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IMPDH1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14691a

Product Information

Application	WB, IHC-P, E
Primary Accession	P20839
Other Accession	D3ZLZ7, P50096, Q6GMG5, A0JNA3, NP_001136045.1, NP_899066.1, NP_001096075.1
Reactivity	Human
Predicted	Bovine, Zebrafish, Mouse, Rat, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34615
Calculated MW	55406
Antigen Region	84-113

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}, 111205 {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 84-113 amino acids from the N-terminal region of human IMPDH1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
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 (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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

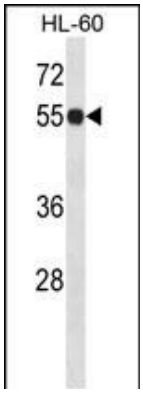
Background

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.

References

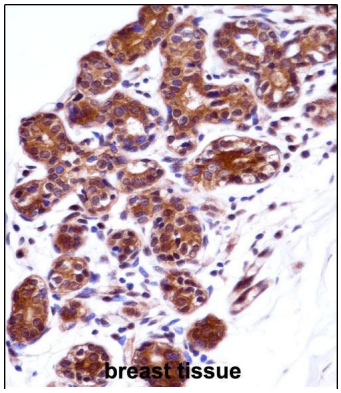
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Images



IMPDH1 Antibody (N-term) (Cat. #AP14691a) western blot analysis in HL-60 cell line lysates (35ug/lane).This demonstrates the IMPDH1 antibody detected the IMPDH1 protein (arrow).

IMPDH1 Antibody (N-term) (AP14691a)immunohistochemistry analysis in formalin fixed and paraffin embedded human breast tissue followed by peroxidase conjugation of the secondary



antibody and DAB staining.This data demonstrates the use of IMPDH1 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.