

# Anti IMPA1 Antibody

Catalog No: tcsa19723



## Available Sizes

**Size:** 100μl



## Specifications

**Application:**

WB, IHC, IF

**Species Reactivity:**

Human, Mouse, Rat

**Host Species:**

Rabbit

**Immunogen / Amino acids:**

Recombinant protein of human IMPA1

**Conjugation:**

Unconjugated

**Clonality:**

Polyclonal

**Isotype:**

IgG

**Form:**

Liquid

**Storage 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 -20C. Avoid freeze / thaw cycles.

### Alternative Names:

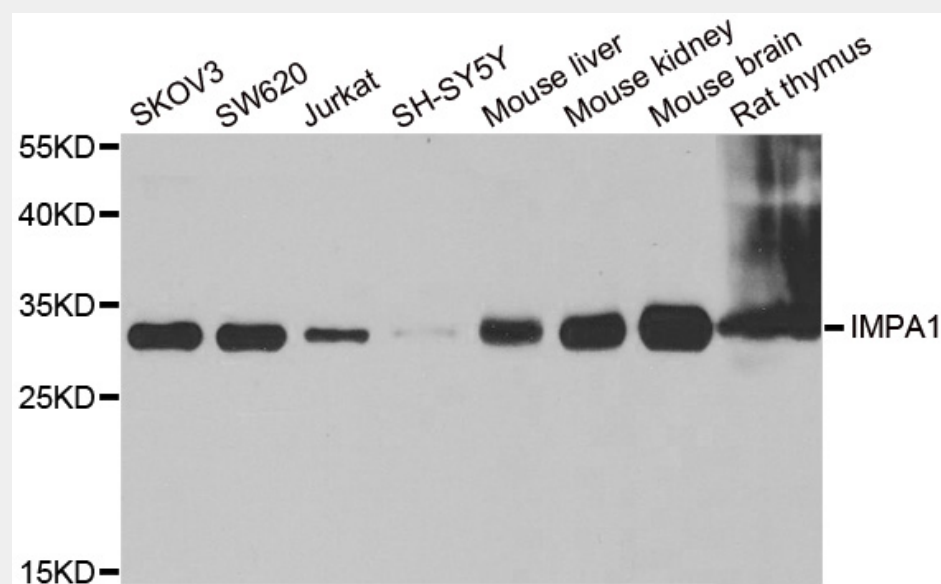
IMPA1 antibody; Inositol monophosphatase 1 antibody; IMP 1 antibody; IMPase 1 antibody; IMPA1 antibody; IMPA antibody

### SwissProt:

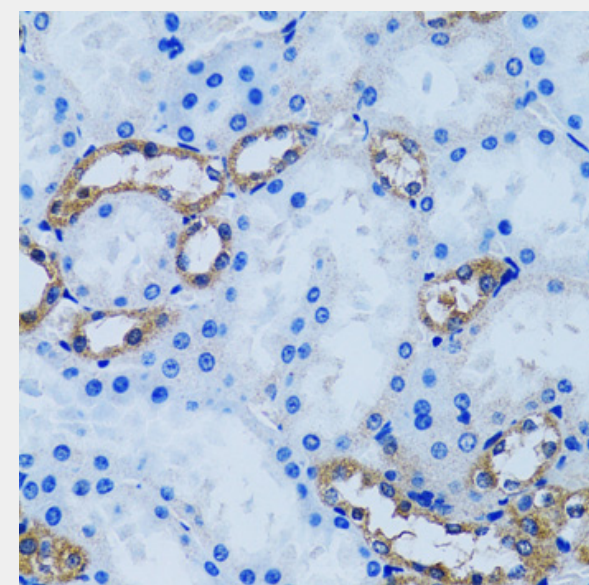
P29218

## 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 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.

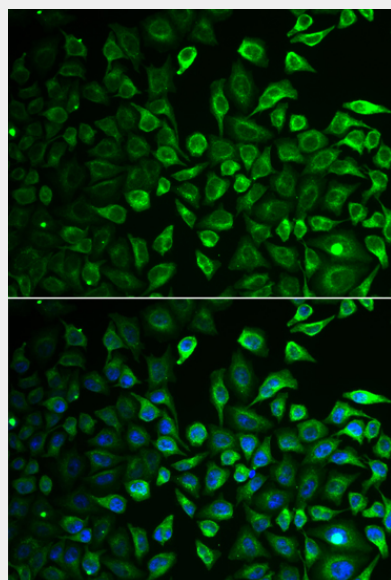


Western blot analysis of extracts of various cell lines, using IMPA1 antibody at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit. Exposure time: 90s.

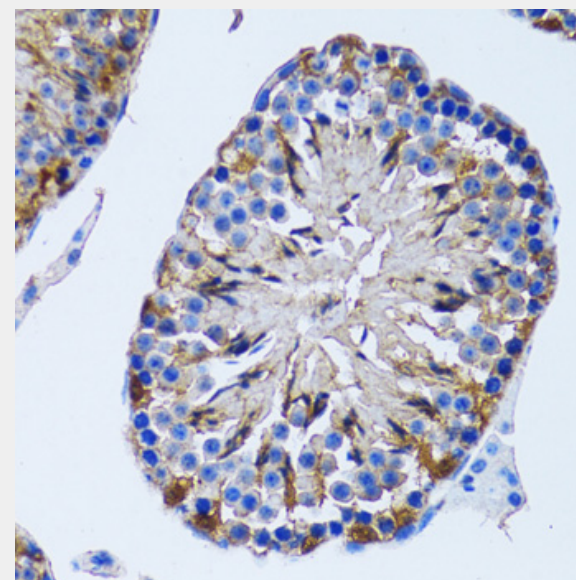


Immunohistochemistry of paraffin-embedded mouse kidney using IMPA1 antibody at dilution of 1:100 (40x lens).

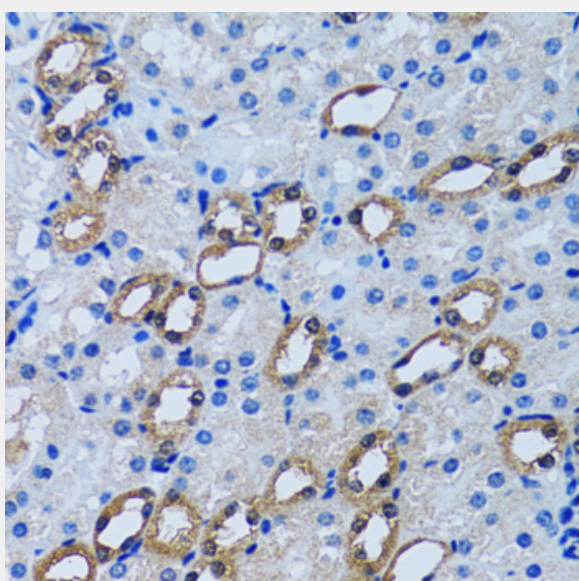




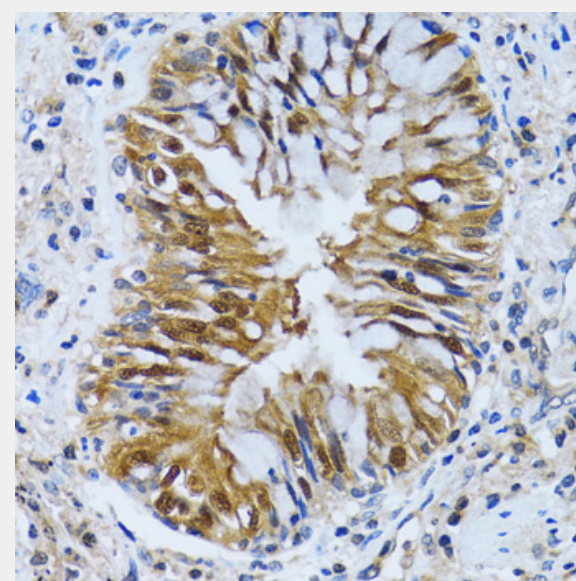
Immunofluorescence analysis of A549 cells using IMPA1 antibody. Blue: DAPI for nuclear staining.



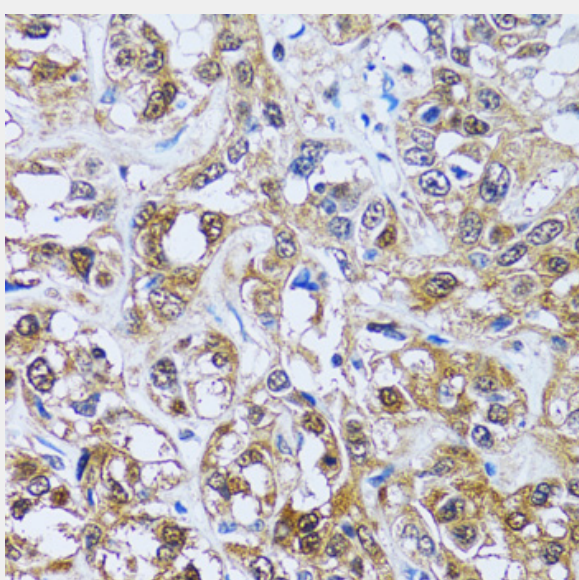
Immunohistochemistry of paraffin-embedded rat testis using IMPA1 antibody at dilution of 1:100 (40x lens).



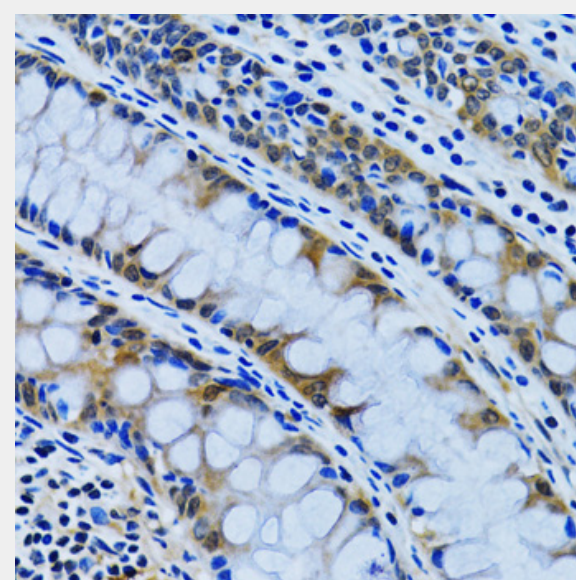
Immunohistochemistry of paraffin-embedded rat kidney using IMPA1 antibody at dilution of 1:100 (40x lens).



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

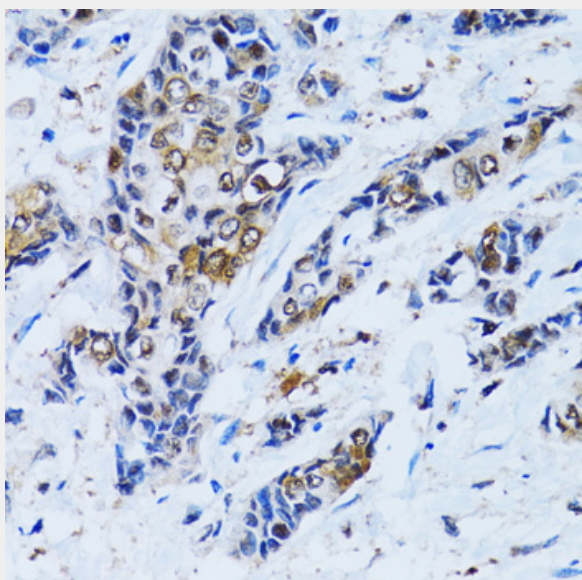


Immunohistochemistry of paraffin-embedded human liver cancer using IMPA1 antibody at dilution of 1:100 (40x lens).

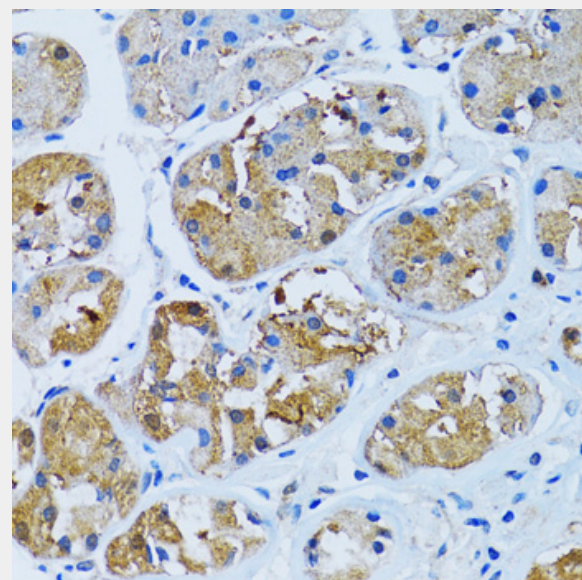


Immunohistochemistry of paraffin-embedded human colon using IMPA1 antibody at dilution of 1:100 (40x lens).

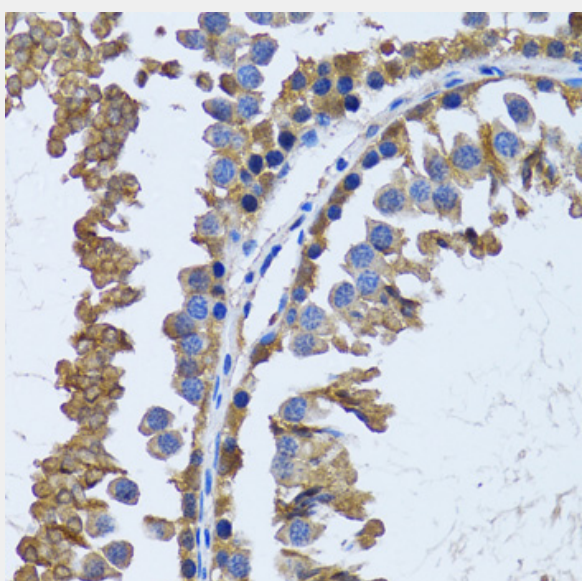




Immunohistochemistry of paraffin-embedded human breast cancer using IMP1 antibody at dilution of 1:100 (40x lens).



Immunohistochemistry of paraffin-embedded human stomach using IMP1 antibody at dilution of 1:100 (40x lens).



Immunohistochemistry of paraffin-embedded mouse testis using IMP1 antibody at dilution of 1:100 (40x lens).

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