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Product datasheet for AR09376PU-N

Aldolase A / ALDOA (1-364, His-tag) Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Aldolase A / ALDOA (1-364, His-tag) human recombinant protein, 0.1 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MGSSHHHHHH SSGLVPRGSH MPYQYPALTP EQKKELSDIA HRIVAPGKGI LAADESTGSI AKRLQSIGTE NTEENRRFYR QLLLTADDRV NPCIGGVILF HETLYQKADD GRPFPQVIKS KGGVVGIKVD KGVVPLAGTN GETTTQGLDG LSERCAQYKK DGADFAKWRC VLKIGEHTPS ALAIMENANV LARYASICQQ NGIVPIVEPE ILPDGDHDLK RCQYVTEKVL AAVYKALSDH HIYLEGTLLK PNMVTPGHAC TQKFSHEEIA MATVTALRRT VPPAVTGITF LSGGQSEEEA SINLNAINKC PLLKPWALTF SYGRALQASA LKAWGGKKEN LKAAQEEYVK RALANSLACQ GKYTPSGQAG AAASESLFVS NHAY
Tag:	His-tag
Predicted MW:	41.5 kDa
Concentration:	lot specific
Purity:	>95% by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 100 mM NaCl, 10% glycerol
Bioactivity:	Specific: > 1.5 units/mg. One unit will convert 1.0 umole of fructose 1,6-diphosphate to dihydroxyacetone phosphate and glyceraldehyde 3-phosphate per minute at pH 7.5 at 25°C. (Activity assay see "Protocols").
Preparation:	Liquid purified protein
Applications:	Protocol: **Activity Assay:** Prepare a 1.45 ml reaction mixture with the following concentrations: 45 mM Tris pH8.0, 0.95mM fructose 1,6-diphosphate, 0.065 mM beta-nicotinamide adenine dinucleotide, 5 unit alpha-glcerophosphate dehydrogenase/triosephosphate isomerase. 2. Add 50 ul of recombinant Aldolase A protein with 1ug, 2ug in reaction mixture. 3. Record the decrease in A340nm for 5 minutes at 25°C.

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Protein Description: Recombinant human Aldolase A, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

Storage: Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

RefSeq: NP_000025

Locus ID: 226

UniProt ID: P04075, V9HWN7

Cytogenetics: 16p11.2

Synonyms: ALDA, NY-LU-1, Muscle-type aldolase

Summary: This gene encodes a member of the class I fructose-bisphosphate aldolase protein family. The encoded protein 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. Mutations in this gene have been associated with Glycogen Storage Disease XII, an autosomal recessive disorder associated with hemolytic anemia. Disruption of this gene also plays a role in the progression of multiple types of cancers. Related pseudogenes have been identified on chromosomes 3 and 10. [provided by RefSeq, Sep 2017]

Protein Families: Protocol: **Activity Assay:**
Prepare a 1.45 ml reaction mixture with the following concentrations: 45 mM Tris pH8.0, 0.95mM fructose 1,6-diphosphate, 0.065 mM beta-nicotinamide adenine dinucleotide, 5 unit alpha-glcerophosphate dehydrogenase/triosephosphate isomerase.
2. Add 50 ul of recombinant Aldolase A protein with 1ug, 2ug in reaction mixture.
3. Record the decrease in A340nm for 5 minutes at 25°C.

Protein Pathways: Fructose and mannose metabolism, Glycolysis / Gluconeogenesis, Metabolic pathways, Pentose phosphate pathway

Product images: