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ALDOA

Purified Mouse Monoclonal Antibody
Catalog # AO2617a

Product Information

Application	WB, IHC, ICC, E
Primary Accession	P04075
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2H2B1
Isotype	Mouse IgG1
Calculated MW	39420
Immunogen	Purified recombinant fragment of human ALDOA (AA: 9-145) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	226
Other Names	ALDA; GSD12; HEL-S-87p
Dilution	WB~~ 1/500 - 1/2000 IHC~~1:100~500 ICC~~ 1/100 - 1/500 E~~ 1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ALDOA is for research use only and not for use in diagnostic or therapeutic procedures.

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

1.Cancer Lett. 2016 Apr 28;374(1):127-35. 2.Oncol Rep. 2014 Nov;32(5):2031-7.

Images

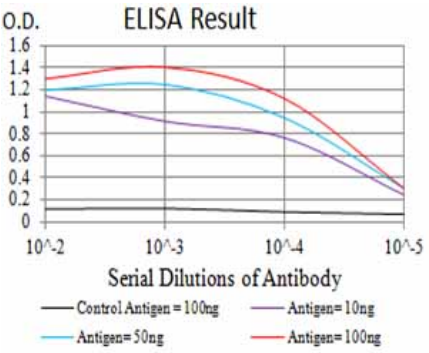


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

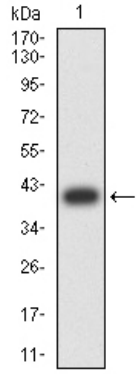


Figure 2:Western blot analysis using ALDOA mAb against human ALDOA (AA: 9-145) recombinant protein. (Expected MW is 40.7 kDa)

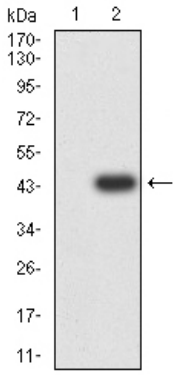
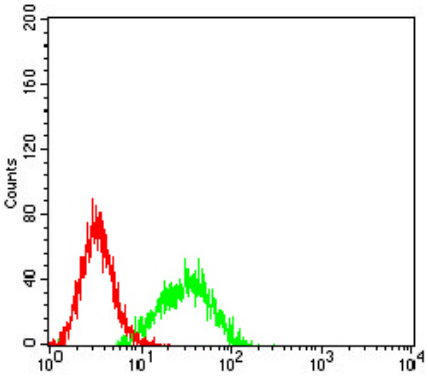


Figure 3:Western blot analysis using ALDOA mAb against HEK293 (1) and ALDOA (AA: 9-145)-hIgGFc transfected HEK293 (2) cell lysate.

Figure 5:Flow cytometric analysis of K562 cells using ALDOA mouse mAb (green) and negative control (red).



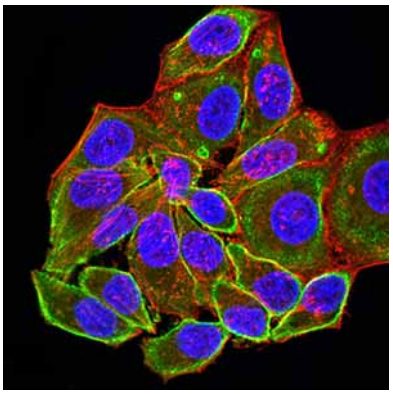


Figure 4:Immunofluorescence analysis of Hela cells using ALDOA mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)

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