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Product datasheet for RG200648

Aldehyde dehydrogenase 10 (ALDH3A2) (NM_001031806) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aldehyde dehydrogenase 10 (ALDH3A2) (NM_001031806) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Aldehyde dehydrogenase 10
Synonyms:	ALDH10; FALDH; SLS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>RG200648 representing NM_001031806
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGCTCGAAGTCCGGCGGGTCCGACAGGCGTTCCTGTCCGGCCGGTCGCGACCTCTGCGGTTTCGGC
TGCAGCAGCTGGAGGCCCTGCGGAGGATGGTGCAGGAGCGCGAGAAGGATATCCTGACGGCCATCGCCGC
CGACCTGTGCAAGAGTGAATTCAATGTGTACAGTCAGGAAGTCATTACTGTCCTTGGGGAAATTGATTTT
ATGCTTGAGAATCTTCCTGAATGGGTTACTGCTAAACCAGTTAAGAAGAACGTGCTCACCATGCTGGATG
AGGCCTATATTCAGCCACAGCCTCTGGGAGTGGTGCTGATAATCGGAGCTTGGAATTACCCCTTCGTTCT
CACCATTCAGCCACTGATAGGAGCCATCGCTGCAGGAAATGCTGTGATTATAAAGCCTTCTGAACTGAGT
GAAAATACAGCCAAGATCTTGGCAAAGCTTCTCCCTCAGTATTTAGACCAGGATCTCTATATTGTTATTA
ATGGTGGTGTTGAGGAAACCACGGAGCTCCTGAAGCAGCGATTTGACCACATTTTCTATACGGGAAACAC
TGCGGTTGGCAAAATTGTCATGGAAGCTGCTGCCAAGCATCTGACCCCTGTGACTCTTGAACTGGGAGGG
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ACATGAATTGTGGCCAAACCTGCATTGCACCCGACTATATTCTCTGTGAAGCATCCCTCCAAAATCAAAT
TGTATGGAAGATTAAGGAAACAGTGAAGGAATTTTATGGAGAAAATATAAAAGAGTCTCCTGATTATGAA
AGGATCATCAATCTTCGTCATTTTAAGAGGATACTAAGTTTGCTTGAAGGACAAAAGATAGCTTTTGGTG
GGGAGACTGATGAGGCCACACGCTACATAGCCCCAACAGTACTTACCGATGTTGATCCTAAAACCAAGGT
GATGCAAGAAGAAATTTTTGGACCAATTCTTCCAATAGTGCCTGTGAAAAATGTAGATGAGGCCATAAAT
TTCATAAATGAACGTGAAAAGCCTCTGGCTCTTTATGTATTTTCGCATAACCATAAGCTCATCAAACGGA
TGATTGATGAGACATCCAGTGGAGGTGTCACAGGCAATGACGTCATTATGCACTTCACGCTCAACTCTTT
CCCATTTGGAGGAGTGGGTTCCAGTGGGATGGGAGCTTATCACGGAAAACATAGTTTTGATACTTTTTCT
CATCAGCGTCCCTGTTTATTAAAAAGTTTAAAGAGAGAAGGTGCTAACAAACTCAGATATCCTCCCAACA
GCCAGTCAAAGGTGGATTGGGGAAAATTTTTTCTCTTGAAACGGTTCAACAAAGAAAAACTCGGTCTCCT
GTTGCTCACTTTCCTGGGTATTGTAGCCGCTGTGCTTGTCAAGAAATACCAAGCTGTGCTGAGGAGAAAG
GCCCTGTTGATTTTTCTGGTAGTTCACAGACTGCGTTGGTCCAGTAAGCAGAGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

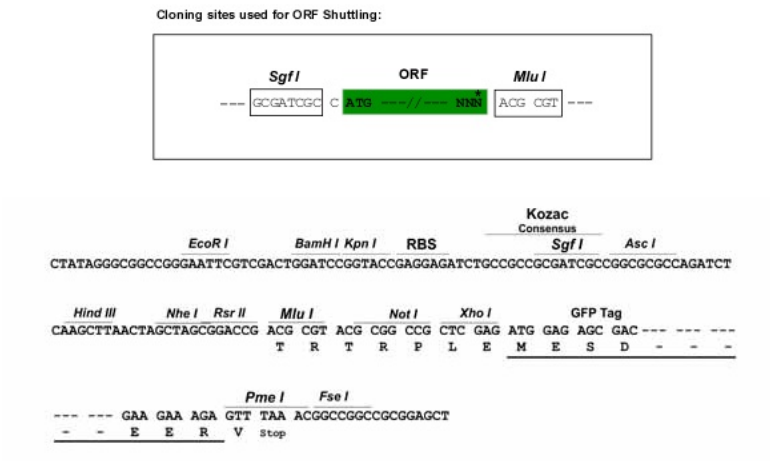
>RG200648 representing NM_001031806
Red=Cloning site Green=Tags(s)

MELEVRRVRQAFLSGRSRPLRFRLQQLEALRRMVQEREKDILTAIAADLCKSEFNVYSQEVITVLGEIDF
MLENLPEWVTAKPVKKNVLTMLDEAYIQPQPLGVVLIIGAWNYPFVLTIQPLIGAIAAGNAVIIKPSELS
ENTAKILAKLLPQYLDQDLYIVINGGVEETTELLKQRFDHIFYTGNTAVGKIVMEAAAKHLTPVTLELGG
KSPCYIDKDCDLDIVCRRITWGKYMNCGQTCIAPDYILCEASLQNQIVWKIKETVKEFYGENIKESPDYE
RIINLRHFKRILSLLEGQKIAFGGETDEATRYIAPTVLTDVDPKTKVMQEEIFGPILPIVPVKNVDEAIN
FINEREKPLALYVFSHNHKLIKRMIDETSSGGVTGNDVIMHFTLNSFPFGGVGSSGMGAYHGKHSFDTFS
HQRPCLLKSLKREGANKLRYPPNSQSKVDWGKFFLLKRFNKEKLGLLLLTFLGIVAAVLVKKYQAVLRRK
ALLIFLVVHRLRWSSKQR

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



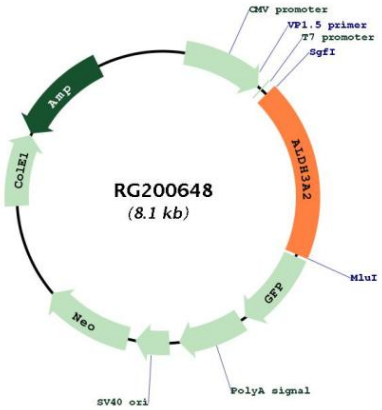
ACCN:	NM_001031806
ORF Size:	1524 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its 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.
RefSeq:	NM_001031806.2
RefSeq Size:	3823 bp
RefSeq ORF:	1527 bp
Locus ID:	224
UniProt ID:	P51648
Cytogenetics:	17p11.2

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Arginine and proline metabolism, Ascorbate and aldarate metabolism, beta-Alanine metabolism, Butanoate metabolism, Fatty acid metabolism, Glycerolipid metabolism, Glycolysis / Gluconeogenesis, Histidine metabolism, Limonene and pinene degradation, Lysine degradation, Metabolic pathways, Propanoate metabolism, Pyruvate metabolism, Tryptophan metabolism, Valine, leucine and isoleucine degradation

Gene Summary: Aldehyde dehydrogenase isozymes are thought to play a major role in the detoxification of aldehydes generated by alcohol metabolism and lipid peroxidation. This gene product catalyzes the oxidation of long-chain aliphatic aldehydes to fatty acid. Mutations in the gene cause Sjogren-Larsson syndrome. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG200648