Best Tools for immunology Research

# Aldolase A Polyclonal Antibody

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|---|---|
| **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 |
| **Human Gene Id :** | 226 |
| **Human Swiss Prot No :** | P04075 |
| **Mouse Gene Id :** | 11674 |
| **Mouse Swiss Prot No :** | P05064 |
| **Rat Gene Id :** | 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 |

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;

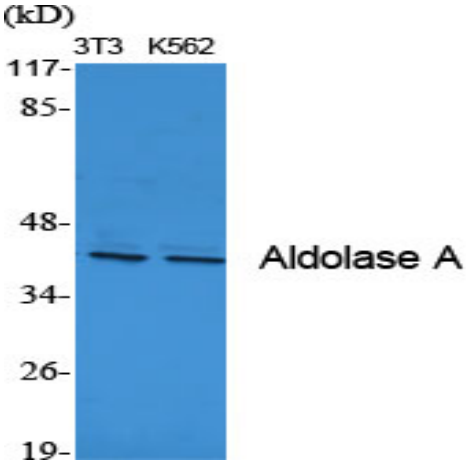
**Background :** The protein encoded by this gene, Aldolase A (fructose-bisphosphate aldolase), is a glycolytic enzyme that catalyzes the reversible conversion of fructose-1,6-bisphosphate to glyceraldehyde 3-phosphate and dihydroxyacetone phosphate. Three aldolase isozymes (A, B, and C), encoded by 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.,

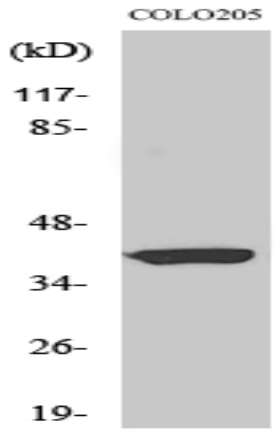
**Subcellular Location :** Cytoplasm, myofibril, sarcomere, I band . Cytoplasm, myofibril, sarcomere, M line . In skeletal muscle, accumulates around the M line and within the I band, colocalizing with FBP2 on both sides of the Z line in the absence of Ca(2+). .

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

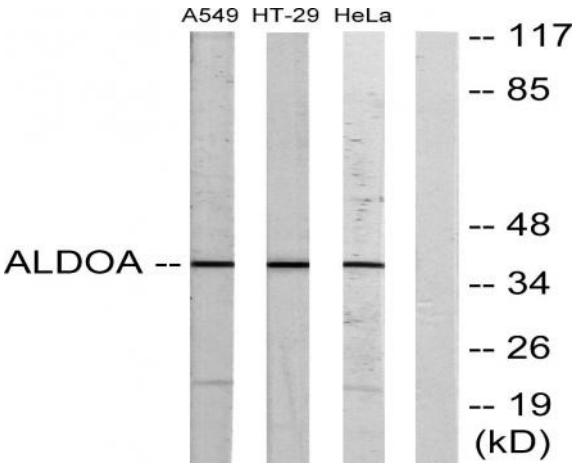
## Products Images



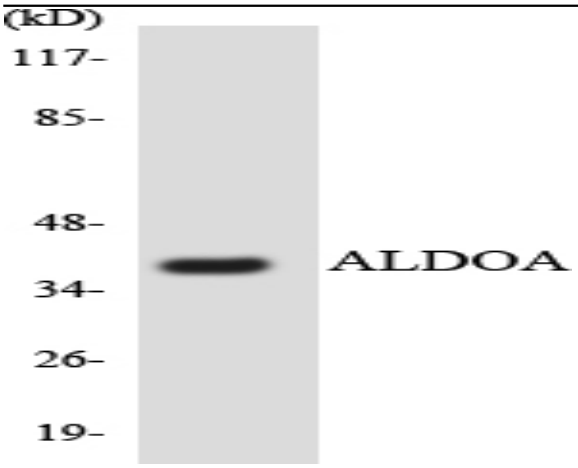

Western Blot analysis of various cells using Aldolase A Polyclonal Antibody diluted at 1:1000




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.