

Product datasheet for **RG214075**

15 Lipoxygenase 2 (ALOX15B) (NM_001039131) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	15 Lipoxygenase 2 (ALOX15B) (NM_001039131) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	15 Lipoxygenase 2
Synonyms:	15-LOX-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG214075 representing NM_001039131
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCCGAGTTCAGGGTCAGGGTGTCCACCGGAGAAGCCTTCGGGGCTGGCACATGGGACAAAGTGTCTG
 TCAGCATCGTGGGACCCGGGGAGAGAGCCCCACTGCCCTGGACAATCTCGGCAAGGAGTTCAGTGC
 GGGCGCTGAGGAGGACTTCCAGGTGACGCTCCCGGAGGACGTAGGCCGAGTGTCTGCTGCTGCGCGTGCAC
 AAGGCGCCCCAGTGTGCCCTGCTGGGGCCCTGGCCCCGGATGCCTGGTTCTGCCGCTGGTTCCAGC
 TGACACCGCCCGGGGGGCCACCTCCTCTCCCTGCTACCAGTGGCTGGAGGGGGCGGGACCCTGGT
 GCTGCAGGAGGTACAGCCAAGGTGTCTGGGCAGACCACCACCTGTGCTCCAGCAACAGCGCCAGGAG
 GAGCTTACGGCCCGCAGGAGATGTACCAGTGAAGGCTTACAACCCAGGTTGGCCTCACTGCCTGGATG
 AAAAGACAGTGAAGACTTGAGCTCAATATCAAATACTCCACAGCCAAGAATGCCAACTTTTATCTACA
 GGCTGGCTCTGCTTTTGCAGAGATGAAAATCAAGGGGTTGCTGGACCGCAAGGGGCTCTGGAGGAGTCTG
 AATGAGATGAAAAGGATCTTCAACTTCCGAGGACCCAGCAGCTGAGCACGCATTTGAGCACTGGCAGG
 AGGACGCCTTCTCGCCTCCCAGTTCCTGAATGGTCTCAACCCTGTCTGATCCGCCGCTGTCACTACCT
 CCCAAAGAACTTCCCGTCACTGATGCCATGGTGGCCTCAGTGTGGGTCTGGGACCAGCTTGCAGGCT
 GAGCTAGAGAAGGGCTCCCTGTTCTTGGTGGATCACGGCATCCTCTCTGGCATCCAGACCAATGTCATTA
 ATGGGAAGCCTCAGTTCCTGCGGCCCAATGACCCTGTATACCAGAGCCCAGGCTGCGGGCCGCTGCT
 GCCTCTCGCCATCCAGCTCAGCCAGACCCCGGCCAAACAGCCCCATCTTCTGCCACTGATGACAAG
 TGGGACTGGTTGCTGGCCAAGACCTGGGTGCGCAATGCCGAGTTCCTTCCATGAGGCCCTCACGCACC
 TGCTGCACCTCACATCTGCTGCCTGAGGTCTTACCCTGGTACCCTGCGTCAGCTGCCACTGCCACCC
 TCTCTTCAAGTCCACAGGCATCGGCATTGAAGGCTTCTCTGAGTTGATACAGAGGAACATGAAGCAGCTG
 AACTATTCTCTCCTGTGTCTGCCTGAGGATATCCGGACCCGAGGAGTTGAAGACATCCCAGGCTACTACT
 ACCGTGATGATGGGATGCAGATCTGGGGTATACCCTCCTCACTGGAGACCCGGGAAGCCCTGGTGCAGTA
 TGTACCATGGTATTCACCTGCTCCGCCAAGCATGCGGCTGTGAGTGCAGGGCAGTTTGACTCCTGT
 GCTTGGATGCCCAACCTGCCACCAGCATGCAGCTGCCACCACCCACCTCCAAAGGCTGGCAACATGCG
 AGGGCTTCATAGCCACCTCCCACCTGTCAATGCCACATGTGATGTCATCCTTGTCTCTGGTTGCTGAG
 CAAGGAGCCTGGAGACCAAGGCCCTGGGCACCTATCCGGATGAGCACTTACAGAGGAGGCCCTCGG
 CGGAGCATCGCCACCTTCCAGAGCCGCTGGCCAGATCTCGAGGGGCATCCAGGAGCGGAACCAGGGCC
 TGGTGTGCCCTACACCTACCTAGACCCTCCCCTCATCGAGAACAGCGTCTCCATC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG214075 representing NM_001039131
 Red=Cloning site Green=Tags(s)

MAEFRVRVSTGEAFGAGTWDKVSIVGTRGESPLPLDNLGKEFTAGAEEDFQVTLPEDEVGRVLLLRVH
 KAPPVLPPLGPLAPDAWFCRWFQLTPPRGGHLLFPCYQWLEGAGTLVLQEGTAKVSWADHHPVLQQQRQE
 ELQARQEMYQWKAYNPGWPHCLDEKTVEDELELNKYSTAKNANFYLQAGSAFAEMKIKGLLDRKGLWRS
 L NEMKRIFNFRRTPAAEHAFEHWQEDAFFASQFLNGLNPVLIRRCHYLPKNFPVTDAMVASVLP
 GPGTSLQA ELEKGSFLVDHGILSGIQTNVINGKPFSAAPMTLLYQSPGCGPLPLAIQLSQT
 PGPNSPIFLPTDDKWDWLLAKTWVRNAEFSFHEALTHLLHSHLLPEVFTLATLRQLPHCHPLFKST
 GIGIEGFSELIQRNMKQLNYSLLCLPEDIRTRGVEDIPGYYYRDDGMQIWGIPSSLETREALVQYV
 TMVIFTCSAKHAAVSAGQFDSCAWMPNLPSPMQLPPPTSKGLATCEGFIATLPPVNATCDVILALWLL
 SKEPGDQRPLGTYPDEHFTEEAPRRSIATFQSRLAQISRGIQERNQGLVLPYTYLDPPLIENSYSI

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_001039131

ORF Size: 1806 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_001039131.2](#)

RefSeq Size: 2508 bp

RefSeq ORF: 1809 bp

Locus ID: 247

UniProt ID: [O15296](#)

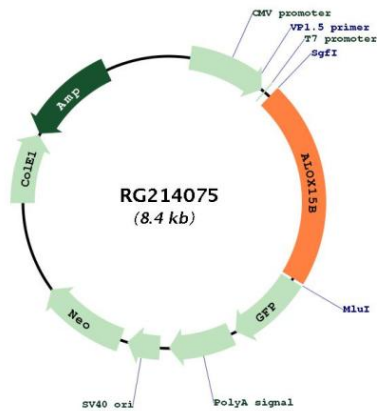
Cytogenetics: 17p13.1

Protein Families: Druggable Genome

Protein Pathways: Arachidonic acid metabolism, Metabolic pathways

Gene Summary: This gene encodes a member of the lipoxygenase family of structurally related nonheme iron dioxygenases involved in the production of fatty acid hydroperoxides. The encoded protein converts arachidonic acid exclusively to 15S-hydroperoxyeicosatetraenoic acid, while metabolizing linoleic acid less effectively. This gene is located in a cluster of related genes and a pseudogene that spans approximately 100 kilobases on the short arm of chromosome 17. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG214075