

Product datasheet for **RC208343**

ALOX12B (NM_001139) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ALOX12B (NM_001139) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ALOX12B
Synonyms:	12R-LOX; ARCI2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC208343 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCCACCTACAAAGTCAGGGTGGCCACAGGCCACCGACCTCTTGTGGGAACACGGGACTCCATCTCAC
 TGACCATTGTGGGACACAAGGAGAGAGCCATAAGCAGCTGCTGAACCACTTTGGGAGAGACTTTGCAAC
 TGGGGCGGTGGGCCAGTACACCGTGCAGTGGCCCTCAGGACCTGGGTGAGCTCATCATATCCGCCTGCAC
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 AGGAAAGACAACAGCAGATGACTCGTCCCGTCTCTGGAGCACAGAAAAGAGGAGATCAGAGCCAAG
 CAGGACTTCTACCACTGGCGAGTCTTTCTTCTGGCCTGCCAGCTATGTGCACATTCCAGTTACCGCC
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 TTCGTCGGCCTGGGGCCATGGCACTGGCTTTCAAAGTCCGCGGCCTGTTGGACTGCAAACATTCGTGGA
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 CTGGGCAGAGGACACCTTCTTTGGGTACCACTCAACGGCGTCAACCCCGCCCTGATCCGCCCTGC
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 GCCAGATGGAGTTCACCGCTGGATGCCAACTTCCCAGCGTCCATGCGGAATCCACCGATTCAGACTAA
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 TGGAGGAGGCCCGCGGAGGAGCATAGAGGCGTTCGCCAGCGCTGAACCAGATCTCACACGACATCCG
 CCAGCGCAACAAGTGCCTTCCATCCCCACTACTACCTGGACCCGGTGTGATTGAGAACAGCATTCT
 ATT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC208343 protein sequence
 Red=Cloning site Green=Tags(s)

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MATYKVRVATGTDLLSGTRDSISLTIVGTQGESHKQLLNHFGRDFATGAVGQYTVQCPQDLGELIIIRLH
KERYAFPKDPWYCNYVQICAPNGRIYHFPAWMDGYETLALREATGKTTADDSLPLVLEHRKEEIRAK
QDFYHWRVFLPGLPSYVHIPSYPVRRHRNPNRPEWNGYIPGFPIILINFKATKFLNLNLRYSFLKTASF
FVRLGPMALAFKVRGLLDCKHSWKRLKDIRKIFPGKKSVMSEYVAEHWAEDTFYGYQLNGVNPGLIRRC
TRIPDKFPVTDDMVAPFLGEGTCLQAELEKGNILADYRIMEGIPTVELSGRKQHHCAPLCLLHFGEPEK
MMPPIAIQLSQTPGDCPIFLPSDSEWDWLLAKTWVRYAEFYSHEAIAHLLLETHLIAEAFCLALLRNLPMC
HPLYKLLIPHTRYTVQINSIGRAVLLNEGGLSAKGMSLVGEFAGVMVRALSELYDSLVPNDFVERGV
QDLPGYYYRDDSLAVWNALEKYVTEIITYYPSDAAVEGDELPQSWVQEIFKECLLGRESSGFPRCLRTV
PELIRYVTIVYTCSAKHAAVNTGQMEFTAWMPNFPASMRNPPIQTKGLTTLETFTLDPVKTTCTITLL
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I
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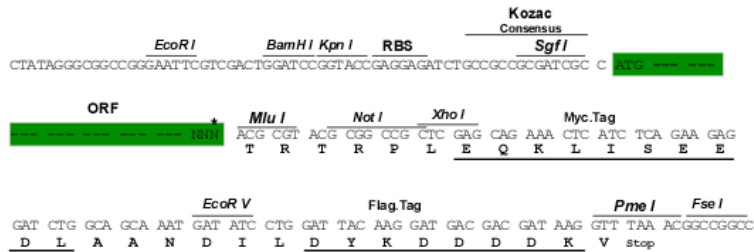
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6230_d03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



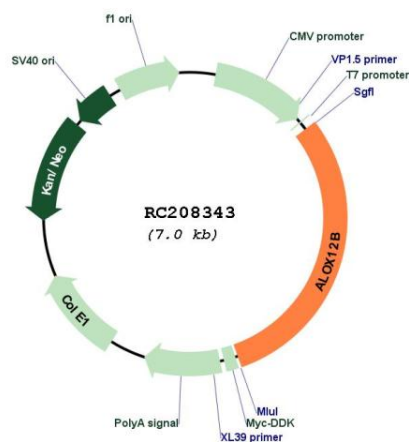
* The last codon before the Stop codon of the ORF

ACCN: NM_001139

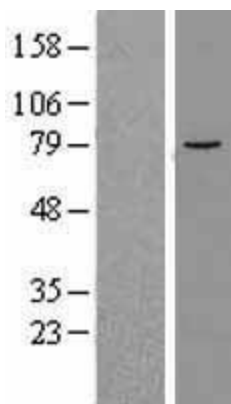
ORF Size: 2103 bp

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:	NM_001139.3
RefSeq Size:	2502 bp
RefSeq ORF:	2106 bp
Locus ID:	242
UniProt ID:	O75342
Cytogenetics:	17p13.1
Protein Families:	Druggable Genome
Protein Pathways:	Arachidonic acid metabolism, Metabolic pathways
MW:	80.4 kDa
Gene Summary:	<p>This gene encodes an enzyme involved in the conversion of arachidonic acid to 12R-hydroxyeicosatetraenoic acid. Mutations in this gene are associated with nonbullous congenital ichthyosiform erythroderma. [provided by RefSeq, Sep 2015]</p>

Product images:



Circular map for RC208343



Western blot validation of overexpression lysate (Cat# [LY420101]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208343 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).