

TALDO1 Protein, Human (HEK293, His)

Cat. No.:	HY-P71351
Synonyms:	Transaldolase; TALDO1; TAL; TALDO; TALDOR
Species:	Human
Source:	HEK293
Accession:	P37837 (M1-K337)
Gene ID:	6888
Molecular Weight:	Approximately 38.0 kDa

PROPERTIES

AA Sequence

M S S S P V K R Q R	M E S A L D Q L K Q	F T T V V A D T G D	F H A I D E Y K P Q
D A T T N P S L I L	A A A Q M P A Y Q E	L V E E A I A Y G R	K L G G S Q E D Q I
K N A I D K L F V L	F G A E I L K K I P	G R V S T E V D A R	L S F D K D A M V A
R A R R L I E L Y K	E A G I S K D R I L	I K L S S T W E G I	Q A G K E L E E Q H
G I H C N M T L L F	S F A Q A V A C A E	A G V T L I S P F V	G R I L D W H V A N
T D K K S Y E P L E	D P G V K S V T K I	Y N Y Y K K F S Y K	T I V M G A S F R N
T G E I K A L A G C	D F L T I S P K L L	G E L L Q D N A K L	V P V L S A K A A Q
A S D L E K I H L D	E K S F R W L H N E	D Q M A V E K L S D	G I R K F A A D A V
K L E R M L T E R M	F N A E N G K		

Biological Activity

The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.

Appearance

Solution.

Formulation

Supplied as a 0.2 µm filtered solution of 20 mM Tris-HCl, 10% Glycerol, pH 8.0.

Endotoxin Level

<1 EU/µg, determined by LAL method.

Reconstitution

N/A

Storage & Stability

Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.

Shipping

Shipping with dry ice.

DESCRIPTION

Background

The TALDO1 protein is a key enzyme in the pentose phosphate pathway, catalyzing the rate-limiting step of the non-oxidative phase. This enzyme facilitates the reversible conversion of sedoheptulose-7-phosphate and D-glyceraldehyde 3-

phosphate into erythrose-4-phosphate and beta-D-fructose 6-phosphate. By regulating the flow of metabolites through the pentose phosphate pathway, TALDO1 plays a crucial role in generating ribose-5-phosphate and NADPH, essential for nucleotide biosynthesis and cellular redox balance, respectively. Moreover, TALDO1 exhibits additional regulatory functions by altering its subcellular localization between the nucleus and the cytoplasm, suggesting its involvement in the coordination of various metabolic pathways.

Caution: Product has not been fully validated for medical applications. For research use only.

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