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Product datasheet for RG228913

ALDH3B1 (NM_001161473) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ALDH3B1 (NM_001161473) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ALDH3B1
Synonyms:	ALDH4; ALDH7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>RG228913 representing NM_001161473
Red=Cloning site Blue=ORF Green=Tags(s)

GACGTTGTATACGACTCCTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGGCGCGCCC

ATGGACCCCCTTGGGGACACGCTGCGGCGACTGCGGGAGGCCTTCCACGCGGGGCGCACGCGGCCAGCTG
AGTTCCGGGCTGCGCAGCTCCAAGGCCTGGGCCGCTTCCTGCAAGAAAACAAGCAGCTTCTGCACGACGC
ACTGGCCCAGGACCTGCACAAGTCAGCCTTCGAGTCGGAGGTGTCTGAGGTTGCCATCAGCCAGGGCGAG
GTCACCCTGGCCCTCAGGAACCTCCGGGCCTGGATGAAGGACGAGCGTGTGCCCAAGAACCTGGCCACGC
AGCTGGACTCCGCCTTCATCCGGAAGGAGCCCTTTGGCCTGGTCCTCATCATTGCGCCCTGGAACTATCC
GCTGAACCTGACGCTGGTGCCCCTCGTGGGAGCCCTCGCTGCAGGGAACTGTGTGGTGCTGAAGCCATCG
GAGATTAGCAAGAACGTCGAGAAGATCCTGGCCGAGGTGCTGCCCCAATACGTGGACCAGAGCTGCTTTG
CTGTGGTGCTGGGCGGGCCCCAGGAGACGGGGCAGCTGCTAGAGCACAGGTTCGACTACATCTTCTTCAC
AGGGAGCCCTCGTGTGGGCAAGATTGTTATGACTGCTGCCGCCAAGCACCTGACACCTGTCACCCTGGAG
CTGGGGGGCAAGAACCCTTGCTACGTGGACGACAACTGCGACCCCCAGACCGTGGCCAACCGCGTGGCCT
GGTTCCGCTACTTCAACGCCGGCCAGACCTGCGTGGCCCCCGACTACGTCCTATGCAGCCCTGAGATGCA
GGAGAGGCTGCTGCCTGCCCTGCAGAGCACCATCACCCGTTTCTATGGCGACGACCCCCAGAGCTCCCCA
AACCTGGGCCGCATCATCAACCAGAAACAGTTCCAGCGGCTGCGGGCATTGCTGGGCTGCGGCCGTGTGG
CCATTGGGGGCCAGAGCGATGAGAGCGATCGCTACATCGCCCCCACGGTGCTGGTGGATGTGCAGGAGAT
GGAGCCTGTGATGCAGGAGGAGATCTTCGGGCCCATCCTGCCCATCGTGAACGTGCAGAGCTTGGACGAG
GCCATCGAGTTCATCAACCGGCGGGAGAAGCCCCTGGCCCTGTACGCCTTCTCCAACAGCAGCCAGGTGG
TCAAGCGGGTGCTGACCCAGACCAGCAGCGGGGGCTTCTGTGGGAACGACGGCTTCATGCACATGACCCT
GGCCAGCCTGCCTTTTGGAGGAGTGGGTGCCAGTGGGATGGGCCGGTACCATGGCAAGTTCTCCTTCGAC
ACCTTCTCCCACCATCGCGCCTGCCTCCTGCGCAGCCCGGGGATGGAGAAGCTCAACGCCCTCCGCTACC
CGCCGCAATCGCCGCGCCGCCTGAGGATGCTGCTGGTGGCCATGGAGGCCCAAGGCTGCAGCTGCACACT
GCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

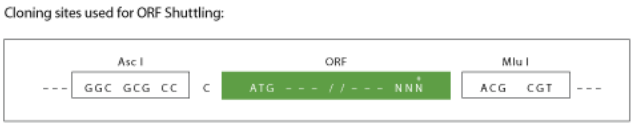
>RG228913 representing NM_001161473
Red=Cloning site Green=Tags(s)

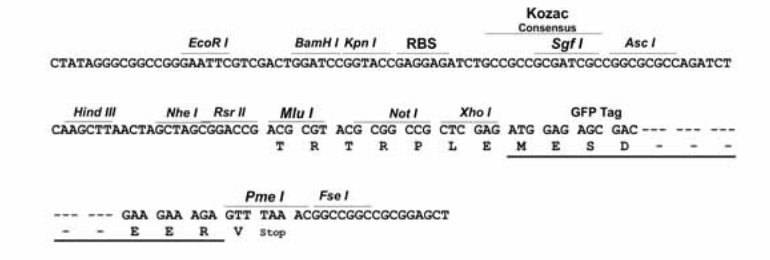
MDPLGDTLRRLREAFHAGRTRPAEFRAAQLQGLGRFLQENKQLLHDALAQDLHKSAFESEVSEVAISQGE
VTLALRNLRAWMKDERVPKNLATQLDSAFIRKEPFGLVLIIAPWNYPLNLTLVPLVGALAAGNCVVLKPS
EISKNVEKILAEVLPQYVDQSCFAVVLGGPQETGQLLEHRFDYIFFTGSPRVGKIVMTAAAKHLTPVTLE
LGGKNPCYVDDNCDPQTVANRVAWFRYFNAGQTCVAPDYVLCSPEMQERLLPALQSTITRFYGDDPQSSP
NLGRIINQKQFQRLRALLGCGRVAIGGQSDESDRYIAPTVLVDVQEMEPVMQEEIFGPILPIVNVQSLDE
AIEFINRREKPLALYAFSNSSQVVKRVLTQTSSGGFCGNDGFMHMTLASLPFGGVGASGMGRYHGKFSFD
TFSHHRACLLRSPGMEKLNALRYPPQSPRRLRMLLVAMEAQGCSCTLL

TRTRPLE - GFP Tag - V

Restriction Sites: AscI-MluI

Cloning Scheme:





ACCN:	NM_001161473
ORF Size:	1404 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_001161473.3
RefSeq Size:	2899 bp
RefSeq ORF:	1407 bp
Locus ID:	221
UniProt ID:	P43353

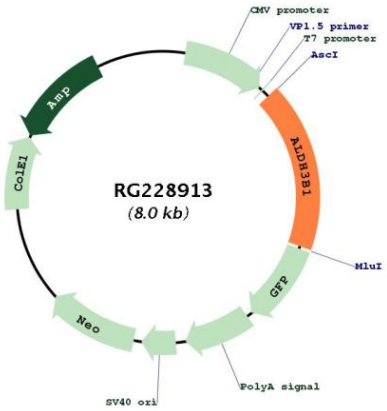
Cytogenetics: 11q13.2

Protein Families: Druggable Genome

Protein Pathways: Drug metabolism - cytochrome P450, Glycolysis / Gluconeogenesis, Histidine metabolism, Metabolic pathways, Metabolism of xenobiotics by cytochrome P450, Phenylalanine metabolism, Tyrosine metabolism

Gene Summary: This gene encodes a member of the aldehyde dehydrogenase protein family. Aldehyde dehydrogenases are a family of isozymes that may play a major role in the detoxification of aldehydes generated by alcohol metabolism and lipid peroxidation. The encoded protein is able to oxidize long-chain fatty aldehydes in vitro, and may play a role in protection from oxidative stress. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2014]

Product images:



Circular map for RG228913