

Product datasheet for SC323004

OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Aldolase (ALDOA) (NM_001127617) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Aldolase (ALDOA) (NM_001127617) Human Untagged Clone

Tag: Tag Free Symbol: ALDOA

Synonyms: ALDA; GSD12; HEL-S-87p

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >SC323004 representing NM_001127617.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGCCCTACCAATATCCAGCACTGACCCCGGAGCAGAAGAAGGAGCTGTCTGACATCGCTCACCGCATC GTGGCACCTGGCAAGGGCATCCTGGCTGCAGATGAGTCCACTGGGAGCATTGCCAAGCGGCTGCAGTCC ATTGGCACCGAGAACACCGAGGAGAACCGGCGCTTCTACCGCCAGCTGCTGACAGCTGACGACCGC GTGAACCCCTGCATTGGGGGTGTCATCCTCTTCCATGAGACACTCTACCAGAAGGCGGATGATGGGCGT CCCTTCCCCAAGTTATCAAATCCAAGGGCGGTGTTGTGGGCATCAAGGTAGACAAGGGCGTGGTCCCC CTGGCAGGGACAAATGGCGAGACTACCACCCAAGGGTTGGATGGGCTGTCTGAGCGCTGTGCCCAGTAC AAGAAGGACGGAGCTGACTTCGCCAAGTGGCGTTGTGTGCTGAAGATTGGGGAACACACCCCCTCAGCC CTCGCCATCATGGAAAATGCCAATGTTCTGGCCCGTTATGCCAGTATCTGCCAGCAGAATGGCATTGTG CCCATCGTGGAGCCTGAGATCCTCCCTGATGGGGACCATGACTTGAAGCGCTGCCAGTATGTGACCGAG AAGGTGCTGGCTGTCTACAAGGCTCTGAGTGACCACCACATCTACCTGGAAGGCACCTTGCTGAAG CCCAACATGGTCACCCCAGGCCATGCTTGCACTCAGAAGTTTTCTCATGAGGAGATTGCCATGGCGACC GTCACAGCGCTGCGCCGCACAGTGCCCCCCGCTGTCACTGGGATCACCTTCCTGTCTGGAGGCCAGAGT GAGGAGGAGGCGTCCATCAACCTCAATGCCATTAACAAGTGCCCCCTGCTGAAGCCCCTGGGCCCTGACC GCTGCGCAGGAGGAGTATGTCAAGCGAGCCCTGGCCAACAGCCTTGCCTGTCAAGGAAAGTACACTCCG AGCGGTCAGGCTGGGGCTGCCAGCGAGTCCCTCTTCGTCTCTAACCACGCCTATTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

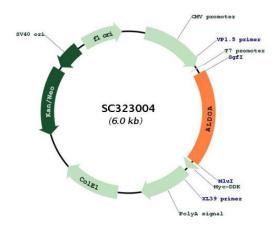
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul





Plasmid Map:



ACCN: NM_001127617

Insert Size: 1095 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).

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: 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 001127617.2

RefSeq Size:1630 bpRefSeq ORF:1095 bp

Locus ID: 226



Aldolase (ALDOA) (NM_001127617) Human Untagged Clone - SC323004

UniProt ID: P04075

Cytogenetics: 16p11.2

Protein Families: Druggable Genome

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

Pentose phosphate pathway

MW: 39.4 kDa

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 (4) differs in the 5' UTR, compared to variant 1. Variants 2, 3, 4,

7, 8, 9, and 10 encode the same isoform (1).