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ITPA Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18963b

Product Information

Application	WB, E
Primary Accession	Q9BY32
Other Accession	NP_258412.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB39180
Calculated MW	21446
Antigen Region	149-178

Additional Information

Gene ID	3704
Other Names	Inosine triphosphate pyrophosphatase {ECO:0000255|HAMAP-Rule:MF_03148}, ITPase {ECO:0000255|HAMAP-Rule:MF_03148}, Inosine triphosphatase {ECO:0000255|HAMAP-Rule:MF_03148}, 36119 {ECO:0000255|HAMAP-Rule:MF_03148}, Non-canonical purine NTP pyrophosphatase {ECO:0000255|HAMAP-Rule:MF_03148}, Non-standard purine NTP pyrophosphatase {ECO:0000255|HAMAP-Rule:MF_03148}, Nucleoside-triphosphate diphosphatase {ECO:0000255|HAMAP-Rule:MF_03148}, Nucleoside-triphosphate pyrophosphatase {ECO:0000255|HAMAP-Rule:MF_03148}, NTPase {ECO:0000255|HAMAP-Rule:MF_03148}, Putative oncogene protein hlc14-06-p, ITPA {ECO:0000255|HAMAP-Rule:MF_03148}, C20orf37
Target/Specificity	This ITPA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 149-178 amino acids from the C-terminal region of human ITPA.
Dilution	WB~~1:1000 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	ITPA Antibody (C-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

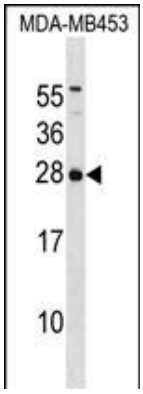
Background

The protein encoded by this gene 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. Also, at least two other transcript variants have been identified which are probably regulatory rather than protein-coding.

References

Kim, J.H., et al. J. Clin. Gastroenterol. 44 (10), E242-E248 (2010) :
Ochi, H., et al. Gastroenterology 139(4):1190-1197(2010)
Thompson, A.J., et al. Gastroenterology 139(4):1181-1189(2010)
Ban, H., et al. J. Gastroenterol. 45(10):1014-1021(2010)
Fellay, J., et al. Nature 464(7287):405-408(2010)

Images



ITPA Antibody (C-term) (Cat. #AP18963b) western blot analysis in MDA-MB453 cell line lysates (35ug/lane).This demonstrates the ITPA antibody detected the ITPA protein (arrow).