

## Product datasheet for **RG237071**

### ALDH3B1 (NM\_001290059) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ALDH3B1 (NM_001290059) 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)
ORF Nucleotide Sequence:	>RG237071 representing NM_001290059. Blue=ORF Red=Cloning site Green=Tag(s)

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GTGAACCGTCAGAAATTTTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCTGACTGGATCCGGTA
CCGAGGAGATCTGCCGCCGCGATCGCCGGCGCGCCC
ATGACTGCTGCCGCAAGCACCTGACACCTGTACCCTGGAGCTGGGGGCAAGAACCCTTGCTACGTG
GACGACAACTGCGACCCCGACCCGTGGCCAACCGCGTGGCTGGTTCCGCTACTTCAACGCCGGCCAG
ACCTGCGTGGCCCCGACTACGTCCTATGCAGCCCTGAGATGCAGGAGAGGCTGCTGCCTGCCCTGCAG
AGCACCATCACCCGTTTCTATGGCGACGACCCCGAGAGCTCCCCAAACCTGGGCCGCATCATCAACCAG
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AGCGATCGCTACATCGCCCCACGGTGTGGTGGATGTGCAGGAGATGGAGCCTGTGATGCAGGAGGAG
ATCTTCGGGCCCATCCTGCCCATCGTGAACGTGCAGAGCTTGGACGAGGCCATCGAGTTCATCAACCCGG
CGGGAGAAGCCCCGTGCCCTGTACGCCTTCTCCAACAGCAGCCAGGTGGTCAAGCGGGTGTGACCCAG
ACCAGCAGCGGGGCTTCTGTGGGAACGACGGCTTCATGCACATGACCCTGGCCAGCCTGCCTTTTGA
GGAGTGGGTGCCAGTGGGATGGGCCGGTACCATGGCAAGTTCTCCTTCGACACCTTCTCCACCATCGC
GCCTGCCTCCTGCGCAGCCCGGGATGGAGAAGCTCAACGCCCTCCGCTACCCGCCGAATCGCCGCGC
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC

```



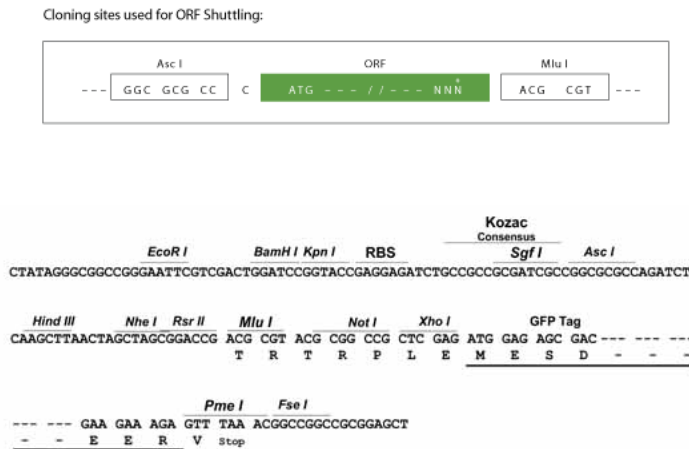
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**Protein Sequence:** >Peptide sequence encoded by RG237071  
 Blue=ORF Red=Cloning site Green=Tag(s)

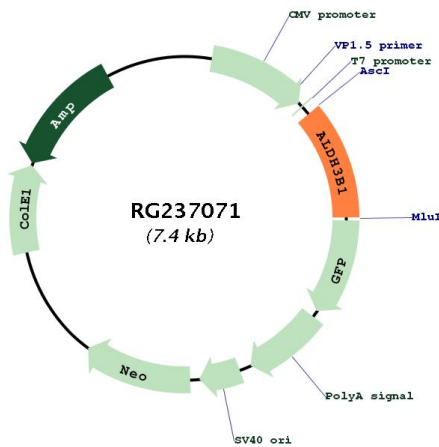
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 STITRFYGGDDPQSSPNLGRINQKQFQRLRALLGCRVAIGGQSDSDRYIAPTVLVDVQEMEPVMQEE  
 IFGPILPIVNVQSLDEAIEFINRREKPLALYAFSNSSQVVKRVLQTSSGGFCGNDGFMHMTLASLFPFG  
 GVGASGMGRYHGKFSFDTFSHHRACLLRSPGMEKLNALRYPPQSPRRLRMLLVAMEAQGCSTLL  
**TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV**  
 MGYGFYHFGTYPSTYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRSNAIVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSTMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** AscI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001290059

<b>ORF Size:</b>	816 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>RefSeq:</b>	<a href="#">NM_001290059.2</a>
<b>RefSeq Size:</b>	2774 bp
<b>RefSeq ORF:</b>	819 bp
<b>Locus ID:</b>	221
<b>UniProt ID:</b>	<a href="#">P43353</a>
<b>Cytogenetics:</b>	11q13.2
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Drug metabolism - cytochrome P450, Glycolysis / Gluconeogenesis, Histidine metabolism, Metabolic pathways, Metabolism of xenobiotics by cytochrome P450, Phenylalanine metabolism, Tyrosine metabolism
<b>MW:</b>	30.5 kDa
<b>Gene Summary:</b>	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]