

ALDOA Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2726b

Product Information

Application	WB, IHC-P, E
Primary Accession	<u>P04075</u>
Other Accession	<u>P00883</u>
Reactivity	Human, Rat, Mouse
Predicted	Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB14945
Calculated MW	39420
Antigen Region	303-331

Additional Information

Gene ID	226
Other Names	Fructose-bisphosphate aldolase A, Lung cancer antigen NY-LU-1, Muscle-type aldolase, ALDOA, ALDA
Target/Specificity	This ALDOA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 303-331 amino acids from the C-terminal region of human ALDOA.
Dilution	WB~~1:1000 IHC-P~~1:100~500 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	ALDOA Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ALDOA (<u>HGNC:414</u>)
Synonyms	ALDA

Function	Catalyzes the reversible conversion of beta-D-fructose 1,6- bisphosphate (FBP) into two triose phosphate and plays a key role in glycolysis and gluconeogenesis (PubMed: <u>14766013</u>). In addition, may also function as scaffolding protein (By similarity).
Cellular Location	Cytoplasm, myofibril, sarcomere, I band {ECO:0000250 UniProtKB:P00883}. Cytoplasm, myofibril, sarcomere, M line {ECO:0000250 UniProtKB:P00883}. Note=In skeletal muscle, accumulates around the M line and within the I band, colocalizing with FBP2 on both sides of the Z line in the absence of Ca(2+) {ECO:0000250 UniProtKB:P00883}

Background

Aldolase A (fructose-bisphosphate aldolase) is a glycolytic enzyme that catalyzes the reversible conversion of fructose-1,6-bisphosphate to glyceraldehyde 3-phosphate and dihydroxyacetone phosphate. Three aldolase isozymes (A, B, and C), encoded by three different genes, are differentially expressed during development. Aldolase A is found in the developing embryo and is produced in even greater amounts in adult muscle. Aldolase A expression is repressed in adult liver, kidney and intestine and similar to aldolase C levels in brain and other nervous tissue. Aldolase A deficiency has been associated with myopathy and hemolytic anemia.

References

Gizak,A., Proteins 72 (1), 209-216 (2008) Lu,J., Biochem. Biophys. Res. Commun. 369 (3), 948-952 (2008) Valis,K., Mol. Cell. Biochem. 311 (1-2), 225-231 (2008)

Images



130 95 72

55

36 28

17

Western blot analysis of lysates from MCF-7, Hela cell line and human skeletal muscle tissue lysate (from left to right), using ALDOA Antibody (C-term)(Cat. #AP2726b). AP2726b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with ALDOA antibody (C-term) (Cat.#AP2726b), 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.