

Product datasheet for **RC206621**

ALOX15 (NM_001140) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ALOX15 (NM_001140) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ALOX15
Synonyms:	12-LOX; 15-LOX; 15-LOX-1; LOG15
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RC206621 representing NM_001140
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGGTCTCTACCGCATCCGCGTGTCCACTGGGGCCTCGTCTATGCCGGTTCCAACAACCAGGTGCAGC
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Protein Sequence: >RC206621 representing NM_001140
 Red=Cloning site Green=Tags(s)

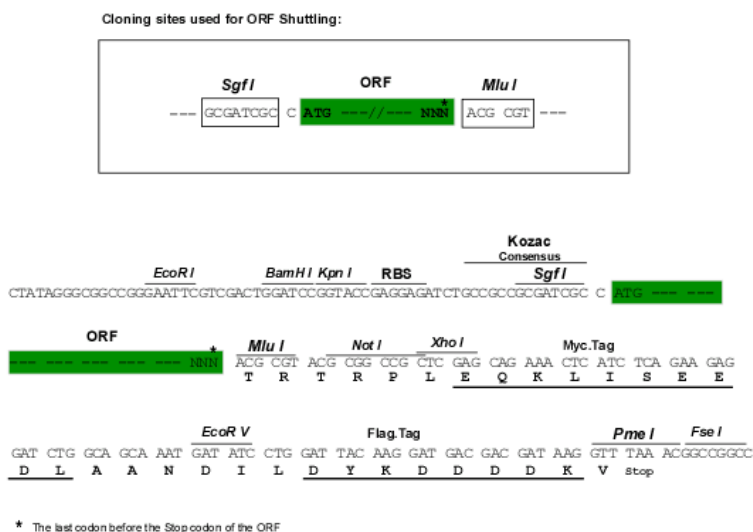
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 QSKLAERV RDSWKEDALFGYQFLNGANPVVLRSAHL PARLVFP PGMEE LQAQLEKELEGGTLFEADFSL
 LDGIKANVILCSQQHLAAPLVMLKLPDGLKLLPMVIQLQLPRTGSPPPPLFLPTDPPMAWLLAKCWVRSS
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 AALDKIEIRNAKLDMPYEYLRPSVVENSVAI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2553_c09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001140

ORF Size: 1986 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001140.2](#)

RefSeq Size: 2707 bp

RefSeq ORF: 1989 bp

Locus ID: 246

UniProt ID: [P16050](#)

Cytogenetics: 17p13.2

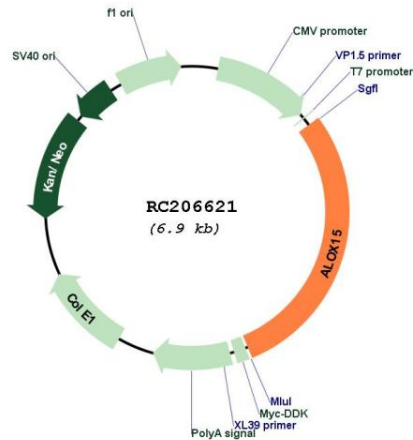
Protein Families: Druggable Genome

Protein Pathways: Arachidonic acid metabolism, Linoleic acid metabolism, Metabolic pathways

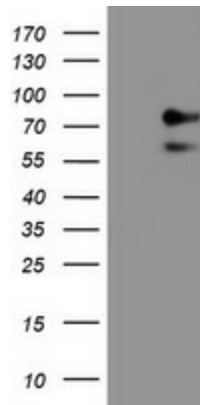
MW: 74.6 kDa

Gene Summary: This gene encodes a member of the lipoxygenase family of proteins. The encoded enzyme acts on various polyunsaturated fatty acid substrates to generate various bioactive lipid mediators such as eicosanoids, hepoxilins, lipoxins, and other molecules. The encoded enzyme and its reaction products have been shown to regulate inflammation and immunity. Multiple pseudogenes of this gene have been identified in the human genome. [provided by RefSeq, Aug 2017]

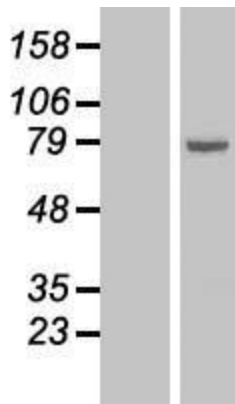
Product images:



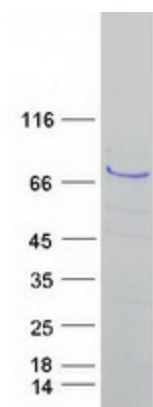
Circular map for RC206621



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ALOX15 (Cat# RC206621, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ALOX15 (Cat# [TA504358]). Positive lysates [LY400456] (100ug) and [LC400456] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400456]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206621 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ALOX15 protein (Cat# [TP306621]). The protein was produced from HEK293T cells transfected with ALOX15 cDNA clone (Cat# RC206621) using MegaTran 2.0 (Cat# [TT210002]).