

## **Aldolase A Polyclonal Antibody**

Catalog No: YT0191

Reactivity: Human; Mouse; Rat

**Applications:** WB;IF;ELISA

Target: Aldolase A

**Fields:** >>Glycolysis / Gluconeogenesis;>>Pentose phosphate pathway;>>Fructose and

mannose metabolism;>>Metabolic pathways;>>Carbon

metabolism;>>Biosynthesis of amino acids;>>HIF-1 signaling pathway

Gene Name: ALDOA

**Protein Name:** Fructose-bisphosphate aldolase A

P04075

P05064

Human Gene Id: 226

**Human Swiss Prot** 

No:

Mouse Gene Id: 11674

**Mouse Swiss Prot** 

No:

Rat Gene ld: 24189

Rat Swiss Prot No: P05065

**Immunogen :** The antiserum was produced against synthesized peptide derived from human

ALDOA. AA range:1-50

**Specificity:** Aldolase A Polyclonal Antibody detects endogenous levels of Aldolase A protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other

1/4



applications.

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 39kD

Cell Pathway: Glycolysis / Gluconeogenesis; Pentose phosphate pathway; Fructose and

mannose metabolism;

**Background:** The protein encoded by this gene, 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. Alternative splicing and alternative promoter usage results in multiple transcript variants. Related pseudogenes have been identified on chromosomes 3 and 10. [provided by

RefSeq, Aug 2011],

**Function :** catalytic activity:D-fructose 1,6-bisphosphate = glycerone phosphate + D-

glyceraldehyde 3-phosphate.,disease:Defects in ALDOA are the cause of aldolase A deficiency [MIM:611881]; also known as aldoA deficiency or red cell aldolase deficiency. Aldolase A deficiency is an autosomal recessive disorder associated with hereditary hemolytic anemia.,miscellaneous:In vertebrates, three forms of this ubiquitous glycolytic enzyme are found, aldolase A in muscle, aldolase B in liver and aldolase C in brain.,pathway:Carbohydrate degradation; glycolysis; D-glyceraldehyde 3-phosphate and glycerone phosphate from D-glucose: step 4/4.,similarity:Belongs to the class I fructose-bisphosphate aldolase

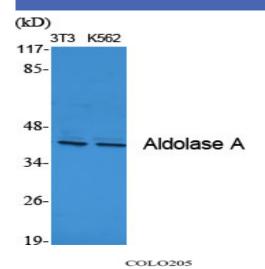
family., subunit: Homotetramer.,

Subcellular Location : Cytoplasm, myofibril, sarcomere, I band. Cytoplasm, myofibril, sarcomere, M line. 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+).

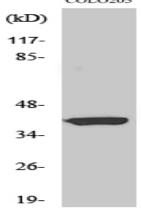
**Expression :** Brain, Cajal-Retzius cell, Cervix, Colon carcinoma, Epithelium, Eye, Feta



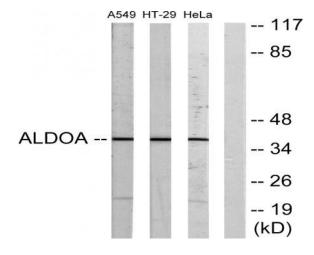
## **Products Images**



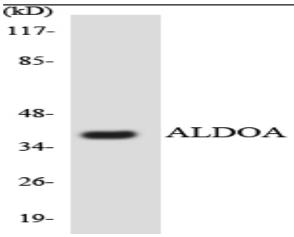
Western Blot analysis of various cells using Aldolase A Polyclonal Antibody diluted at 1:1000



Western Blot analysis of HT29 cells using Aldolase A Polyclonal Antibody diluted at 1:1000



Western blot analysis of lysates from A549, HeLa, and HT-29 cells, using ALDOA Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HT-29 cells using ALDOA antibody.