

TALDO1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6679c

Specification

TALDO1 Antibody (Center) - Product Information

Application WB, FC, IHC-P,E

Primary Accession
Reactivity
Host
Clonality
Isotype
Calculated MW
Antigen Region

P37837
Human
Rabbit
Polyclonal
Rabbit IgG
Rabbit IgG
186-215

TALDO1 Antibody (Center) - Additional Information

Gene ID 6888

Other Names

Transaldolase, TALDO1, TAL, TALDO, TALDOR

Target/Specificity

This TALDO1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 186-215 amino acids from the Central region of human TALDO1.

Dilution

WB~~1:1000 FC~~1:10~50 IHC-P~~1:50~100

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

TALDO1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

TALDO1 Antibody (Center) - Protein Information

Name TALDO1 (HGNC:11559)



Synonyms TAL, TALDO, TALDOR

Function Catalyzes the rate-limiting step of the non-oxidative phase in the pentose phosphate pathway. Catalyzes the reversible conversion of sedheptulose-7-phosphate and D-glyceraldehyde 3-phosphate into erythrose-4-phosphate and beta-D-fructose 6-phosphate (PubMed:18687684, PubMed:8955144). Not only acts as a pentose phosphate pathway enzyme, but also affects other metabolite pathways by altering its subcellular localization between the nucleus and the cytoplasm (By similarity).

Cellular Location

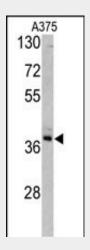
[Isoform 1]: Nucleus {ECO:0000250|UniProtKB:Q93092}. Cytoplasm {ECO:0000250|UniProtKB:Q93092}. Note=Shuttles between the nucleus and the cytoplasm. Actively transported into the nucleus in an importin alpha/beta-dependent manner. Exported into the cytoplasm by CRM1 {ECO:0000250|UniProtKB:Q93092}

TALDO1 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

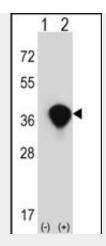
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

TALDO1 Antibody (Center) - Images

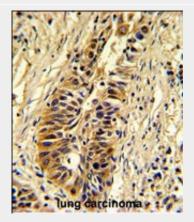


Western blot analysis of TALDO1 antibody (Center) (Cat. #AP6679c) in A375 cell line lysates (35ug/lane). TALDO1 (arrow) was detected using the purified Pab.

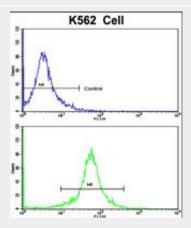




Western blot analysis of TALDO1 (arrow) using rabbit polyclonal TALDO1 Antibody (Center) (Cat. #AP6679c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the TALDO1 gene.



Formalin-fixed and paraffin-embedded human lung carcinoma reacted with TALDO1 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

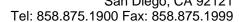


Flow cytometric analysis of K562 cells using TALDO1 Antibody (Center)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

TALDO1 Antibody (Center) - Background

Transaldolase 1 is a key enzyme of the nonoxidative pentose phosphate pathway providing







ribose-5-phosphate for nucleic acid synthesis and NADPH for lipid biosynthesis. This pathway can also maintain glutathione at a reduced state and thus protect sulfhydryl groups and cellular integrity from oxygen radicals.

TALDO1 Antibody (Center) - References

Schneider, S., J. Biol. Chem. 283 (44), 30064-30072 (2008) Qian, Y., Biochem. J. 415 (1), 123-134 (2008) Wamelink, M.M., J. Inherit. Metab. Dis. 30 (5), 735-742 (2007)