

Recombinant human TALDO1 protein

Catalog Number: ATGP0666

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-337aa

UniProt No.

P37837

NCBI Accession No.

NP_006746

Alternative Names

Transaldolase 1, TAL, TAL-H, TALDOR, TALH, TALDO1, Transaldolase 1

PRODUCT SPECIFICATION

Molecular Weight

39.7 kDa (357aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol

Purity

> 90% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

TALDO1 is a key enzyme of the non-oxidative pentose phosphate pathway providing ribose-5-phosphate for nucleic acid synthesis and NADPH for lipid biosynthesis. This protein transfers a dihydroxyacetone group from donor compounds (fructose 6-phosphate or sedoheptulose 7-phosphate) to aldehyde acceptor compounds. It is expressed at selectively high levels in oligodendrocytes of the brain. Deficiency of TALDO1 causes accumulation of erythritol, D-arabitol, and ribitol. Recombinant human TALDO1, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.

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Amino acid Sequence

MGSSHHHHHH SSSLVPRGSH MSSSPVKRQR MESALDQLKQ FTTVVADTGD FHAIDEYKPQ DATTNPSLIL AAAQMPAYQE
LVEEAIAYGR KLGGSQEDQI KNAIDKLFVL FGAEILKKIP GRVSTEVDAR LSFDKDAMVA RARRLIELYK EAGISKDRIL
IKLSSTWEGI QAGKELEEQH GIHCNMTLLF SFAQAVACAE AGVTLISPFV GRILDWHVAN TDKKSYEPLD DPGVKSVTKI
YNYKKFSYK TIVMGASFRN TGEIKALAGC DFLTISPKLL GELLQDNAKL VPVLSAKAAQ ASDLEKIHLD EKSFRWLHNE
DQMAVEKLSL GIRKFAADAV KLERMLTERM FNAENGK

General References

Sprenger GA., et al. (2009) Int J Biochem Cell Biol. 41(7):1482-94.
Saudubray JM., et al (2006) J Pediatr. 149(5):713-7.

DATA

SDS-PAGE

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

