

Product datasheet for **SC320738**

Aldolase (ALDOA) (NM_000034) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aldolase (ALDOA) (NM_000034) Human Untagged Clone
Tag:	Tag Free
Symbol:	Aldolase
Synonyms:	ALDA; GSD12; HEL-S-87p
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene sequence for NM_000034.2
 CCTAGCTTGGCGCGGAATCCGTGAATTGCCCGCGGCCGAGGGTGCAGCTCCCGACTGA
 CTGGCTCTGCCCTTCCCATGGACGCCTCCTCTAGCCCGTGAATCCAACCCCGGCTCT
 GTCAGCAGCCCTCCCCTGCTGCTCCCCATCCCTGCCATCGTCTTCATCGCTGTGGGCATC
 TATTTGTTGCTGCTGGGTCTAGTCTGCTGACTAGGAATGCCTGCTGGCCAGGGCTGC
 TCGCGGACGGTAGCTCCCCCTGCAGGAAGCAAGTTCCCTCCGGGCCCCAGACTGCTGC
 TGGACCTGTGCAGAAGCTGCAACTTTCCCTGCTAGCCCGGCCCACTTCTGGATGCT
 TGCTGCCCCAGCCACCAGAGCTGACTGGGCACCTCGCTGCCCCGCTGCTGCCACTC
 TGCAGCTGTGCCTGTACGTGCCAGCTCCCCGACTGCCAGAGCCTCAACTGTCTCTGCTTC
 GAGATCAAGTCCGATGAGGACCCAGGGCCCTGCCCTCTGGGGAGCGGCCAGCCCCAG
 GGCCCATGTGCCCTCCTCCCTGAAGAGCCTTTCCCCACGCCACTGGAACCACAGATGGCC
 TGCCGAGCACCAGGCCTGGAACTGGAAGTGGCAGCGCAGGGCCTGGCTCCCTGCAGGG
 CAGGACTTTGGCCGGCTGGACGGCAGCTCCTCTGGAGGGCCAGAAAAGAGAGGGCTAG
 TGCTCGGGCAGGTGCCCTGGCTTCCCTTCCCTCCACACGTCAACGATTCTATTTGAAGT
 TGGGCAGGGGGTGGCGTGTCTACCACACACAAGTGTTATAGGAGGAGTCTGGCCCTTG
 AGTACCGGTACGCAGGGGTGCCTCAACCACACTCCGTCCACGGACTCTCCGTTATTTTA
 GGAGTCCCTGGCCAAAGATTTATTTCTTTGACAACCAAGGGCCTCCGTCTGGATTTCC
 AAGGAAGAATTTCTCTGAAGCACCGAACTTGCTACTACCAGCACCATGCCCTACCAAT
 ATCCAGCACTGACCCCGAGCAGAAGAAGGAGTGTCTGACATCGCTCACCGCATCGTGG
 CACCTGGCAAGGGCATCCTGGCTGCAGATGAGTCCACTGGGAGCATTGCCAAGCGGCTGC
 AGTCCATTGGCACCGAGAACCAGGAGAACCCGGCGCTTCTACCGCCAGCTGCTGCTGA
 CAGCTGACGACCCGTGAACCCCTGCATTGGGGGTGTCTCCTCTCCATGAGACACTCT
 ACCAGAAGCGGATGATGGCGTCCCTTCCCCAAAGTTATCAAATCCAAGGGCGGTGTG
 TGGGCATCAAGGTAGACAAGGGCGTGGTCCCCCTGGCAGGGACAATGGCGAGACTACCA
 CCAAGGGTTGGATGGGCTGTCTGAGCGCTGTGCCAGTACAAGAAGGACGGAGCTGACT
 TCGCCAAGTGGCGTTGTGTGCTGAAGATTGGGGAACACACCCCTCAGCCCTCGCCATCA
 TGGAAAATGCCAATGTTCTGGCCGTTATGCCAGTATCTGCCAGCAGAATGGCATTGTGC
 CCATCGTGGAGCCTGAGATCCTCCCTGATGGGGACCATGACTTGAAGCGCTGCCAGTATG
 TGACCGAGAAGGTGCTGGCTGCTGTCTACAAGGCTCTGAGTGACCACCACATCTACCTGG
 AAGGCACCTTGTGAAGCCCAACATGGTACCCCCAGGCCATGCTTGCCTCAGAAGTTTT
 CTCATGAGGAGATTGCCATGGCGACCGTACAGCGCTGCGCCGACAGTGCCCCCGCTG
 TCACTGGGATCACCTTCCCTGTCTGGAGGCCAGAGTGAGGAGGAGGCGTCCATCAACCTCA
 ATGCCATTAACAAGTGCCCCCTGCTGAAGCCCTGGGCCCTGACCTTCTCCTACGGCCGAG
 CCCTGCAGGCCTCTGCCCTGAAGGCCTGGGGCGGGAAGAAGGAGAACCTGAAGGCTGCGC
 AGGAGGAGTATGTCAAGCGAGCCCTGGCCAACAGCCTTGCTGTCAAGGAAAGTACACTC
 CGAGCGGTGAGGCTGGGGCTGCTGCCAGCGAGTCCCTCTTCGCTCTAACCACGCCTATT
 AAGCGGAGGTGTTCCAGGCTGCCCCCAACTCCAGGCCTGCCCCCTCCCCTCTTGA
 AGAGGAGGCCCTCCTCGGGCTCCAGGCTGGCTTGGCCGCGCTTTTCTTCCCTCGTG
 ACAGTGGTGTGTGGTGTCTGTGAATGCTAAGTCCATCACCTTTCCGGCACACTGCC
 AAATAAACAGCTATTTAAGGGGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
 AAAAAAAAAAAAAAAAAAACTCGGG

Restriction Sites: Please inquire

ACCN: NM_000034

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).

OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	NM_000034.2 , NP_000025.1
RefSeq Size:	2353 bp
RefSeq ORF:	1095 bp
Locus ID:	226
UniProt ID:	P04075
Cytogenetics:	16p11.2
Domains:	glycolytic_enzy
Protein Families:	Druggable Genome
Protein Pathways:	Fructose and mannose metabolism, Glycolysis / Gluconeogenesis, Metabolic pathways, Pentose phosphate pathway
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (1) encodes the longer isoform (1). Variants 2, 3, 4, 7, 8, 9, and 10 encode the same isoform.</p>