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ITPA Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP4942a

Specification

ITPA Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q9BY32

ITPA Antibody (N-term) Blocking Peptide - 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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ITPA Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- Blocking Peptides

ITPA Antibody (N-term) Blocking Peptide - Images

ITPA Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - 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)