10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ITPA Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP4942A

Specification

ITPA Antibody (N-term) - Product Information

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

ITPA Antibody (N-term) - 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
IF~~1:25
WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

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.

ITPA Antibody (N-term) - 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}

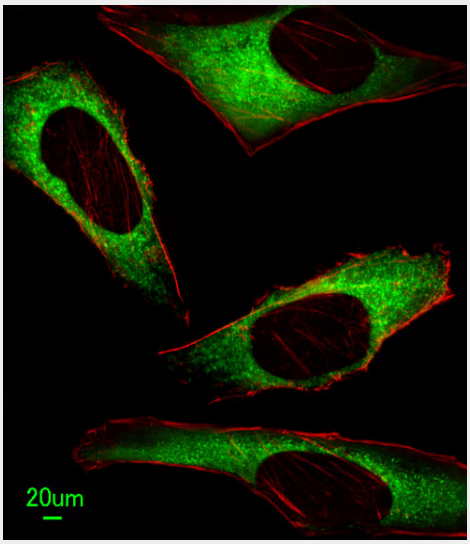
Tissue Location
Ubiquitous. Highly expressed in heart, liver, sex glands, thyroid and adrenal gland

ITPA Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

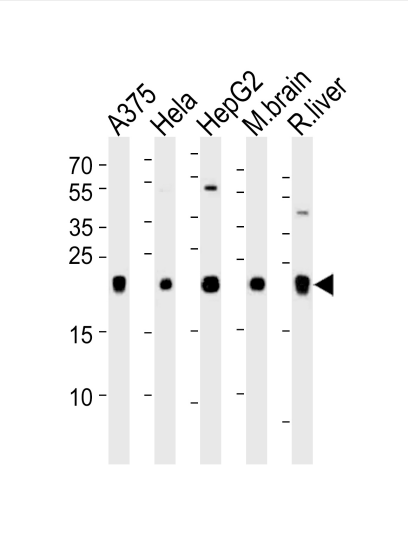
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ITPA Antibody (N-term) - Images

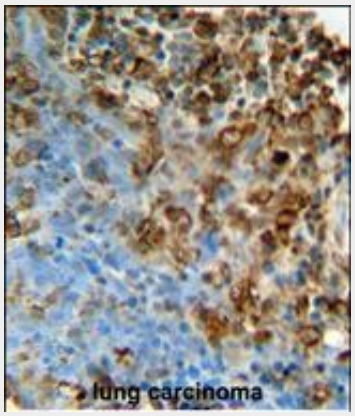


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Immunofluorescent analysis of Hela cells, using ITPA Antibody (N-term)(Cat. #AP4942a). AP4942a was diluted at 1:25 dilution. Alexa Fluor 488-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Dylight Fluor® 554 (red) conjugated Phalloidin (red).

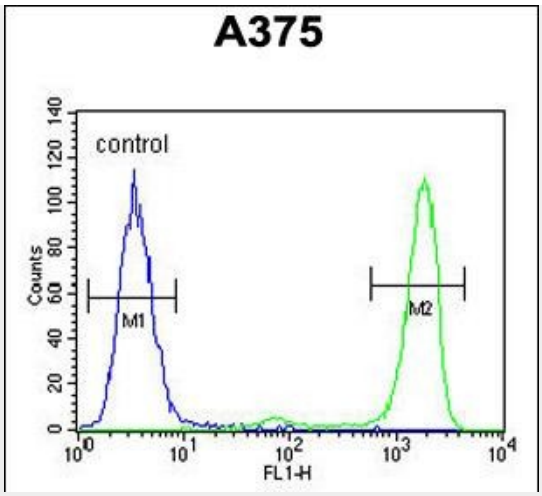


Western blot analysis of lysates from A375, Hela, HepG2 cell line, mouse brain and rat liver tissue lysate(from left to right), using ITPA Antibody (N-term)(Cat. #AP4942a). AP4942a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



ITPA Antibody (N-term) (Cat. #AP4942a) immunohistochemistry analysis in formalin fixed and paraffin embedded human lung carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the ITPA Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

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ITPA Antibody (N-term) (Cat. #AP4942a) flow cytometric analysis of A375 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

ITPA Antibody (N-term) - 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.

ITPA Antibody (N-term) - 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)