

**IMPDH1 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP13549b****Specification**

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**IMPDH1 Antibody (C-term) - Product Information**

Application	IF, WB, IHC-P,E
Primary Accession	<a href="#">P20839</a>
Other Accession	<a href="#">D3ZLZ7</a> , <a href="#">P50096</a> , <a href="#">A0JNA3</a> , <a href="#">NP_001136045.1</a> , <a href="#">NP_001096075.1</a>
Reactivity	Human
Predicted	Bovine, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	55406
Antigen Region	487-514

**IMPDH1 Antibody (C-term) - Additional Information****Gene ID** 3614**Other Names**

Inosine-5'-monophosphate dehydrogenase 1 {ECO:0000255|HAMAP-Rule:MF\_03156}, IMP dehydrogenase 1 {ECO:0000255|HAMAP-Rule:MF\_03156}, IMPD 1 {ECO:0000255|HAMAP-Rule:MF\_03156}, IMPDH 1 {ECO:0000255|HAMAP-Rule:MF\_03156}, I11205 {ECO:0000255|HAMAP-Rule:MF\_03156}, IMPDH-I, IMPDH1 {ECO:0000255|HAMAP-Rule:MF\_03156}, IMPD1

**Target/Specificity**

This IMPDH1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 487-514 amino acids from the C-terminal region of human IMPDH1.

**Dilution**

IF~~1:10~50  
WB~~1:1000  
IHC-P~~1:10~50

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

IMPDH1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## IMPDH1 Antibody (C-term) - Protein Information

**Name** IMPDH1 {ECO:0000255|HAMAP-Rule:MF\_03156}

**Synonyms** IMPD1

**Function** Catalyzes the conversion of inosine 5'-phosphate (IMP) to xanthosine 5'-phosphate (XMP), the first committed and rate-limiting step in the de novo synthesis of guanine nucleotides, and therefore plays an important role in the regulation of cell growth. Could also have a single-stranded nucleic acid-binding activity and could play a role in RNA and/or DNA metabolism. It may also have a role in the development of malignancy and the growth progression of some tumors.

### Cellular Location

Cytoplasm {ECO:0000255|HAMAP-Rule:MF\_03156, ECO:0000269|PubMed:14766016}. Nucleus {ECO:0000255|HAMAP-Rule:MF\_03156, ECO:0000269|PubMed:14766016}

### Tissue Location

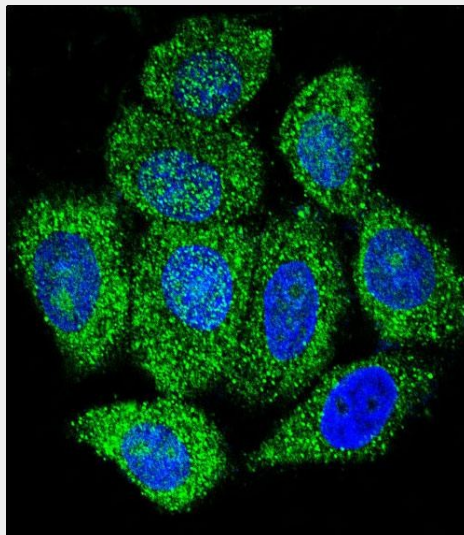
IMP type I is the main species in normal leukocytes and type II predominates over type I in the tumor

## IMPDH1 Antibody (C-term) - Protocols

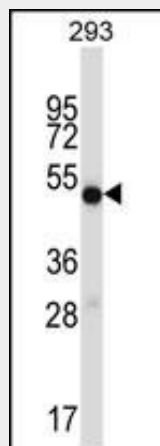
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

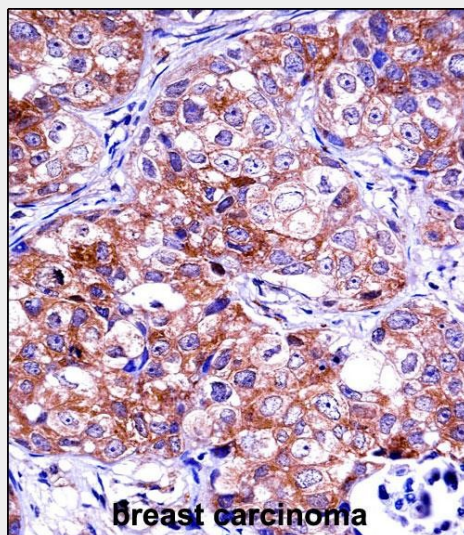
## IMPDH1 Antibody (C-term) - Images



Confocal immunofluorescent analysis of IMPDH1 Antibody (C-term) (Cat#AP13549b) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).



IMPDH1 Antibody (C-term) (Cat. #AP13549b) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the IMPDH1 antibody detected the IMPDH1 protein (arrow).



IMPDH1 Antibody (C-term) (AP13549b) immunohistochemistry analysis in formalin fixed and paraffin embedded human breast carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of IMPDH1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

### **IMPDH1 Antibody (C-term) - Background**

The protein encoded by this gene acts as a homotetramer to regulate cell growth. The encoded protein is an enzyme that catalyzes the synthesis of xanthine monophosphate (XMP) from inosine-5'-monophosphate (IMP). This is the rate-limiting step in the de novo synthesis of guanine nucleotides. Defects in this gene are a cause of retinitis pigmentosa type 10 (RP10). Several transcript variants encoding different isoforms have been found for this gene.

### **IMPDH1 Antibody (C-term) - References**

Ohmann, E.L., et al. *Pediatr Transplant* 14(7):891-895(2010) Gensburger, O., et al. *Pharmacogenet. Genomics* 20(9):537-543(2010) Kagaya, H., et al. *Basic Clin. Pharmacol. Toxicol.* 107(2):631-636(2010) Ohmann, E.L., et al. *J. Heart Lung Transplant.* 29(5):509-516(2010) Shumei,

L., et al. Adv. Exp. Med. Biol. 664, 293-297 (2010) :