Recombinant Human ITPA, His-tagged

Cat. No. ITPA-778H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human ITPA protein, fused to His-tag at N-terminus, was expressed in*E.coli*and purified by using conventional chromatography techniques. MW =23.7kDa (215aa) confirmed by MALDI-TOF.
Species	Human
Source	E.coli
Description	ITPA, also known as Inosine triphosphate pyrophosphatase, is an enzyme that catalyzes the pyrophosphohydrolysis of both ITP (inosine triphosphate) and dITP (deoxyinosine triphosphate) to IMP (inosine monophosphate) and diphosphate. IMP can be used as a substrate for purine nucleotide pathways. IMP can be phosphorylated to ITP, and ITPA can regulate the concentration of ITP in the cell by converting ITP back to IMP. Defects in ITPA result in ITPA deficiency which is thought to be inherited and is characterized by an over-accumulation of ITP in erythocytes, leukocytes and fibroblasts.
Sequences Of Amino Acids	MGSSHHHHHH SSGLVPRGSH MMAASLVGKK IVFVTGNAKK LEEVVQILGD KFPCTLVAQK IDLPEYQGEP DEISIQKCQE AVRQVQGPVLVEDTCLCFNA LGGLPGPYIK WFLEKLKPEG LHQLLAGFED KSAYALCTFA LSTGDPSQPV RLFRGRTSGR IVAPRGCQDF GWDPCFQPDG YEQTYAEMPK AEKNAVSHRF RALLELQEYF GSLAA
Purity	> 95% by SDS – PAGE.

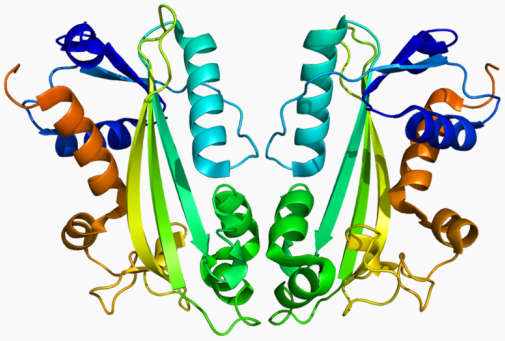
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Form	Liquid. 20mM Tris-HCl buffer (pH8.0) containing 10% glycerol.
Concentration	1 mg/ml (determined by Bradford assay).
Storage	Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

GENE INFORMATION

Gene Name	ITPA inosine triphosphatase (nucleoside triphosphate pyrophosphatase) [Homo sapiens]
Synonyms	ITPA; inosine triphosphatase (nucleoside triphosphate pyrophosphatase); ITPase; C20orf37; dJ794I6.3; HLC14-06-P; inosine triphosphate pyrophosphatase; My049 protein; inosine triphosphatase-A; putative oncogene protein HLC14-06-P; nucleoside triphosphate diphosphatase; inosine triphosphate pyrophosphohydrolase; EC 3.6.1.19
Gene ID	3704
mRNA Refseq	NM_033453
Protein Refseq	NP_258412
MIM	147520
UniProt ID	Q9BY32
Chromosome Location	20p
Pathway	Drug metabolism - other enzymes; Metabolic pathways; Purine metabolism;

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	Pyrimidine metabolism
Function	hydrolase activity; metal ion binding; nucleoside-triphosphate diphosphatase activity
PDB rendering based on 2car.	

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