# Recombinant Human ITPase/ITPA Protein (His Tag)

Catalog Number:PKSH032588



Note: Centrifuge before opening to ensure complete recovery of vial contents.

### **Description**

Synonyms Inosine Triphosphate Pyrophosphatase;ITPase;Inosine Triphosphatase;Non-

Canonical Purine NTP Pyrophosphatase; Non-Standard Purine NTP

Pyrophosphatase; Nucleoside-Triphosphate Diphosphatase; Nucleoside-Triphosphate Pyrophosphatase; Putative Oncogene Protein hlc14-06-p; ITPA; C20orf37

SpeciesHumanExpression HostE.coli

SequenceAla2-Ala194AccessionQ9BY32Calculated Molecular Weight22.5 kDaObserved molecular weight21 kDaTagC-His

### **Properties**

**Purity** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin** < 1.0 EU per µg of the protein as determined by the LAL method.

Storage Storage Store at  $< -20^{\circ}$ C, stable for 6 months. Please minimize freeze-thaw cycles.

**Shipping** This product is provided as liquid. It is shipped at frozen temperature with blue

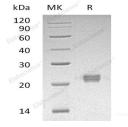
ice/gel packs. Upon receipt, store it immediately at < - 20°C.

Formulation Supplied as a 0.2 μm filtered solution of 20mM Tris-HCl, 5% Trehalose, 300mM

NaCl, 30% Glycerol, 0.05% Tween 80, pH8.0.

**Reconstitution** Not Applicable

#### Data



> 95 % as determined by reducing SDS-PAGE.

## **Background**

Inosine Triphosphate Pyrophosphatase (ITPase) is a cytoplasmic enzyme that belongs to the HAM1 NTPase family. ITPase hydrolyzes the non-canonical purine nucleotides inosine triphosphate (ITP) and deoxyinosine triphosphate (dITP) to the monophosphate nucleotide (IMP) and diphosphate. The ITPase enzyme acts as a homodimer and does not distinguish between the deoxy- and ribose forms. ITPase 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 ITPase is thought to be inherited and is characterized by an over-accumulation of ITP in erythocytes, leukocytes and fibroblasts.

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