

Aldolase (ALDOA) Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP2726a

Product Information

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|--------------------------|--------------------------------------------------------------------------|
| Application | IHC-P, IF, WB, E |
| Primary Accession | P04075 |
| Other Accession | P05065 , P00883 , P05064 |
| Reactivity | Human, Rat, Mouse |
| Predicted | Mouse, Rat, Rabbit |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | Rabbit IgG |
| Clone Names | RB14944 |
| Calculated MW | 39420 |
| Antigen Region | 66-95 |

Additional Information

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|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gene ID | 226 |
| Other Names | Fructose-bisphosphate aldolase A, Lung cancer antigen NY-LU-1, Muscle-type aldolase, ALDOA, ALDA |
| Target/Specificity | This Aldolase (ALDOA) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 66-95 amino acids from the N-terminal region of human Aldolase (ALDOA). |
| Dilution | IHC-P~~1:100~500 IF~~1:10~50 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 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 | Aldolase (ALDOA) Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

Protein Information

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| Name | ALDOA (HGNC:414) |
| Synonyms | ALDA |

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| Function | Catalyzes the reversible conversion of beta-D-fructose 1,6- biphosphate (FBP) into two triose phosphate and plays a key role in glycolysis and gluconeogenesis (PubMed: 14766013). 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} |

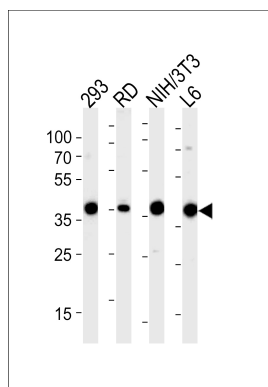
Background

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.

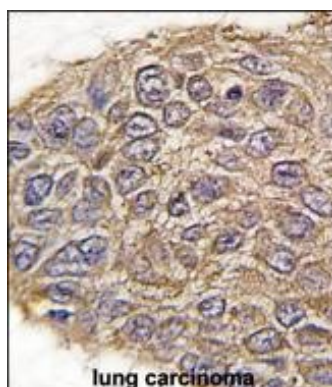
References

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

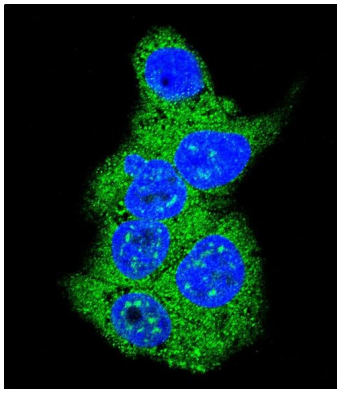


Western blot analysis of lysates from 293, RD, mouse NIH/3T3, rat L6 cell line (from left to right), using ALDOA Antibody (N-term)(Cat. #AP2726a). AP2726a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with ALDOA antibody (N-term) (Cat.#AP2726a), 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.

Confocal immunofluorescent analysis of Aldolase (ALDOA) Antibody (N-term)(Cat#AP2726a) with HepG2 cell followed by Alexa Fluor 488-conjugated goat



anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).

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