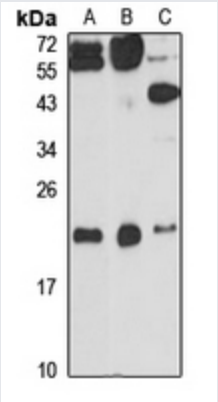
ITPase Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	ITPase, Polyclonal Antibody
Full Product Name	Anti-ITPase Antibody
Product Gene Name	anti-ITPase antibody
Product Synonym Gene Name	ITPA
Product Synonym Names	C20orf37; Inosine triphosphate pyrophosphatase; ITPase; Inosine triphosphatase; Non-canonical purine NTP pyrophosphatase; Non-standard purine NTP pyrophosphatase; Nucleoside-triphosphate diphosphatase; Nucleoside-triphosphate pyrophosphatase; NTPase; Putative oncogene protein hlc14-06-p
Clonality	Polyclonal
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Form/Format	Liquid in 0.42% Potassium Phosphate, 0.87% Sodium Chloride, pH 7.3, 30% Glycerol, and 0.01% Sodium Azide.
Purity/Purification	Purified by Immunogen Affinity Chromatography
Specificity	Recognizes endogenous levels of ITPase protein.
Preparation and Storage	Upon delivery aliquot and store at -20 degree C for one year. Avoid freeze/thaw cycles.
Molecular Weight	21,446 Da
OMIM	147520
3D Structure	ModBase 3D Structure for Q9BY32
Immunogen	Recombinant fusion protein of human ITPase. The exact sequence is proprietary.
Applications Tested/Suitable for anti-ITPase antibody	Western Blot (WB)
Application Notes for anti-ITPase antibody	WB: 1:500-1:2000
Related Product Information for anti-ITPase antibody	MBS8307017 is an antibody targeting ITPase. Reactive in Human, Mouse, Rat. Host: Rabbit. Rabbit polyclonal antibody to ITPase
Other Notes	Small volumes of anti-ITPase antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



Western Blot (WB) of anti-ITPase antibody
Western blot analysis of ITPase expression in HT29 (A), mouse heart (B), rat liver (C) whole cell lysates.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for ITPase. It may not necessarily be applicable to this product.

NCBI GI #	30173120
NCBI GeneID	3704
NCBI Accession #	Q9BY32.2
UniProt Primary Accession #	Q9BY32
UniProt Secondary Accession #	Q9D892; D3ZW55
UniProt Related Accession #	Q9BY32
NCBI Official Full Name	Inosine triphosphate pyrophosphatase
NCBI Official Synonym Full Names	inosine triphosphatase (nucleoside triphosphate pyrophosphatase)
NCBI Official Symbol	ITPA
NCBI Official Synonym Symbols	My049; C20orf37; dJ794I6.3; HLC14-06-P
UniProt Protein Name	Inosine triphosphate pyrophosphatase
UniProt Synonym Protein Names	Non-canonical purine NTP pyrophosphatase; Non-standard purine NTP pyrophosphatase; Nucleoside-triphosphate diphosphatase; Nucleoside-triphosphate pyrophosphatase; NTPase; Putative oncogene protein hlc14-06-p
Protein Family	Inosine triphosphate pyrophosphatase
UniProt Gene Name	ITPA
UniProt Synonym Gene Names	C20orf37; ITPase; Inosine triphosphatase; NTPase
UniProt Entry Name	ITPA_HUMAN
NCBI Protein Information	inosine triphosphate pyrophosphatase; ITPase; NTPase; inosine triphosphatase-A; putative oncogene protein HLC14-06-P; nucleoside-triphosphate diphosphatase; non-standard purine NTP pyrophosphatase; non-canonical purine NTP pyrophosphatase; inosine triphos
NCBI Summary for ITPase	This gene encodes an inosine triphosphate pyrophosphohydrolase. The encoded protein hydrolyzes inosine triphosphate and deoxyinosine triphosphate to the monophosphate nucleotide and diphosphate. This 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 which causes an accumulation of ITP in red blood cells. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Jun 2012]

UniProt Comments for ITPase	ITPA: Pyrophosphatase that hydrolyzes the non-canonical purine nucleotides inosine triphosphate (ITP), deoxyinosine triphosphate (dITP) as well as 2'-deoxy-N-6-hydroxylaminopurine triposphate (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. Defects in ITPA are the cause of inosine triphosphate pyrophosphohydrolase deficiency (ITPAD). It is a common inherited trait characterized by the abnormal accumulation of inosine triphosphate (ITP) in erythrocytes and also leukocytes and fibroblasts. The pathological consequences of ITPA deficiency, if any, are unknown. However, it might have pharmacogenomic implications and be related to increased drug toxicity of purine analog drugs. Three different human populations have been reported with respect to their ITPase activity: high, mean (25% of high) and low activity. The variant Thr-32 is associated with complete loss of enzyme activity, may be by altering the local secondary structure of the protein. Heterozygotes for this polymorphism have 22.5% of the control activity: this is consistent with a dimeric structure of the enzyme. Belongs to the HAM1 NTPase family. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Nucleotide Metabolism - pyrimidine; Xenobiotic Metabolism - drug metabolism - other enzymes; Nucleotide Metabolism - purine; EC 3.6.1.19; Hydrolase Chromosomal Location of Human Ortholog: 20p Cellular Component: cytoplasm; cytosol Molecular Function: metal ion binding; nucleotide binding Biological Process: deoxyribonucleoside triphosphate catabolic process; nucleobase, nucleoside and nucleotide metabolic process; ITP catabolic process; chromosome organization and biogenesis Disease: Inosine Triphosphatase Deficiency
Research Articles on ITPase	**1.** ITPA protects against ribavirin-induced anemia, but is not associated with sustained virological response rate.
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