

Product datasheet for **RG220062**

ALDOB (NM_000035) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ALDOB (NM_000035) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ALDOB
Synonyms:	ALDB; ALDO2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG220062 representing NM_000035 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCACCGATTTCCAGCCCTCACCCAGGAGCAGAAGAAGGAGCTCTCAGAAATTGCCAGAGCATTG
TTGCCAATGAAAGGGGATCCTGGCTGCAGATGAATCTGTAGGTACCATGGGAACCGCTGCAGAGGAT
CAAGGTGAAAACACTGAAGAGAACCGCCGCGAGTTCCGAGAAATCCTTCTCTGTGGACAGTTCCATC
AACCAGAGCATCGGGGTGTGATCCTTTCCACGAGACCCTCTACCAGAAGGACAGCCAGGGAAAGCTGT
TCAGAAACATCCTCAAGGAAAAGGGGATCGTGGTGGGAATCAAGTTAGACCAAGGAGGTGCTCCTTTGC
AGGAACAAACAAAGAAACCACCATTCAAGGGCTTGATGGCCTCTCAGAGCGCTGTGCTCAGTACAAGAAA
GATGGTGTGACTTTGGGAAGTGGCGTGTGTGCTGAGGATTGCCAGCAGTGTCCATCCAGCCTCGCTA
TCCAGGAAAACGCCAACGCCCTGGCTCGCTACGCCAGCATCTGTGAGCAGAAATGGACTGGTACCTATTGT
TGAACCAGAGGTAATTCCTGATGGAGACCATGACCTGGAACACTGCCAGTATGTTACTGAGAAGGTCCTG
GCTGCTGTCTACAAGCCCTGAATGACCATCATGTTTACCTGGAGGGCACCCTGCTAAAGCCCAACATGG
TGACTGCTGGACATGCCTGCACCAAGAAGTATACTCCAGAACAAGTAGCTATGGCCACCGTAACAGCTCT
CCACCGTACTGTTCCCTGCAGCTGTTCTTGGCATCTGCTTTTGTCTGGTGGCATGAGTGAAGAGGATGCC
ACTCTCAACCTCAATGCTATCAACCTTTGCCCTTACCAAGCCCTGAAAACCTAAGTTTCTTTATGGAG
GGCCCTGCAGGCCAGTGCAGCTGGCTGCCTGGGTGGCAAGGCTGCAAAACAAGGAGGCAACCCAGGAGGC
TTTTATGAAGCGGGCCATGGCTAACTGCCAGGCGCCAAAGGACAGTATGTTACACGGGTTCTTCTGGG
GCTGCTCCACCCAGTCGCTCTTACAGCCTGCTATACCTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG220062 representing NM_000035
 Red=Cloning site Green=Tags(s)

MAHRFPALTQEKKELSEIAQSIIVANGKILAADESVGTMGNRLQRKVENTEENRRQFREILFSVDSSI
 NQSIGGVILFHETLYQKDSQGLFRNILKEKGI VVGIKLDQGGAPLAGTNKETTIQGLDGLSERCAQYKK
 DGVDFGKWRAVLRIADQCPSSLAIQENANALARYASICQQNGLVPIVEPEVIPDGDHDLHCQYVTEKVL
 AAVYKALNDHHVYLEGTL LKPNMVTAGHACTKKYTP EQVAMATVTALHRTVPAAVPGICFLSGGMSEEDA
 TLNLNAINLCPLPKPWKLSFSYGRALQASALAAWGGKAANKEATQEA FMKRAMANCQAAGQYVHTGSSG
 AASTQSLFTACYTY

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000035

ORF Size: 1092 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_000035.4](#)

RefSeq Size: 1669 bp

RefSeq ORF: 1095 bp

Locus ID: 229

UniProt ID: [P05062](#)

Cytogenetics: 9q31.1

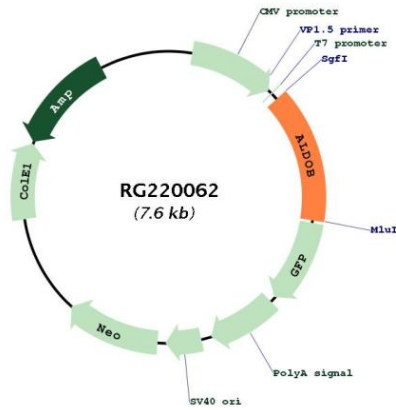
Domains: glycolytic_enzy

Protein Families: Druggable Genome

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

Gene Summary: Fructose-1,6-bisphosphate aldolase (EC 4.1.2.13) is a tetrameric glycolytic enzyme that catalyzes the reversible conversion of fructose-1,6-bisphosphate to glyceraldehyde 3-phosphate and dihydroxyacetone phosphate. Vertebrates have 3 aldolase isozymes which are distinguished by their electrophoretic and catalytic properties. Differences indicate that aldolases A, B, and C are distinct proteins, the products of a family of related 'housekeeping' genes exhibiting developmentally regulated expression of the different isozymes. The developing embryo produces aldolase A, which is produced in even greater amounts in adult muscle where it can be as much as 5% of total cellular protein. In adult liver, kidney and intestine, aldolase A expression is repressed and aldolase B is produced. In brain and other nervous tissue, aldolase A and C are expressed about equally. There is a high degree of homology between aldolase A and C. Defects in ALDOB cause hereditary fructose intolerance. [provided by RefSeq, Dec 2008]

Product images:



Circular map for RG220062