

# Recombinant Protein Technical Manual Recombinant Human TPI1/TIM Protein (His Tag)

**RPES1389** 

#### **Product Data:**

Product SKU: RPES1389 Size: 10μg

Species: Human Expression host: E. coli

**Uniprot:** P60174

#### **Protein Information:**

Molecular Mass: 28.8 kDa

AP Molecular Mass: 29 kDa

Tag: N-6His

**Bio-activity:** 

**Purity:** > 90 % as determined by reducing SDS-PAGE.

**Endotoxin:**  $< 1.0 \text{ EU per } \mu\text{g}$  as determined by the LAL method.

**Storage:** Store at < -20°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 TrisHCl, 1mM DTT, 10% Glycerol,

pH 8.0.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** 

**Synonyms:** Triosephosphate Isomerase; TIM; Triose-Phosphate Isomerase; TPI1; TPI

## Immunogen Information:

Sequence: Met 1-Gln249

### **Background**:

Triose-phosphate isomerase, also named Triose-phosphate isomerase, TPI and TIM, is an enzyme that catalyzes the reversible interconversion of the triose phosphate isomers dihydroxyacetone phosphate and D-glyceraldehyde 3-phosphate. TPI has been found in nearly every organism searched for the enzyme, including animals such as mammals and insects as well as in fungi, plants, and bacteria. However, some bacteria that do not perform glycolysis, like ureaplasmas, lack TPI. TPI plays an important role in glycolysis and is essential for efficient energy production. TPI deficiency is an autosomal recessive disorder and the most severe clinical disorder of glycolysis. Triose phosphate isomerase deficiency is associated with neonatal jaundice, chronic hemolytic anemia, progressive neuromuscular dysfunction, cardiomyopathy and increased susceptibility to infection and characterized by chronic hemolytic anemia.