10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ALDOB Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP18830a

Specification

ALDOB Antibody (N-term) Blocking Peptide - Product Information

Primary Accession P05062

ALDOB Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 229

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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ALDOB Antibody (N-term) Blocking Peptide - 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

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ALDOB Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

ALDOB Antibody (N-term) Blocking Peptide - Images

ALDOB Antibody (N-term) Blocking Peptide - Background

Fructose-1,6-bisphosphate aldolase (EC 4.1.2.13) is atetrameric glycolytic enzyme that catalyzes the reversibleconversion of fructose-1,6-bisphosphate to glyceraldehyde3-phosphate and dihydroxyacetone phosphate. Vertebrates have 3aldolase isozymes which are distinguished by their electrophoreticand catalytic properties. Differences indicate that aldolases A, B,and C are distinct proteins, the products of a family of related'housekeeping' genes exhibiting developmentally regulatedexpression of the different isozymes. The developing embryoproduces aldolase A, which is produced in even greater amounts inadult muscle where it can be as much as 5% of total cellularprotein. In adult liver, kidney and intestine, aldolase Aexpression is repressed and aldolase B is produced. In brain andother 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. [providedby RefSeq].

ALDOB Antibody (N-term) Blocking Peptide - 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) :