

Recombinant Human Triosephosphate Isomerase 1, His-tagged

Cat. No. TPI1-2845H **Lot. No.** (See product label)

SPECIFICATION

Product Overview

Recombinant human TPI1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques. MW =28.8kDa (269aa) confirmed by MALDI-TOF.

Species

Human

Source

E.coli

Description

TPI1 (Triosephosphate isomerase) belongs to the triosephosphate isomerase family. TPI1 catalyzes the isomerization of glyceraldehydes 3-phosphate (G3P) and dihydroxy-acetone phosphate (DHAP) in glycolysis and gluconeogenesis. Defects in TPI1 are the cause of triosephosphate isomerase deficiency (TPI deficiency). TPI deficiency is an autosomal recessive disorder. It is the most severe clinical disorder of glycolysis. It is associated with neonatal jaundice, chronic hemolytic anemia, progressive neuromuscular dysfunction, cardiomyopathy and increased susceptibility to infection.

Sequences Of Amino Acids

MGSSHHHHH SSGLVPRGSH MAPSRKFFVG GNWKMNGRKQ SLGELIGTLN
AAKVPADTEV VCAPPTAYID FARQKLDPKI AVAAQNCYKV TNGAFTGEIS
PGMIKDCGAT WVLGHSERR HVGESDELI GQKVAHALAE GLGVIACIGE
KLDEREAGIT EKVVFEQTKV IADNVKDSK VVLAYEPVWA IGTGKTATPQ
QAQEVHEKLR GWLKSNSVDA VAQSTRIIYG GSVTGATCKE LASQPDVDGF
LVGGASLKPE FVDIINAKQ

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Purity	> 95% by SDS – PAGE.
Form	Liquid. 20mM Tris-HCl buffer (pH8.0) containing 10% glycerol, 1mM DTT.
Concentration	0.5mg/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	TPI1 triosephosphate isomerase 1 [Homo sapiens]
Synonyms	TPI1; triosephosphate isomerase 1; TPI; MGC88108; triosephosphate isomerase; TIMOTTHUMP00000165244; triose-phosphate isomerase; EC 5.3.1.1
Gene ID	7167
mRNA Refseq	NM_000365
Protein Refseq	NP_000356
MIM	190450
UniProt ID	P60174
Chromosome Location	12p13
Pathway	Fructose and mannose metabolism; Glycolysis / Gluconeogenesis; Inositol phosphate metabolism; Metabolic pathways

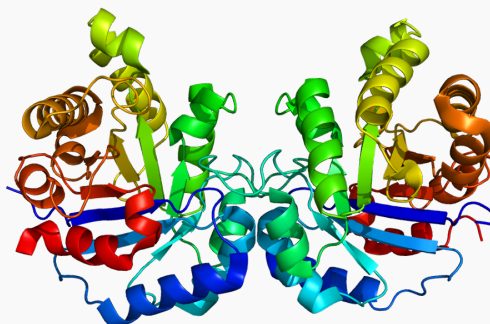
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Function

isomerase activity; protein binding; triose-phosphate isomerase activity

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