

Product datasheet for **RG234499**

Leukotriene A4 hydrolase (LTA4H) (NM_001256643) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Leukotriene A4 hydrolase (LTA4H) (NM_001256643) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Leukotriene A4 hydrolase
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG234499 representing NM_001256643
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTGCCACAGAGAAATCTTTCTAAAAGACAAGTACCGACCATGCATATCCCAGTTAAGACTCGTCGAC
 TTCTTGACGCTTAAAGGTTTTGGATACAAAGGACCTTACAATAGAAAAAGTAGTGATCAATGGACAAGA
 AGTCAAATATGCTCTTGAGAAAAGACAAAGTTACAAGGGATCGCCAATGGAAATCTCTTCTCCTATCGCT
 TTGAGCAAAAATCAAGAAATTGTTATAGAAATTTCTTTGAGACCTCTCCAAAATCTTCTGCTCTCCAGT
 GGCTCACTCCTGAACAGACTTCTGGGAAGGAACCCCATATCTCTTTAGTCAGTGCCAGGCCATCCACTG
 CAGAGCAATCCTTCTTGTGAGGACACTCCTTCTGTGAAATTAACCTATACTGCAGAGGTGTCTGTCCCT
 AAAGAAGTGGTGGCACTTATGAGTGCTATTCGTGATGGAGAAACACCTGACCCAGAAGACCCAAGCAGGA
 AAATATACAAATTCATCCAAAAGTTCCAATACCCTGCTACCTGATTGCTTTAGTTGTTGGAGCTTTAGA
 AAGCAGGCAAATTTGGCCAAAGAACTTTGGTGTGGTCTGAGAAAGAGCAGGTGGAAAAGTCTGCTTATGAG
 TTTTCTGAGACTGAATCTATGCTTAAAATAGCAGAAGATCTGGGAGGACCGTATGTATGGGGACAGTATG
 ACCTATTGGTCCCTGCCACCATCCTTCCCTTATGGTGGCATGGAGAATCCTTGCCTTACTTTTGTAACTCC
 TACTCTACTGGCAGGCGACAAGTCACTCTCCAATGTCAATTGCACATGAAATATCTCATAGCTGGACAGGG
 AATCTAGTGACCAACAAAAGTGGGATCACTTTTGGTTAAATGAGGGACATACTGTGACTTGGAAACGCC
 ACATTTGCGGACGATTGTTTGGTAAAAGTTTCCAGACATTTTAAATGCTCTGGGAGGATGGGGAGAAGTACA
 GAATTCGGTAAAGACATTTGGGGAGACACATCCTTCCACAACTTGTGGTTGATCTGACAGATATAGAC
 CCTGATGACTGATTTCTTCCAGTCCCTATGAGAAGGGCTTTGCTTTACTTTTTTACCTTGAACAAGTGC
 TTGGAGGACCAAGAGATTTTCTAGGATTTCTAAAAGCTTATGTTGAGAAGTTTTCTATAAGCAGATAAC
 TACTGATGACTGGAAGGATTTCCCTGATTTCTTAAAGATAAGGTTGATGTTCTCAATCAAGTTGAT
 TGGAAATGCCTGGCTCTACTCTCCTGGACTGCCTCCCATAAAGCCCAATTATGATGACTCTGACAAATG
 CTTGTATTGCCTTAAAGTCAAAGATGGATTACTGCCAAAGAAGATGATTTAAATCATTCAATGCCACAGA
 CCTGAAGGATCTCTTCTCATCAATGAATGAGTTTTTAGCACAGACGCTCCAGAGGACACCTCTTCCA
 TTGGGGCACATAAAGCGAATGCAAGAGGTGTACAACCTCAATGCCATTAACAATCTGAAATACGATTCA
 GATGGCTGCGGCTCTGCATTCAATCCAAGTGGGAGGACGCAATTCCTTTGGCGCTAAAGATGGCAACTGA
 ACAAGGAAGAATGAAGTTTACCCGGCCCTTATTCAAGGATCTTGCTGCCTTTGACAAATCCCATGATCAA
 GCTGTCCGAACCTACCAAGAGCACAAGCAAGCATGCATCCCGTACTGCAATGCTGGTGGGAAAGACT
 TAAAAGTGGAT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG234499 representing NM_001256643
 Red=Cloning site Green=Tags(s)

MLPQRNLSKRQVPTMHIPVKTRRLAALKVLDTKDLTIEKVVINGQEVKYLGERQSYKGSMPMEISLPIA
 LSKNQEIVIEISFETSPKSSALQWLTPQTSKKEHPYLFSQLQAIHCRAILPCQDTPSVKLYTAEVSV
 KELVALMSAIRDGETPDPEDPSRKIYKFIQKVPICPYLIALVVGALSRQIGPRTLWVSEKEQVEKSAYE
 FSETESMLKIAEDLGGPYVWQYDLLVLPSPFYGGMENPCLTFVPTLLAGDKSLSNVIAHEISHSWTG
 NLVTNKTWDHFWLNEGHTVYLERHICGRLEGEKFRHFNALGGWELQNSVKTFGEHPFTKLVVDLTDID
 PDVAYSSVPYEKGFALLFYLEQLLGGPEIFLGLKAYVEKFSYKSITDDWKFDFLYSYFKDKVDLNVQV
 WNAWL YSPGLPPIKPNYDMLTNACIALSQRWITAKEDDLNSFNATDLKDLSSHQLNEFLAQTLQRAPLP
 LGHIKRMQEVYFNAINNSEIRFRWLRLCIQSKWEDAIPALALKMATEQGRMKFTRPLFKDLAAFDKSHDQ
 AVRITYQEHKASHPVTAMLVGDLDKVD

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_001256643

ORF Size: 1761 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_001256643.1](#), [NP_001243572.1](#)

RefSeq Size: 2145 bp

RefSeq ORF: 1764 bp

Locus ID: 4048

UniProt ID: [P09960](#)

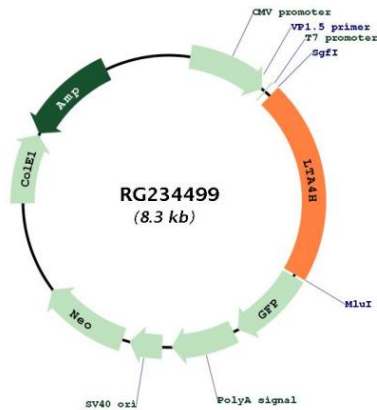
Cytogenetics: 12q23.1

Protein Families: Druggable Genome, Protease

Protein Pathways: Arachidonic acid metabolism, Metabolic pathways

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 RG234499