

Product datasheet for **SC108418**

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:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC108418 sequence for NM_000034 edited (data generated by NextGen Sequencing)

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ATGCCCTACCAATATCCAGCACTGACCCCGGAGCAGAAGAAGGAGCTGTCTGACATCGCT
CACCGCATCGTGGCACCTGGCAAGGGCATCCTGGCTGCAGATGAGTCCACTGGGAGCATT
GCCAAGCGGCTGCAGTCCATTGGCACCGAGAACCAGGAGAGAACCAGGCGCTTCTACCGC
CAGCTGTCTGACAGCTGACGACCGCGTGAACCCCTGCATTGGGGGTGTCATCCTCTTC
CATGAGACACTCTACCAGAAGGCGGATGATGGGCGTCCCTCCCCCAAGTTATCAAATCC
AAGGGCGGTGTTGTGGGCATCAAGGTAGACAAGGGCGTGGTCCCCCTGGCAGGGACAAAT
GGCGAGACTACCACCAAGGGTTGGATGGGCTGTCTGAGCGCTGTGCCAGTACAAGAAG
GACGGAGCTGACTTCGCAAGTGGCGTTGTGTGCTGAAGATTGGGGAACACCCCCCTCA
GCCCTCGCCATCATGGAAAATGCCAATGTTCTGGCCCGTTATGCCAGTATCTGCCAGCAG
AATGGCATTGTGCCATCGTGGAGCCTGAGATCCTCCCTGATGGGACCATGACTTGAAG
CGTGCCAGTATGTGACCGAGAAGGTGCTGGCTGCTGTCTACAAGGCTCTGAGTGACCAC
CACATCTACCTGGAAGGCACCTTGTGAAGCCCAACATGGTCACCCCAGGCCATGCTTGC
ACTCAGAAGTTTTCTCATGAGGAGATTGCCATGGCGACCGTCACAGCGCTGCGCCGCACA
GTGCCCCCGCTGCTACTGGGATCACCTTCTGTCTGGAGGCCAGAGTGAGGAGGAGGGCG
TCCATCAACCTCAATGCCATTAACAAGTGCCCCCTGTGAAGCCCTGGGCCCTGACCTTC
TCCTACGGCCGAGCCCTGCAGGCCTCTGCCCTGAAGCCCTGGGGCGGGAAGAAGGAGAAC
CTGAAGGCTGCGCAGGAGGAGTATGTCAAGCGAGCCCTGGCCAACAGCCCTTGCCTGTCAA
GGAAAGTACACTCCGAGCGGTGAGGCTGGGGCTGCTGCCAGCGAGTCCCTCTTCGTCTCT
AACCACGCCTATTAA

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Clone variation with respect to NM_000034.3



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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000034 unedited
 NTTGTCAGAAATTTGTATACGACTCACTATAGGCGGCCGGAATTCGCACGAGGATTTATT
 TCTCTTGAACCAAGGCCTCCGTCTGGATTTCCAAGGAAGAAATTCCTCTGAAGCACCGG
 AACTTGTACTACCAGCACCATGCCCTACCAATATCCAGCACTGACCCCGGAGCAGAAGA
 AGGAGCTGTCTGACATCGCTCACCGCATCGTGGCACCTGGCAAGGGCATCCTGGCTGCAG
 ATGAGTCCACTGGGAGCATTGCCAAGCGGCTGCAGTCCATTGGCACCGAGAACACCCGAGG
 AGAACCGGCGCTTCTACCGCCAGCTGCTGCTGACAGCTGACGACCGCGTGAACCCCTGCA
 TTGGGGGTGTCATCCTCTTCCATGAGACACTCTACCAGAAGGCGGATGATGGGCGTCCCT
 TCCCCAAGTTATCAAATCCAAGGGCGGTGTTGTGGGCATCAAGGTAGACAAGGGCGTGG
 TCCCCCTGGCAGGGACAAATGGCGAGACTACCACCAAGGGTTGGATGGGCTGTCTGAGC
 GCTGTGCCAGTACAAGAAGGACGGAGCTGACTTCGCAAGTGGCGTTGTGTGCTGAAGA
 TTGGGGAACACACCCCTCAGCCCTCGCCATCATGAAAATGCCAATGTTCTGGCCCGTT
 ATGCCAGTATCTGCCAGCAGAATGGCATTGTGCCATCGTGGAGCCTGAGATCCTCCCTG
 ATGGGGACCATGACTTGAAGCGTGCAGTATGTACCGAGAAGGTGCTGGCTGTGTCT
 ACAAGGCTCTGAGTGACCACCACATCTACCTGGAAGGCACCTTGCTGAAGCCACATGGG
 TACCCAGCCATGCTGCCTTTCANAAGTTCTCATGAGAGATGCCATGGCGACCGTCAAG
 CGCTGCGCCGACAGTGCCCGCTGTACTGGGACACCTTCTGTCTGAGCAGAGGN

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_000034 unedited
 TTTGAATACTGTTATTTGGCTGTGTGCCGAAAGGTGATGGACTTAGCATTACATACG
 ACACCACACACCCTGTCACGAGGGAAGAAAGAGCGGGCAAGCCAGCCTGGAGCCCCG
 AGGAGGGCGCCTCCTCTCAAGAGTGGGAGGGGGCAGGGCCTGGAGTGTGGGGCAGCC
 TGGGAACACCTCCGCTTAATAGGCGTGGTTAGAGACGAAGAGGGACTCGCTGGCAGCAGC
 CCCAGCCTGACCGCTCGGAGTGTACTTTCTTGACAGGCAAGGCTGTTGGCCAGGGCTTC
 GCTTGACATACTCCTCCTGCGCAGCCTTCAGGTTCTCCTTCTTCCCGCCCCAGGCCTTCA
 GGGCAGAGGCCTGCAGGGCTCGGCCGTAGGAGAAGGTCAGGGCCAGGGCTTCAGCAGGG
 GGCACCTTGTTAATGGCATTGAGGTTGATGGACGCCTCCTCCTCACTCTGGCCTCCAGACA
 GGAAGGTGATCCCAGTGACAGCGGGGGCAGTGTGCGGCGCATCGCTGTGACGGTCCGCCA
 TGGCAATCTCCTCATGAGAAAATTCTGAGTGAAGCATGGCCTGGGGTGACCATGTTGG
 CCTTCAGCAAGGTGCCTTCCAGGTAGATGTGGTGGTCACTCAGAGCCTTGTAGACAGCAG
 CCAGCACCTTCTCGGTACATACTGGCAGCGCTTCAAGTATGGTCCCCATCAGGGAGGA
 TCTCATGGCTCACGATGGGCACAATGCCATTCTGCTGGCAGATACTGGCATAACGGGCCA
 GAACATTGGCATTTCATGATGGCGATGGCTGAGGGGGTGTGTTCCCCCAATCTCAGCA
 CACAACGCCACTTGGCGAAAGTCAGCTCGTCTTTCTGTACTGGGCACAGCGCTCAGACA
 GNCCATCCNACCCTTGGGTGGTAGTCTCGCCCT

Restriction Sites:

NotI-NotI

ACCN:

NM_000034

Insert Size:

1530 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:	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>