TPI1, 1-295aa, Human, His tag, E.coli

Cat.NO.: TP04282

3th Edition

Synonyms:triosephosphate isomerase, TPI, MGC88108, TIM, TPI, Triose-phosphate isomerase 1. Triosephosphate isomerase 1

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. Recombinant human TPI1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

Form: Liquid. 20mM Tris-HCl buffer (pH8.0) containing 10% glycerol, 1mM DTT

Molecular Weight:28.8kDa (269aa) confirmed by MALDI-TOF

Sequences:
MGSSHHHHHHSSGLVPRGSHMAPSRKFFVGGNWKMNGRKQSLGELIGTLNAAKVPADTEVVCAPPTAYIDFARQ
KLDPKIAVAAQNCYKVTNGAFTGEISPGMIKDCGATWVVLGHSERRHVFGESDELIGQKVAHALAEGLGVIACIGEK
LDEREAGITEKVVFEQTKVIADNVKDWSKVVLAYEPVWAIGTGKTATPQQAQEVHEKLRGWLKSNVSDAVAQSTRII
YGGSVTGATCKELASQPDVDGFLVGGASLKPEFVDIINAKQ

Purity:> 95% by HPLC

Concentration:0.5mg/ml (determined by Bradford assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

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.