

ALDOB Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18830a

Specification

ALDOB Antibody (N-term) - Product Information

Application WB,E
Primary Accession P05062

Other Accession <u>P00884</u>, <u>P79226</u>, <u>Q91Y97</u>, <u>Q3T0S5</u>,

NP 000026.2, P52210

Reactivity Human

Predicted Bovine, Mouse, Rabbit, Rat, Sheep

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 39473
Antigen Region 31-60

ALDOB Antibody (N-term) - Additional Information

Gene ID 229

Other Names

Fructose-bisphosphate aldolase B, Liver-type aldolase, ALDOB, ALDB

Target/Specificity

This ALDOB antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 31-60 amino acids from the N-terminal region of human ALDOB.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

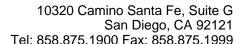
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ALDOB Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ALDOB Antibody (N-term) - Protein Information

Name ALDOB {ECO:0000303|PubMed:15880727, ECO:0000312|HGNC:HGNC:417}





Function Catalyzes the aldol cleavage of fructose 1,6-biphosphate to form two triosephosphates dihydroxyacetone phosphate and D- glyceraldehyde 3-phosphate in glycolysis as well as the reverse stereospecific aldol addition reaction in gluconeogenesis. In fructolysis, metabolizes fructose 1-phosphate derived from the phosphorylation of dietary fructose by fructokinase into dihydroxyacetone phosphate and D-glyceraldehyde (PubMed:10970798, PubMed:12205126, PubMed:20848650). Acts as an adapter independently of its enzymatic activity, exerts a tumor suppressor role by stabilizing the ternary complex with G6PD and TP53 to inhibit G6PD activity and keep oxidative pentose phosphate metabolism in check (PubMed:35122041).

Cellular Location

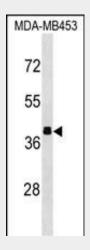
Cytoplasm, cytosol. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriolar satellite

ALDOB Antibody (N-term) - 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
- Cell Culture

ALDOB Antibody (N-term) - Images



ALDOB Antibody (N-term)(Cat. #AP18830a) western blot analysis in MDA-MB453 cell line lysates (35ug/lane). This demonstrates the ALDOB antibody detected the ALDOB protein (arrow).

ALDOB Antibody (N-term) - Background

Fructose-1,6-bisphosphate aldolase (EC 4.1.2.13) is a tetrameric glycolytic enzyme that catalyzes the reversible conversion of fructose-1,6-bisphosphate to glyceraldehyde 3-phosphate and dihydroxyacetone phosphate. Vertebrates have 3 aldolase isozymes which are distinguished by their electrophoretic and catalytic properties. Differences indicate that aldolases A, B, and C are distinct proteins, the products of a family of related





'housekeeping' genes exhibiting developmentally regulated expression of the different isozymes. The developing embryo produces aldolase A, which is produced in even greater amounts in adult muscle where it can be as much as 5% of total cellular protein. In adult liver, kidney and intestine, aldolase A expression is repressed and aldolase B is produced. In brain and other nervous tissue, aldolase A and C are expressed about equally. There is a high degree of homology between aldolase A and C. Defects in ALDOB cause hereditary fructose intolerance. [provided by RefSeq].

ALDOB Antibody (N-term) - References

Bouteldja, N., et al. J. Inherit. Metab. Dis. 33(2):105-112(2010) Coffee, E.M., et al. J. Inherit. Metab. Dis. 33(1):33-42(2010) Segat, L., et al. J. Gastroenterol. Hepatol. 24(12):1840-1846(2009) Davit-Spraul, A., et al. Mol. Genet. Metab. 94(4):443-447(2008) Eriksson, A., et al. BMC Gastroenterol 8, 34 (2008) :