

Product datasheet for **RG224951**

ALDH1L2 (NM_001034173) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ALDH1L2 (NM_001034173) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ALDH1L2
Synonyms:	mtFDH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG224951 representing NM_001034173
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTGCGGGCGGGCAGCCAGGCGCTCCGGCGCTTCTCCACTGGCCGGGTTTATTTCAAAAACAAGCTGA
 AGTTGGCACTAATTGGCCAGAGCCTCTTTGGACAAGAAGTCTATAGCCACCTCCGCAAAGAGGGCCACCG
 AGTAGTAGGGGTGTTACAGTTCACAGATCCAGACAAGGATGGAAAAGCTGACCCTCTGGCTTTGGCTGCAGAGAAA
 GATGGGACCCCTGTGTTCAAGCTTCTAAATGGAGGGTCAAGGGCAAGACCATCAAAGAAGTGGCAGAAG
 CCTACAGATCCGTGGGTGCAGAGCTAAATGTGCTCCCTTCTGCACTCAGTTCATCCCATGGATATAAT
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 ATCAATTGGACTTAATTATGGGAGATAAGAAAGCTGGGTTTTCTGTTTTCTGGGCTGATGATGGCTTGG
 ATACAGGACCCATCCTTCTCAGAGATCATGTGATGTTGAACCAATGATACAGTGGATGCACTTTATAA
 TCGGTTTTCTTTTCTGAAGGAATCAAGGCCATGGTAGAAGCTGTCCAACCTCATAGCTGATGGAAAAGCT
 CCTCGTATACCCAGCCAGAAGAAGGGCAACATATGAAGGTATCCAGAAAAGGAAAATGCTGAGATTT
 CTTGGGACCAGTCTGCCGAAGTTTTACATAACTGGATTTCGAGGTCATGATAAAGTCCCTGGAGCTTGGAC
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 CTTGGCCCTGAAGACACACATTGGAATGTCTGTGCAAACATTAGATATTTTGTGGCTGGTGCACAAA
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 CACTCGGTGTCTGTGCCATTATTATCCCTGGAAGTACCCGCTGATGATGCTGGCATGGAAGAGTGTCTGC
 GTGTTTGGCAGCAGGCAATACCTTAGTGCTCAAGCCAGCACAGGTCACACCCCTTGACTGCTTTGAAGTTT
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 TAAACAAAGCTATGTATGTGAGTGAAGAACTGGAAGCAGGAAGTGTTTTTTAAACACATACAACAAGAC
 AGATGTGGCGGCCCATTTGGCGGAGTTAAACAATCTGGCTTTGGAAAAGACTTAGGTGAGGAAGCTCTA
 AATGAATATCTCAAACCAAGACGGTGACTGGAATAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG224951 representing NM_001034173
 Red=Cloning site Green=Tags(s)

MLRRGSQALRRFSTGRVYFKNLKLALIGQSLFGQEVYSHLRKEGHRVVGVTVPDKDGKADPLALAAEK
 DGTPVFKLPKWRVKGKTIKEVAEAYRSVGAELNLPFCTQFIPMDIIDSPKHGSIYHPSILPRHRGASA
 INWTLIMGDKKAGFSVFWADDGLDTGPILLQRSCDVEPNDTVDALYNRFLFPEGIKAMVEAVQLIADGKA
 PRIPQPEEGATYEGIQKKENAEISWDQSAEVLHNWIRGHDKVPGAWTEINGQMVTFYGSTLLNSSVPPGE
 PLEIKGAKKPLVTKNGLVLFNGDGKALTVRNLQFEDGKMIPASQYFSTGETSVVELTAEVVKVAETIKV
 IWAGILSNVPIIEDSTDFFKSGASSMDVARLVEEIRQKCGGLQLQNEDEVYMATKFEFGIQKVVVRKLRGED
 QEVELVVDYISKEVNEIMVKMPYQCFINGQFTDADDGKTYDTINPTDGGSTICKVSYASLADVDKAVAAAK
 DAFENGEWGRMNARERGLMYRLADLLEENQEELATIEALDSGAVYTLALKTHIGMSVQTFRYFAGWCDK
 IQGSTIPINQARPNRNLTFKKEPLGVCAIIPWNYPLMMLAWKSAACLAAGNTLVLKPAQVTPLTALKF
 AELSVKAGFPKGVINIIPGSGGIAGQRLSEHPDIRKLGFTGSTPIGKQIMKSCAVSNLKKVSLLEGGKSP
 LIIFNDCELDKTVRMGMGAVFFNKGENCIAAGRLFVEESIHFVTRVVEEIKMKIGDPLDRSTDHGPQ
 NHKAHLEKLLQYCETGVKEGATLVYGGQVQRPGFMEPTVFTDVEDYMYLAKEESFGPIMVISKFQNGD
 IDGVLQRANSTEYGLASGVFTRDINKAMYVSEKLEAGTVFINTYNKTDVAAPFGGVKQSGFGKDLGEEAL
 NEYLKTKTVTLEY

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

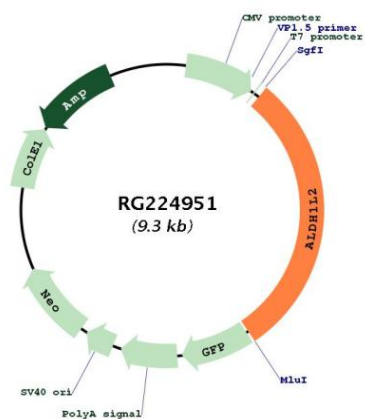
Cloning Scheme:



ACCN: NM_001034173

ORF Size:	2769 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:	<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_001034173.1 , NP_001029345.1
RefSeq Size:	2796 bp
RefSeq ORF:	2772 bp
Locus ID:	160428
UniProt ID:	Q3SY69
Cytogenetics:	12q23.3
Protein Families:	Druggable Genome
Gene Summary:	This gene encodes a member of both the aldehyde dehydrogenase superfamily and the formyl transferase superfamily. This member is the mitochondrial form of 10-formyltetrahydrofolate dehydrogenase (FDH), which converts 10-formyltetrahydrofolate to tetrahydrofolate and CO ₂ in an NADP(+)-dependent reaction, and plays an essential role in the distribution of one-carbon groups between the cytosolic and mitochondrial compartments of the cell. Alternatively spliced transcript variants have been found for this gene.[provided by RefSeq, Oct 2010]

Product images:



Circular map for RG224951