

Product datasheet for **RC234316**

Leukotriene A4 hydrolase (LTA4H) (NM_001256644) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Leukotriene A4 hydrolase (LTA4H) (NM_001256644) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Leukotriene A4 hydrolase
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC234316 representing NM_001256644
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTGCCACAGAGAAATCTTTCTAAAAGACAAGTACCGACCATGCATATCCCAGTTAAGACTCGTCGAC
 TTCTTGACGCCTTAAAGGTTTTGGATACAAAGGACCTTACAATAGAAAAAGTAGTGATCAATGGACAAGA
 AGTCAAATATGCTCTTGAGAAAGACAAAGTTACAAGGGATCGCCAATGGAAATCTCTCTTCCTATCGCT
 TTGAGCAAAAATCAAGAAATTGTTATAGAAATTTCTTTGAGACCTCTCCAAATCTTCTGCTCTCCAGT
 GGCTCACTCCTGAACAGACTTCTGGGAAGGAACCCCATATCTTTAGTCAGTGCCAGGCCATCCACTG
 CAGAGCAATCCTTCTTGTGAGGACACTCCTTCTGTGAAATTAACCTATACTGCAGAGGTGTCTGTCCT
 AAAGAACTGGTGGCACTTATGAGTGCTATTCGTGATGGAGAAACACCTGACCCAGAAGACCCAAGCAGGA
 AAATATACAAATTCATCCAAAAAGTTCCAATACCCTGCTACCTGATTGCTTTAGTTGTTGGAGCTTTAGA
 AAGCAGGCAAATTTGGCCCAAGAACTTTGGTGTGGTCTGAGAAAGAGCAGGTGGAAAAGTCTGCTTATGAG
 TTTTCTGAGACTGAATCTATGCTTAAATAGCAGAAGATCTGGGAGGACCGTATGTATGGGGACAGTATG
 ACCTATTGGTCTGCCACCATCCTTCCCTTATGGTGGCATGGAGAATCCTTGCCTTACTTTTGTAATCC
 TACTCTACTGGCAGGCGACAAGTCACTCTCCAATGTCAATGCACATGAAATATCTCATAGCTGGACAGGG
 AATCTAGTGACCAACAAAACCTTTGGGATCACTTTTGTTAAATGAGGGACATACTGTGACTTGGAACGCC
 ACATTTGCGGACGATTGTTTGGTGAAAAGTTGAGACATTTAATGCTCTGGGAGGATGGGAGAACTACA
 GAATTCGGTAAAGACATTTGGGGAGACACATCCTTACCACAACTTGTTGTTGATCTGACAGATATAGAC
 CCTGATGTAGCTTATTCTTCAGTCCCTATGAGAAGGGCTTTGCTTTACTTTTTACCTTGAACAACTGC
 TTGGAGGACCAGAGATTTTCTAGGATTCTTAAAGCTTATGTTGAGAAGTTTCTATAAGAGCATAAC
 TACTGATGACTGGAAGGATTTCCCTGTATTCTTATTTTAAAGATAAGGTTGATGTTCTCAATCAAGTTGAT
 TGAATGCCTGGCTCTACTCTCTGAGTGCCTCCCATAAAGCCCAATTATGATGACTCTGACAAATG
 CTTGTATTGCCTTAAGTCAAAGATGGATTACTGCCAAAGAAGATGATTTAAATCATTCAATGCCACAGA
 CCTGAAGGATCTCTCTTCTCATCAATTGAATGAGTTTTAGCACAGACGCTCCAGAGGATGGCTGCGGCT
 CTGCATTCAATCCAAGTGGGAGGACGCAATTCCTTTGGCGCTAAAGATGGCAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC234316 representing NM_001256644
 Red=Cloning site Green=Tags(s)

MLPQRNLSKRQVPTMHIPVKTRRLAALKVLDTKDLTIEKVVINGQEVKYALGERQSYKGSPMEISLP
 LSKNQEIVIEISFETSPKSSALQWLTPQTSGKEHPYLFQSQAIHCRAILPCQDTPSVKLTYTEVSV
 KELVALMSAIRGETPDPEPSRKIYKFIQKVPICYLIALVVGALSRQIGPRTLWSEKEQVEKSAYE
 FSETESMLKIAEDLGGPVVWQYDLLVLPPSFPYGGMENPCLTFVPTLLAGDKSLSNVIAHEISHSWT
 NLVTNKTWDHFWLNEGHTVYLERHICGRILFGEKFRHFNALGGWGLQNSVKTFGETHPFTKLVDLTDID
 PDVAYSSVPYEKGFALLFYLEQLLGGPEIFLGFLLKAYVEKFSYKSITDDWKDFLYSYFKDKVDVLNQVD
 WNAWL YSPGLPPIKPNYDMLTNACIALSQRWITAKEDDLNSFNATDLKDLSSHQLNEFLAQLQRMAAA
 LHSIQVGGGRNSFGAKDGN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_001256644

ORF Size: 1524 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_001256644.1](#), [NP_001243573.1](#)

RefSeq Size: 2062 bp

RefSeq ORF: 1527 bp

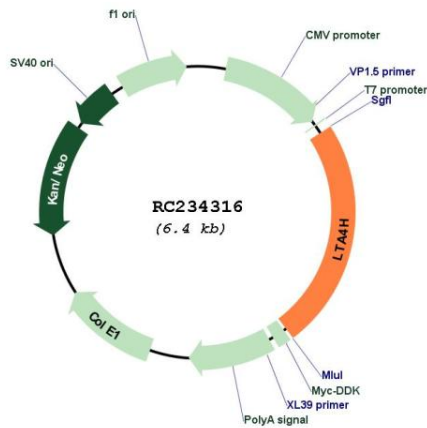
Locus ID: 4048

UniProt ID: [P09960](#)

Cytogenetics: 12q23.1

Protein Families:	Druggable Genome, Protease
Protein Pathways:	Arachidonic acid metabolism, Metabolic pathways
MW:	57.7 kDa
Gene Summary:	The protein encoded by this gene is an enzyme that contains both hydrolase and aminopeptidase activities. The hydrolase activity is used in the final step of the biosynthesis of leukotriene B4, a proinflammatory mediator. The aminopeptidase activity has been shown to degrade proline-glycine-proline (PGP), a neutrophil chemoattractant and biomarker for chronic obstructive pulmonary disease (COPD). Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2015]

Product images:



Circular map for RC234316