

## Product datasheet for **RR204994**

### Alox5 (NM\_012822) Rat Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Alox5 (NM_012822) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Alox5
Synonyms:	LOX5A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RR204994 representing NM\_012822  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCCTTCTACTGTACCGTAGCCACCGGTAGCCAGTGGTTCGCGGGCACCGACTACATTTACC  
 TCAGCCTCATTGGCTCTGCAGGCTGCAGTGAAGAAGCATCTTCTTGACAAAGCTTTCTACAATGACTTCGA  
 GCGCGGGTTCGCGACTCCTATGACGTCCTGTGGATGAAGAAGTGGGTGAGATCTACCTAGTCAAATC  
 GAGAAGCGCAAATACAGGCTCCATGATGACTGGTACTTGAATACATCACACTGAAGACACCCACGACT  
 ACATAGAGTTCCCTTGTATCGTTGGATCACAGGCGAGGCGAGATTGTCCTGAGGGATGGATGTGCAA  
 ATTGGCCCGAGATGACCAAATCCACATCTCAAGCAGCACAGGCGAAAGAAGTGGAAACACGTCAGAAA  
 CAGTATCGATGGATGGAGTGAACCCCGCTTCCCTTTGAGTATTGATGCTAAATGCCACAAGGATCTGC  
 CCCGAGATATCCAGTTTATAGTAAAAGGGAGTGGACTTTGTTCTGAAGTACTCAAAGCGATGGAGAA  
 CCTGTTCAATCGCTTCATGCACATGTTCCAGTCTTCTGGCATGACTTTGCTGACTTTGAGAAAATC  
 TTCGTCAAAATCAGCAACTATTTCTGAGAGAGTCAAGAACCCTGGCAAGAGGACCTCATGTTTGGCT  
 ACCAGTTCCTGAATGGTGCAACCCAGTACTCATCAAGCGCTGCACAGAGTTGCCTAAGAAGCTCCCAGT  
 GACCACAGAAATGGTGGAGTGCAGCCTAGAGCGGCAGCTCAGTTTAGAACAGGAAGTACAGGAAGGGAAC  
 ATTTTCATCGTTGATTACGAAGTACTGGATGGCATTGATGCTAACAAAAGTACCCTGTACACACCAGT  
 TCCTGGCCGCCCATCTGCCTGCTGTATAAGAAGTACCAACAAGATTGTTCCCATCGCCATCCAGCT  
 CAACCAAAACCCCTGGAGAGAAGAACCCTTTTCTCCCTACGGACTCAAATACGACTGGCTTTTGGCC  
 AAAATCTGGGTGCGTTCAAGTACTTCCATATCCATCAAACAATCACCCATCTTCTCCGCACACATCTGG  
 TGTCTGAGGTGTTTCGGTATTGCCATGTACCAGTGCCTGCTGTGCACCCCTTTTCAAGCTGCTGGT  
 AGCCCATGTGAGTTTACCATTGCCATCAACTAAGGCCCGGGAACAGCTTAACTGTGAGTACGGCCTT  
 TTTGACAAGGCCAATGCCACCGAGGTGGTGGGCAGTGCAGATGGTGCAGAGAGCTGTCCAGGACCTGA  
 CCTATTCTCCCTGTGCTTCCCGGAGGCCATCAAGGCCCGGGCATGGACAACACCGAGGACATCCCTA  
 CTACTTCTATCGTATGATGGACTGCTCGTGTGGGAAGCTATCCAGTCGTTCAACTGAGGTGGTAAGC  
 ATCTACTATGAGGATGACCAGGTGGTGGAGGAGGACCAGGAAGTGCAGGACTTCGTAAGGATGTTTACG  
 TTTATGGCATGCGGGCAGAAAGCCTCAGGTTTCCCAAGTCCATCAAGAGCAGGGAGAAATTGTCTGA  
 GTACCTGACGGTGGTATCTTACAGCCTCGGCCAGCATGCAGCTGTAAGTGGCCAGTATGACTGG  
 TGCTCCTGGATCCCAACGCTCCTCAACTATGCGGGCCCAACCCACGGCCAAGGTGTGGTACCA  
 TCGAGCAGATTGTGGATACTCTACCAGACCGTGGCCGCTCATGTTGGCATCTAGGTGCAGTGTGGCCCT  
 GAGCCAGTTTCAAGAGAATGAGCTGTTTCTGGGCATGTACCCAGAGGAGCATTTCATCGAGAAGCCAGT  
 AAAGAAGCCATGATTGATTCCGCAAGAAGCTGGAGGCCATCGTCAGCGTATTGCCGAGCGCAATAAGA  
 ACAAAAAGCTCCCTACTACTACCTGTCACCAGACAGATTCCAAACAGTG

**ACGCGT**ACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RR204994 representing NM\_012822  
Red=Cloning site Green=Tags(s)

MPSYTVTATGSQWFAGTDDYIYLSLIGSAGCSEKHLDDKAFYNDFERGGRDSYDVTVDEELGEIYL VKI  
 EKRRKYRLHDDWYLKYITLKTPhDYIEFPCYRWITGEGEIVLRDGC AKLARDQIHLKQHRRKELETRQK  
 QYRMEWNP GPFPLSIDAKCHKDLPRDIQFDSEKGVDFVLNYSKAMENLF INRFMHMFQSSWHDFADFEKI  
 FVKISNTISERVKNHWQEDLMFGYQFLNGCNPVL IKRC TELPKKLPVTTEMVECSLERQLSLEQEVQEGN  
 IFIVDYELLDGIDANKTDPCTHQFLAAPICLLYKNLANKIVPIAIQLNQTPGEKNPIFLPTDSKYDWLLA  
 KIWVRSSDFHIHQITITHLLRTHLVSEVFGIAMYRQLPAVHPLFKLLVAHVRF TIAINTKAREQLNCEYGL  
 FDKANATGGGGHVQMVQRAVQDLTYSSLCFPEAIKARGMDNTEDIPYYFYRDDGLLVWEAIQSFTTEVVS  
 IYYEDDQVVEEDQELQDFVKDVVYVYGMGRKASGFPKSIKSREKLSEYLTVVIFTASAQHAAVNFGQYDW  
 CSWIPNAPPTMRAPPPTAKGVV TIEQIVDTLPDRGRSCWHLGAVWALSQFQENELFLGMYP EEFHIEKPV  
 KEAMIRFRKNLEAIVSVIAERNKNKLPYYLSPDRFQTV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_012822

**ORF Size:** 2010 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\\_012822.1](#), [NP\\_036954.1](#)

**RefSeq Size:** 2535 bp

**RefSeq ORF:** 2013 bp

**Locus ID:** 25290

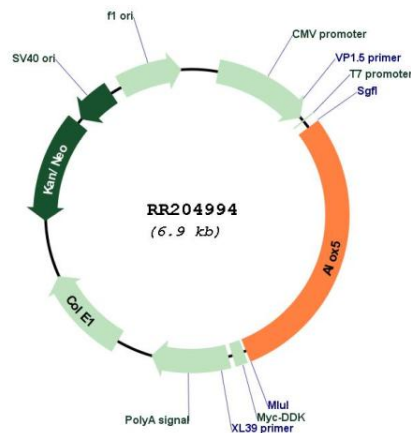
**UniProt ID:** [P12527](#)

**Cytogenetics:** 4q42

**MW:** 77.9 kDa

**Gene Summary:** catalyzes the conversion of arachidonate to leukotriene A4 in leukotriene metabolism [RGD, Feb 2006]

### Product images:



Circular map for RR204994