

ITPA Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP4942A

Product Information

| | |
|--------------------------|--|
| Application | IHC-P, FC, IF, WB, E |
| Primary Accession | Q9BY32 |
| Other Accession | Q2NLA8 , D3ZW55 , Q9D892 , F1NLH9 , Q2KIC5 |
| Reactivity | Human, Rat, Mouse |
| Predicted | Bovine, Chicken, Mouse, Rat, Xenopus |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | Rabbit IgG |
| Clone Names | RB22150 |
| Calculated MW | 21446 |
| Antigen Region | 24-51 |

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 24-51 amino acids from the N-terminal region of human ITPA. |
| Dilution | IHC-P~~1:100~500 FC~~1:10~50 IF~~1:10~50 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 (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.

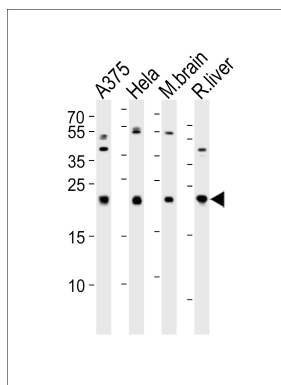
References

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 cell line, mouse brain and rat liver tissue lysate(from left to right), using ITPA Antibody (N-term)(Cat. #AP4942a). AP4942a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

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