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Anti-ALDOA Antibody

Catalog # AP50972

Product Information

Application	WB, IF/IC
Primary Accession	P04075
Reactivity	Human, Mouse, Rat, Rabbit, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	39420

Additional Information

Gene ID	226
Other Names	ALDA; Fructose-bisphosphate aldolase A; Lung cancer antigen NY-LU-1; Muscle-type aldolase
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human ALDOA. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, 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

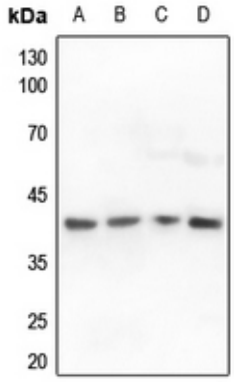
Name	ALDOA (HGNC:414)
Synonyms	ALDA
Function	Catalyzes the reversible conversion of beta-D-fructose 1,6- bisphosphate (FBP) into two triose phosphate and plays a key role in glycolysis and gluconeogenesis (PubMed:14766013). In addition, also functions as a scaffolding protein (By similarity). In response 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}

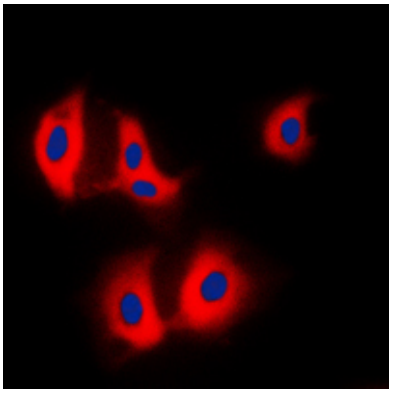
References

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Izzo P.,et al.Eur. J. Biochem. 164:9-13(1987).
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Mukai T.,et al.Eur. J. Biochem. 195:781-787(1991).
Ota T.,et al.Nat. Genet. 36:40-45(2004).

Images



Western blot analysis of ALDOA expression in Hela (A), HGC27 (B), mouse spleen (C), mouse lung (D) whole cell lysates. (Predicted band size: 39 kD; Observed band size: 39 kD)



Immunofluorescent analysis of ALDOA staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

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