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32-6931: TPI1 Human, Active

Application : Functional Assay
Alternative Name : TPI, TIM, Triosephosphate Isomerase 1.

Description

Source: Escherichia Coli.
Sterile Filtered clear solution.
TPI1 is one of the triosephosphate isomerase family. TPI1 catalyzes the isomerization of glyceraldehydes 3-phosphate (G3P) and dihydroxy-acetone phosphate (DHAP) in glycolysis and gluconeogenesis. Mutations in TPI1 causes triosephosphate isomerase deficiency (TPI deficiency). TPI deficiency is an autosomal recessive disorder which is the most severe clinical disorder of glycolysis and is related to neonatal jaundice, chronic hemolytic anemia, progressive neuromuscular dysfunction, cardiomyopathy and increased susceptibility to infection.
TPI1 produced in E.Coli is a single, non-glycosylated polypeptide chain containing 269 amino acids (1-249a.a.) and having a molecular mass of 28.8kDa.TPI1 is fused to a 20 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

Product Info

Amount :	2 µg / 10 µg
Purification :	Greater than 95% as determined by SDS-PAGE.
Content :	TPI1 protein solution (0.5mg/ml) containing 20mM Tris-HCl buffer (pH8.0), 1mM DTT and 10% glycerol.
Storage condition :	Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Avoid multiple freeze-thaw cycles.
Amino Acid :	MGSSHHHHHH SSGLVPRGSH MAPSRKFFVG GNWKMNGRKQ SLGELIGTLN AAKVPADTEV VCAPPTAYID FARQKLDPKI AVAAQNCYKV TNGAFTGEIS PGMIKDCGAT WVVLGHSERR HVFGESDELI GQKVAHALAE GLGVIACIGE KLDEREAGIT EKVVFEQTKV IADNVKDWSK VVLAYEPVWA IGTGKTATPQ QAQEVHEKLR GWLKSNVSDA VAQSTRIIYG GSVTGATCKE LASQPDVDGF LVGGASLKPE FVDIINAKQ

Application Note

Specific activity is > 3000 units/mg, in which one unit will convert 1.0 umole of D-glyceraldehyde-3-phosphate to dihydroxyacetone phosphate per minute at pH 7.5 at 25C.