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IMPDH2 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7390c

Specification

IMPDH2 Antibody (Center) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	P12268
Other Accession	E9PU28, P24547, B0UXP9, P12269, Q3SWY3, D3ZLZ7, P50096, P20839, A0JNA3
Reactivity	**Human**
Predicted	**Bovine, Mouse, Rat, Hamster, Zebrafish**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**55805**
Antigen Region	**180-210**

IMPDH2 Antibody (Center) - Additional Information

Gene ID 3615

Other Names
Inosine-5'-monophosphate dehydrogenase 2 {ECO:0000255|HAMAP-Rule:MF_03156}, IMP dehydrogenase 2 {ECO:0000255|HAMAP-Rule:MF_03156}, IMPD 2 {ECO:0000255|HAMAP-Rule:MF_03156}, IMPDH 2 {ECO:0000255|HAMAP-Rule:MF_03156}, 111205 {ECO:0000255|HAMAP-Rule:MF_03156}, IMPDH-II, IMPDH2 {ECO:0000255|HAMAP-Rule:MF_03156}, IMPD2

Target/Specificity
This IMPDH2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 180-210 amino acids from the Central region of human IMPDH2.

Dilution
WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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
IMPDH2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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IMPDH2 Antibody (Center) - Protein Information

Name IMPDH2 (HGNC:6053)

Synonyms IMPD2

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 (PubMed:7763314, PubMed:7903306). Could also have a single-stranded nucleic acid-binding activity and could play a role in RNA and/or DNA metabolism (PubMed:14766016). It may also have a role in the development of malignancy and the growth progression of some tumors.

Cellular Location
Cytoplasm. Nucleus. Cytoplasm, cytosol. Note=Can form fiber-like subcellular structures termed 'cytoophidia' in response to intracellular guanine- nucleotide depletion.

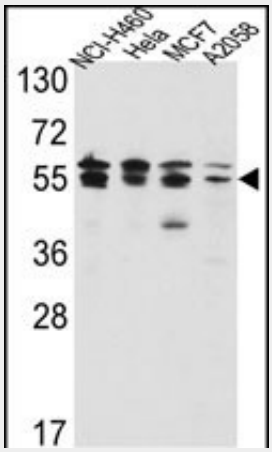
Tissue Location
IMPDH1 is the main species in normal leukocytes and IMPDH2 predominates over IMPDH1 in the tumor

IMPDH2 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IMPDH2 Antibody (Center) - Images



Western blot analysis of IMPDH2 Antibody (Center) (Cat. #AP7390c) in NCI-H460,Hela,MCF7,A2058 cell line lysates(35ug/lane). IMPDH2 (arrow) was detected using the

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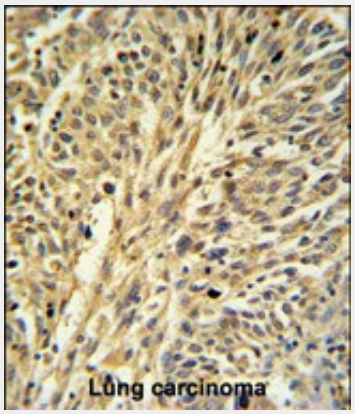
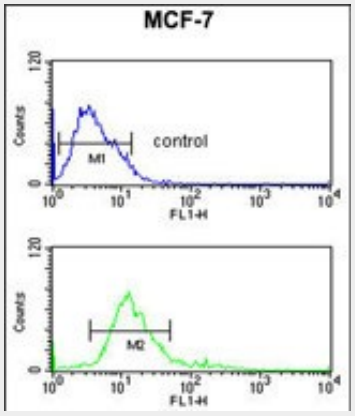
purified Pab.



IMPDH2 Antibody (Center) (Cat. #AP7390c) IHC analysis in formalin fixed and paraffin embedded human Lung carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the IMPDH2 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



IMPDH2 Antibody (Center) (Cat. #AP7390c) flow cytometric analysis of MCF-7 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

IMPDH2 Antibody (Center) - Background

IMPDH2 is the rate-limiting enzyme in the de novo guanine nucleotide biosynthesis. It is thus involved in maintaining cellular guanine deoxy- and ribonucleotide pools needed for DNA and RNA synthesis. The protein catalyzes the NAD-dependent oxidation of inosine-5'-monophosphate into xanthine-5'-monophosphate, which is then converted into guanosine-5'-monophosphate. Its gene is up-regulated in some neoplasms, suggesting it may play a role in malignant transformation.

IMPDH2 Antibody (Center) - References

Sombogaard,F., Pharmacogenet. Genomics 19 (8), 626-634 (2009)
Mohamed,M.F., Genet. Test. 12 (4), 513-516 (2008)