

Product datasheet for **RG210211**

12 Lipoxygenase (ALOX12) (NM_000697) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	12 Lipoxygenase (ALOX12) (NM_000697) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	12 Lipoxygenase
Synonyms:	12-LOX; 12S-LOX; LOG12
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG210211 representing NM_000697
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGCCGCTACCGCATCCGCGTGGCCACCGGGGCTGGCTCTTCTCCGGTTCGTAACAACCGCTGCAGC
 TTTGGCTGGTCGGGACGCGCGGGGAGCGGAGCTGGAGCTGCAGCTGCGGCCGGCGGGGCGAGGAGGA
 GGAGTTTGATCATGACGTTGACAGGACTTGGGGCTCCTGCAGTTCGTGAGGCTGCGCAAGCACCCTGG
 CTGGTGGACGACGCGTGGTTCTGCGACCGCATCACGGTGCAGGGCCCTGGAGCCTGCGCGGAGGTGGCT
 TCCCGTGTACCGCTGGGTGCAGGGCGAGGACATCCTGAGCCTGCCCCAGGGCACCGCCCGCTGCCAGG
 AGACAATGCTTTGGACATGTTCCAGAAGCATCGAGAGAAGGAAGTAAAGACAGACAGCAGATCTACTGC
 TGGGCCACCTGGAAGGAAGGGTTACCCCTGACCATCGCTGCAGACCGTAAGGATGATCTACCTCAAATA
 TGAGATTCATGAGGAGAAGAGGCTGGACTTTGAATGGACTGAAGGCAGGGGCTCTGGAGATGGCCCT
 CAAACGTGTTTACACCCTCCTGAGCTCCTGGAAGTGCCTAGAAGACTTTGATCAGATCTTCTGGGGCCAG
 AAGAGTGCCTGGCTGAGAAGGTTCCGCAAGTGGCAGGATGATGAGTTGTTACAGTACCAAGTTCCTCA
 ATGGTGCCAAACCCATGCTGTTGAGACGCTCGACCTCTGCCCCTCCAGGCTAGTGTGCCCTCAGGGAT
 GGAAGAGCTTCGGGCTCAACTGGAGAAAGAACTTCAGAATGGTCCCTGTTTGAAGCTGACTTATCCTT
 CTGGATGGAATTCAGCCAACGTGATCCGAGGAGAGAAGCAATACCTGGCTGCCCCCTCGTTATGCTGA
 AGATGGAGCCCAATGGGAAGCTGCAGCCATGGTCATCCAGATTCAGCCTCCCAACCCAGCTCTCCAAC
 CCCAACTGTTCTGCCCTCAGACCCCACTTGCTGGCTCCTGGCAAAGTCTGGGTCGAAATTCAG
 GATTTCCAACGCACGAGATCCAGTATCACTTGCTGAACACGCACCTGGTGGCTGAGTGCATCGCTGTGC
 CCACCATGCGGTGCCTCCAGGACTGCACCCATCTTCAAGTTCCTGATCCCCATATCCGCTACACCAT
 GGAAATCAACACCCGGGCGGACCCAACTCATCTCAGATGGAGGAATTTTGGATAAGGCAGTGAGCACA
 GGTGGAGGGGCCATGTACAGTTGCTCCGTGCGGCGGAGCTCAGCTGACCTACTGCTCCCTCTGTCCCTC
 CTGACGACCTGGCTGACCGGGGCTGCTGGGACTCCCAGGTGCTCTATGCCCATGATGCTTTACGGCT
 CTGGGAGATCATTGCCAGGTATGTGGAGGGATCGTCCACCTCTTCTACCAGAGGGATGACATAGTGAAG
 GGGGACCCTGAGCTGCAGGCTGGTGTGCGGAGATCACGGAGGTGGGCTGTGCCAGGCCAGGACCGAG
 GTTCCCTGTCTCCTCCAGTCCAGAGTCAACTCTGCCATTTCTCACCATGTGCGTCTTACGTGCAC
 TGCCAGCATGCCGCATCAACCAGGGCCAGCTGGACTGGTATGCCTGGTCCCTAATGCTCCATGCACA
 ATGCGGATGCCCCACCCACCACCAAGGAAGATGTGACGATGGCCACAGTATGGGGTCACTACCTGATG
 TCCGGCAGGCCTGTCTTCAAATGGCCATCTCATGGCATCTGAGTCGCCCGCCAGCCAGACATGGTGCCTCT
 GGGCACCAAAAGAAAAATTTCTCAGGCCCAAGCCAAAGCTGTGCTAAACCAATCCGAACAGAT
 TTGAAAAGCTGGAAAAGGAGATTACAGCCCGGAATGAGCAACTTACTGGCCCTATGAATATCTGAAGC
 CCAGCTGCATAGAGAACAGTGTCAACATC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

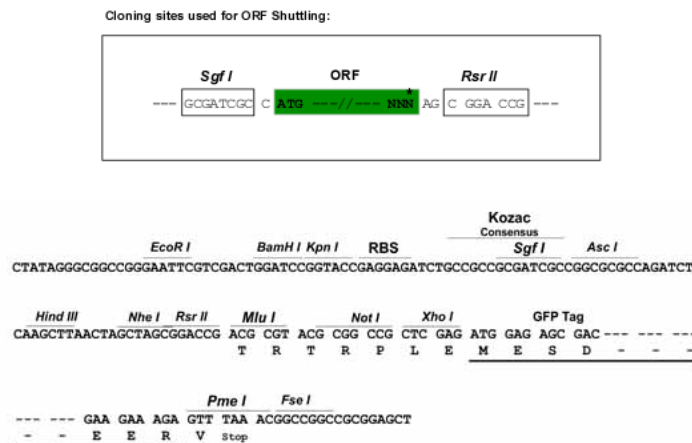
Protein Sequence: >RG210211 representing NM_000697
 Red=Cloning site Green=Tags(s)

MGRYRIRVATGAWLFSGSYNRVQLWLVGTRGEAELELQLRPARGEEEFDHDVAEDLGLLQFVRLRKHHW
 LVDDAWFCDRITVQPGACA EVAFP CYRWVQGEDILSLPEGTARLPGDNALDMFQKHREKELKDRQQIYC
 WATWKEGLPLTIAADRKDDLPPNMRFHEEKRLDFEWTLKAGALEMALKRVTLLSSWNCLEDFDQIFWGQ
 KSALAEKVRQCWQDDELFSYQFLNGANPMLLRSTSLPSRLVLP SGMEELRAQLEKELQNGSLFEADFIL
 LDGIPANVIRGEKQYLAAPLVMLKMEPNGKLQPMVIQIQPPNPSSPTPTLFLPSDPPPLAWLLAKSWVRNS
 DFQLHEIQYHLLNTHLVAEVI AVATMRCLPGLHP IFKFLIPHIRYTMETRARTQLISDGGIFDKAVST
 GGGGHVQLLRRAAQLTYCSLCPDDLADRGLLGLPGALYAHDALRLWEIIARYVEGIVHLFYQRDDIVK
 GDPELQAWCREITEVGLCQAQDRGFPVSFQSQSQLCHFLTMCVFTCTAQHAAINQQLDWYAWVPNAPCT
 MRMPPTTKEDVTMATVMGSLPDV RQACLQMAISWHL SRRQPMVPLGHHKEKYFSGPKPKAVLNQFRTD
 LEKLEKEITARNEQLDWPYEYLPKSCIENSVTI

SGPTRRRLE - GFP Tag - V

Restriction Sites: SgfI-RsrII

Cloning Scheme:

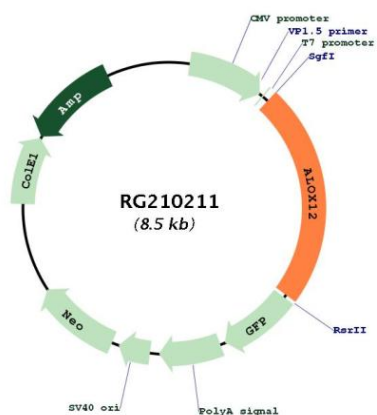


ACCN: NM_000697

ORF Size: 1989 bp

OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
OTI Annotation:	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
Components:	<p>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).</p>
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:	<p>NM_000697.1, NP_000688.1</p>
RefSeq Size:	<p>2335 bp</p>
RefSeq ORF:	<p>1992 bp</p>
Locus ID:	<p>239</p>
UniProt ID:	<p>P18054</p>
Cytogenetics:	<p>17p13.1</p>
Protein Families:	<p>Druggable Genome</p>
Protein Pathways:	<p>Arachidonic acid metabolism, Metabolic pathways</p>
Gene Summary:	<p>This gene encodes a member of the lipoxygenase family of proteins. The encoded enzyme acts on different polyunsaturated fatty acid substrates to generate bioactive lipid mediators including eicosanoids and lipoxins. The encoded enzyme and its reaction products have been shown to regulate platelet function. Elevated expression of this gene has been observed in pancreatic islets derived from human diabetes patients. Allelic variants in this gene may be associated with susceptibility to toxoplasmosis. Multiple pseudogenes of this gene have been identified in the human genome. [provided by RefSeq, Aug 2017]</p>

Product images:



Circular map for RG210211