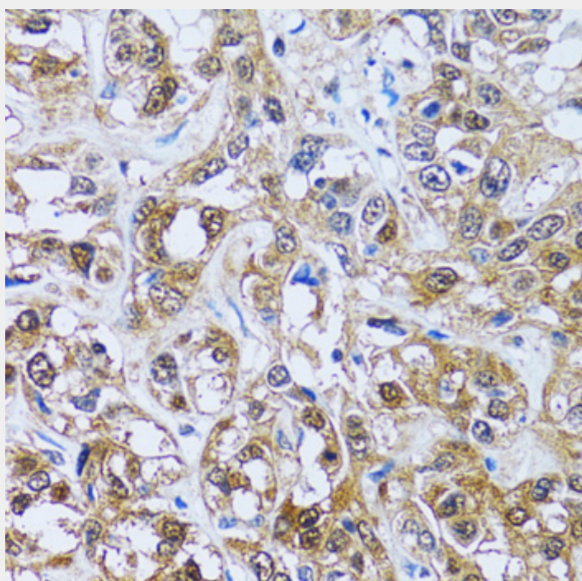
Immunohistochemistry of paraffin-embedded rat testis using IMPA1 antibody at dilution of 1:100 (40x lens).



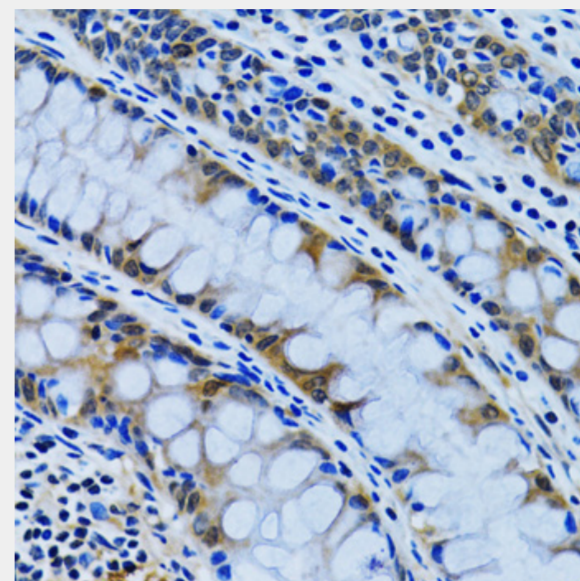
Immunohistochemistry of paraffin-embedded rat kidney using IMPA1 antibody at dilution of 1:100 (40x lens).



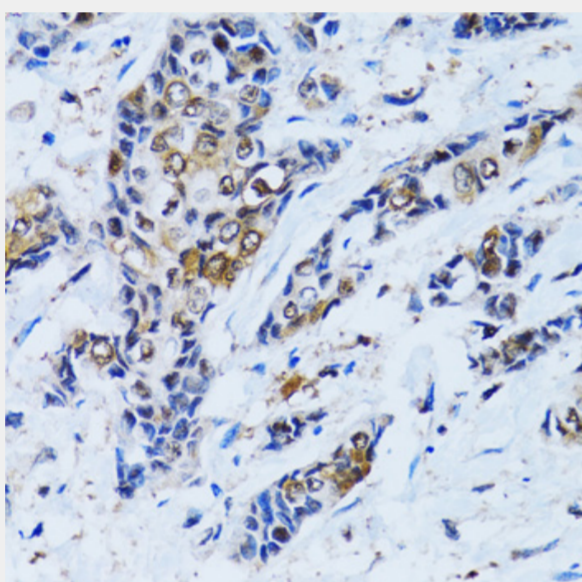
Immunohistochemistry of paraffin-embedded human lung cancer using IMPA1 antibody at dilution of 1:100 (40x lens).



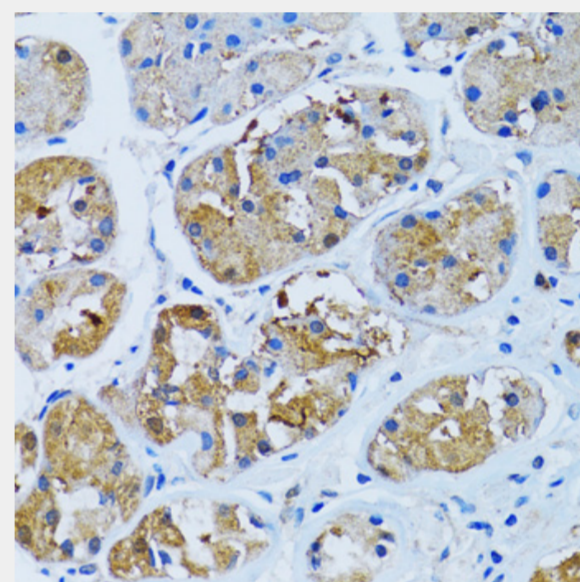
Immunohistochemistry of paraffin-embedded human liver cancer using IMPA1 antibody at dilution of 1:100 (40x lens).



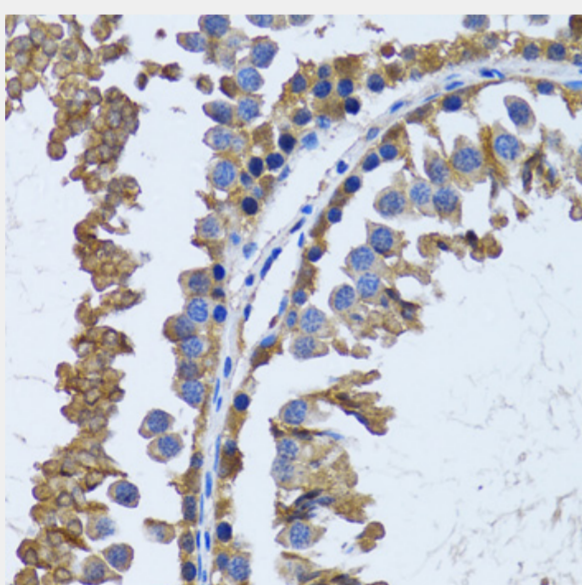
Immunohistochemistry of paraffin-embedded human colon using IMPA1 antibody at dilution of 1:100 (40x lens).



Immunohistochemistry of paraffin-embedded human breast cancer using IMPA1 antibody at dilution of 1:100 (40x lens).



Immunohistochemistry of paraffin-embedded human stomach using IMPA1 antibody at dilution of 1:100 (40x lens).



Immunohistochemistry of paraffin-embedded mouse testis using IMPA1 antibody at dilution of 1:100 (40x lens).

All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!