

Product datasheet for **SC108921**

Aldolase (ALDOA) (NM_184043) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aldolase (ALDOA) (NM_184043) Human Untagged Clone
Tag:	Tag Free
Symbol:	Aldolase
Synonyms:	ALDA; GSD12; HEL-S-87p
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_184043, the custom clone sequence may differ by one or more nucleotides

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ATGCCCTACCAATATCCAGCACTGACCCCGGAGCAGAAGAAGGAGCTGTCTGACATCGCTCACCGCATCG  
TGGCACCTGGCAAGGGCATCCTGGCTGCAGATGAGTCCACTGGGAGCATTGCCAAGCGGCTGCAGTCCAT  
TGGCACCGAGAACACCGAGGAGAACCGGCGCTTCTACCGCCAGCTGCTGCTGACAGCTGACGACCGCGTG  
AACCCCTGCATTGGGGGTGTCATCCTCTTCCATGAGACTCTACCAGAAGGCGGATGATGGGCGTCCCT  
TCCCCAAGTTATCAAATCCAAGGGCGGTGTTGTGGGCATCAAGGTAGACAAGGGCGTGGTCCCCCTGGC  
AGGGACAAATGGCGAGACTACCACCAAGGTTGGATGGGCTGTCTGAGCGCTGTGCCAGTACAAGAAG  
GACGGAGCTGACTTCGCAAGTGGCGTTGTGTGCTGAAGATTGGGGAACACCCCTCAGCCCTCGCCA  
TCATGGAAAATGCCAATGTTCTGGCCCGTTATGCCAGTATCTGCCAGCAGAATGGCATTGTGCCATCGT  
GGAGCCTGAGATCCTCCCTGATGGGGACCATGACTTGAAGCGCTGCCAGTATGTGACCGAGAAGGTGCTG  
GCTGCTGTCTACAAGGCTCTGAGTGACCACCACATCTACCTGGAAGGCACCTTGCTGAAGCCCAACATGG  
TCACCCAGGCCATGCTTGCCTCAGAAAGTTTCTCATGAGGAGATTGCCATGGCGACCGTACAGCGCT  
GCGCCGCACAGTGGCCCGCTGTCACTGGGATCACCTTCTGTCTGGAGGCCAGAGTGAGGAGGAGGCG  
TCCATCAACCTCAATGCCATTAACAAGTGGCCCTGTGAAGCCCTGGGCCCTGACCTTCTCCTACGGCC  
GAGCCCTGCAGGCCTCTGCCCTGAAGGCCTGGGCGGGAAGAAGGAGAACCTGAAGGCTGCGCAGGAGGA  
GTATGTCAAGCGAGCCCTGGCCAACAGCCTTGCCTGTCAAGGAAAGTACACTCCGAGCGGTGAGGCTGGG  
GCTGCTGCCAGCGAGTCCCTCTTCTGCTCTAACCACGCCTATTA
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5' Read Nucleotide Sequence:	>OriGene 5' read for NM_184043 unedited TTGTAATACGACTCACTATAGGGCGGCACGCGATTTCGGCACGAGGTCTGGATTTCCAAGG AAGAATTTCTCTGAAGCACCGGAACCTTGCTACTACCAGCACCATGCCCTACCAATATCC AGCACTGACCCCGGAGCAGAAGAAGGAGCTGTCTGACATCGCTCACCGCATCGTGGCACC TGGCAAGGGCATCCTGGCTGCAGATGAGTCCACTGGGAGCATTGCCAAGCGGCTGCAGTC CATTGGCACCCGAGAACACCGAGGAGAACC GGCGCTTCTACCGCCAGCTGCTGCTGACAGC TGACGACCGCGTGAACCCCTGCATTGGGGGTGTCATCCTCTTCCATGAGACACTTACCA GAAGCGGATGATGGGCGTCCCTTCCCCAAGTTATCAAATCCAAGGGCGGTGTTGTGGG CATCAAGGTAGACAAGGGCGTGGTCCCCCTGGCAGGGACAAATGGCGAGACTACCACCCA AGGGTTGGATGGGCTGTCTGAGCGCTGTGCCAGTACAAGAAGGACGGAGCTGACTTCGC CAAGTGGCGTTGTGTGCTGAAGATTGGGGAACACACCCCTCAGCCCTCGCCATCATGGA AAATGCCAATGTTCTGGCCGTTATGCCAGTATCTGCCAGCAGAATGGCATTGTGCCCAT CGTGGAGCCTGAGATCCTCCCTGATGGGGACCATGACTGAAGCGCTGCCAGTATGTGAC CGAGAAGGTGCTGGCTGTGTCTACAAGCTCTGAGTGACACCACATCTACCTGGAAGGCA CCTTGCTGAAGCCACATGGTCACCCAGCCATGNCTGCCTCANAAGTTTCTCATGAGAG ATGCCATGGCGACCGTACAGCGCTGCGCCGACAGTGCCCCGCTGCACTGGGATCACCTT CTGNCTGAGCCANATGAGAAG
Restriction Sites:	ECoRI-NOT
ACCN:	NM_184043
Insert Size:	1500 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none"> 1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	<u>NM_184043.1</u> , <u>NP_908932.1</u>
RefSeq Size:	1594 bp
RefSeq ORF:	1095 bp
Locus ID:	226
UniProt ID:	<u>P04075</u>
Cytogenetics:	16p11.2
Protein Families:	Druggable Genome

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

Gene 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]

Transcript Variant: This variant (3) differs in the 5' UTR, compared to variant 1. Variants 2, 3, 4, 7, 8, 9, and 10 encode the same isoform (1).