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# Anti-ALDOA Antibody

Catalog # AP95663

## Product Information

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|---|---|
| **Application** | WB, IHC, FC |
| **Primary Accession** | P04075 |
| **Reactivity** | Human, Mouse |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Calculated MW** | 39420 |

## Additional Information

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|---|---|
| **Gene ID** | 226 |
| **Other Names** | ALDA; Fructose-bisphosphate aldolase A; Lung cancer antigen NY-LU-1; Muscle-type aldolase |
| **Target/Specificity** | Recombinant fusion protein of human ALDOA expressed in E. Coli |
| **Dilution** | WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~FC (1/100 - 1/200) |
| **Format** | Mouse IgG2a. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide. |
| **Storage** | Store at -20 °C.Stable for 12 months from date of receipt |

## Protein Information

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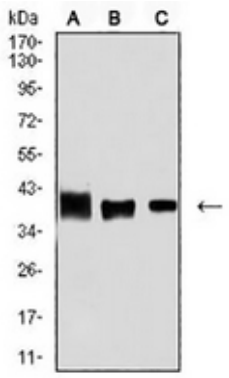
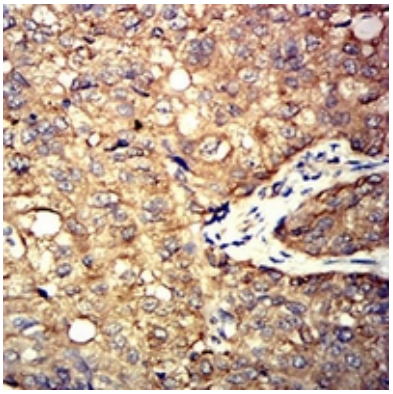
|---|---|
| **Name** | ALDOA ( HGNC:414) |
| **Synonyms** | ALDA |
| **Function** | Catalyzes the reversible conversion of beta-D-fructose 1,6- bisphosphate (FBP) into two triose phosphate and plays a key role in glycolysis and gluconeogenesis (PubMed:14766013). In addition, also functions as a scaffolding protein (By similarity). In response to glucose deprivation, FBP dissociates from aldolase and acts as an adapter that promotes AMP-activated protein kinase (AMPK) activity: mechanistically, associates with transient receptor potential channels TrpV (TRPV1-TRPV4), promoting inhibition of the V-ATPase complex on lysosomes and AMPK activation via the AXIN1-STK11/LKB1 axis (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} |

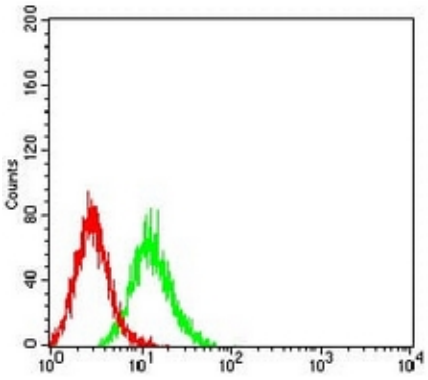
## Images




Western blot analysis of ALDOA expression in MCF7 (A), Hela (B), NIH/3T3 (C) whole cell lysates. (Predicted band size: 39 kD; Observed band size: 39 kD)



Immunohistochemical analysis of ALDOA staining in human bladder cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.




Flow cytometric analysis of K562 cells using Anti-ALDOA Antibody (green) and negative control (red).