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ALDOB Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant ALDOB.
Catalog # AT1117a

Product Information

Application	E
Primary Accession	P05062
Other Accession	BC029399
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a kappa
Clone Names	3B3
Calculated MW	39473

Additional Information

Gene ID	229
Other Names	Fructose-bisphosphate aldolase B, Liver-type aldolase, ALDOB, ALDB
Target/Specificity	ALDOB (AAH29399, 1 a.a. ~ 316 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	ALDOB Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

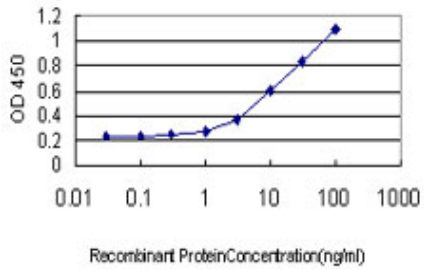
Background

Fructose-1,6-bisphosphate aldolase (EC 4.1.2.13) is a tetrameric glycolytic enzyme that catalyzes the reversible conversion of fructose-1,6-bisphosphate to glyceraldehyde 3-phosphate and dihydroxyacetone phosphate. Vertebrates have 3 aldolase isozymes which are distinguished by their electrophoretic and catalytic properties. Differences indicate that aldolases A, B, and C are distinct proteins, the products of a family of related 'housekeeping' genes exhibiting developmentally regulated expression of the different isozymes. The developing embryo produces aldolase A, which is produced in even greater amounts in adult muscle where it can be as much as 5% of total cellular protein. In adult liver, kidney and intestine, aldolase A expression is repressed and aldolase B is produced. In brain and other nervous tissue, aldolase A and C are expressed about equally. There is a high degree of homology between aldolase A and C. Defects in ALDOB cause hereditary fructose intolerance.

References

The biochemical basis of hereditary fructose intolerance. Bouteldja N, et al. J Inherit Metab Dis, 2010 Apr. PMID 20162364.Increased prevalence of mutant null alleles that cause hereditary fructose intolerance in the American population. Coffee EM, et al. J Inherit Metab Dis, 2010 Feb. PMID 20033295.Secreted protein acidic and rich in cysteine (SPARC) gene polymorphism association with hepatocellular carcinoma in Italian patients. Segat L, et al. J Gastroenterol Hepatol, 2009 Dec. PMID 19817957.Five mucosal transcripts of interest in ulcerative colitis identified by quantitative real-time PCR: a prospective study. Eriksson A, et al. BMC Gastroenterol, 2008 Aug 12. PMID 18700007.Hereditary fructose intolerance: frequency and spectrum mutations of the aldolase B gene in a large patients cohort from France--identification of eight new mutations. Davit-Spraul A, et al. Mol Genet Metab, 2008 Aug. PMID 18541450.

Images



Detection limit for recombinant GST tagged ALDOB is approximately 0.3ng/ml as a capture antibody.