

# **TALDO1** Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6679c

### Specification

# **TALDO1 Antibody (Center) - Product Information**

Application Primary Accession Reactivity	WB, IHC-P, FC,E <u>P37837</u> Human Pabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	37540
Antigen Region	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 IHC-P~~1:50~100 FC~~1:10~50

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:<u>18687684</u>, PubMed:<u>8955144</u>). 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

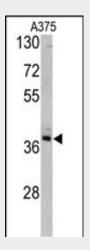
{ECO:0000250|UniProtKB:Q93092}. Note=Shuttles between the nucleus and the cytoplasm. Actively transported into the nucleus in an importin alpha/beta-dependent manner. Exported into the cytoplasm by CRM1 {ECO:0000250|UniProtKB:Q93092}

# **TALDO1 Antibody (Center) - Protocols**

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

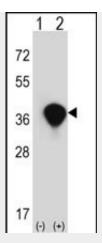
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### **TALDO1 Antibody (Center) - Images**

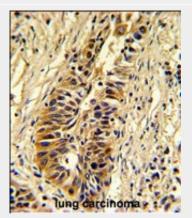


Western blot analysis of TALDO1 antibody (Center) (Cat. #AP6679c) in A375 cell line lysates (35ug/lane). TALDO1 (arrow) was detected using the purified Pab.

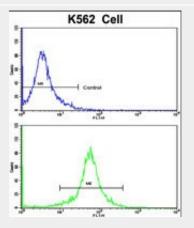




Western blot analysis of TALDO1 (arrow) using rabbit polyclonal TALDO1 Antibody (Center) (Cat. #AP6679c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the TALDO1 gene.



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)