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ITPA Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5332

Product Information

Application	WB
Primary Accession	Q9BY32
Other Accession	Q2NLA8, D3ZW55, Q9D892, F1NLH9, Q2KIC5
Reactivity	Human, Mouse, Rat
Predicted	Bovine, Chicken, Xenopus
Host	Rabbit
Clonality	Polyclonal
Calculated MW	21446
Isotype	Rabbit IgG
Antigen Source	HUMAN

Additional Information

Gene ID	3704
Antigen Region	24-51
Other Names	ITPA; C20orf37; Inosine triphosphate pyrophosphatase; Non-canonical purine NTP pyrophosphatase; Non-standard purine NTP pyrophosphatase; Nucleoside-triphosphate diphosphatase; Nucleoside-triphosphate pyrophosphatase; Putative oncogene protein hlc14-06-p
Dilution	WB~~1:1000
Target/Specificity	This ITPA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 24-51 amino acids from the N-terminal region of human ITPA.
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	ITPA Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ITPA {ECO:0000255|HAMAP-Rule:MF_03148}

Synonyms	C20orf37
Function	Pyrophosphatase that hydrolyzes the non-canonical purine nucleotides inosine triphosphate (ITP), deoxyinosine triphosphate (dITP) as well as 2'-deoxy-N-6-hydroxylaminopurine triphosphate (dHAPTP) and xanthosine 5'-triphosphate (XTP) to their respective monophosphate derivatives. The enzyme does not distinguish between the deoxy- and ribose forms. Probably excludes non-canonical purines from RNA and DNA precursor pools, thus preventing their incorporation into RNA and DNA and avoiding chromosomal lesions.
Cellular Location	Cytoplasm {ECO:0000255|HAMAP-Rule:MF_03148, ECO:0000269|PubMed:11278832}
Tissue Location	Ubiquitous. Highly expressed in heart, liver, sex glands, thyroid and adrenal gland

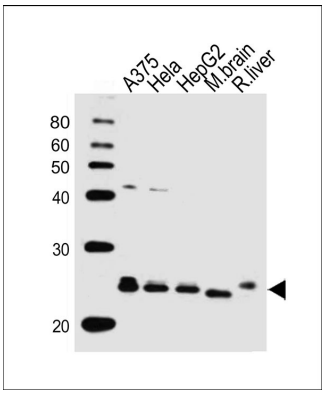
Background

ITPA hydrolyzes inosine triphosphate and deoxyinosine triphosphate to the monophosphate nucleotide and diphosphate. The encoded protein, which is a member of the HAM1 NTPase protein family, is found in the cytoplasm and acts as a homodimer. Defects in the encoded protein can result in inosine triphosphate pyrophosphorylase deficiency. Two transcript variants encoding two different isoforms have been found for this gene.

References

Fellay, J., et al. Nature 464(7287):405-408(2010)
Herting, G., et al. Biochim. Biophys. Acta 1802(2):269-274(2010)
Kudo, M., et al. Drug Metab. Pharmacokinet. 24(6):557-564(2009)

Images



Western blot analysis of lysates from A375,Hela,HepG2 cell line,mouse brain,rat liver tissue lysate(from left to right), using ITPA Antibody (N-term)(Cat. #AW5332). AW5332 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.Lysates at 20ug per lane.