

Product datasheet for **RG210762**

Apolipoprotein A I (APOA1) (NM_000039) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Apolipoprotein A I (APOA1) (NM_000039) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Apolipoprotein A I
Synonyms:	apo(a); HPALP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG210762 representing NM_000039 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAAGCTGCGGTGCTGACCTTGCCGTGCTCTTCTGACGGGGAGCCAGGCTCGGCATTTCTGGCAGC
AAGATGAACCCCCCAGAGCCCCCTGGGATCGAGTGAAGGACCTGGCCACTGTGTACGTGGATGTGCTCAA
AGACAGCGGCAGAGACTATGTGTCCAGTTTGAAGGCTCCGCCTTGGGAAAACAGCTAAACCTAAAGCTC
CTTGACAACCTGGGACAGCGTGACCTCCACCTTCAGCAAGCTGCGGAACAGCTCGGCCCTGTGACCCAGG
AGTTCTGGGATAACCTGGAAAAGGAGACAGAGGGCCTGAGGCAGGAGATGAGCAAGGATCTGGAGGAGGT
GAAGGCCAAGGTGCAGCCCTACCTGGACGACTTCCAGAAGAAGTGGCAGGAGGAGATGGAGCTTACCCG
CAGAAGGTGGAGCCGCTGCGCGCAGAGCTCCAAGAGGGCGCGCCAGAAGCTGCACGAGCTGCAAGAGA
AGCTGAGCCCACTGGGCGAGGAGATGCGCGACCGCGCGCGCCCATGTGGACGCGCTGCGCACGCATCT
GGCCCCCTACAGCGACGAGCTGCGCCAGCGCTTGGCCGCGCGCCTTGAGGCTCTCAAGGAGAACGGCGGC
GCCAGACTGGCCGAGTACCACGCCAAGGCCACCGAGCATCTGAGCACGCTCAGCGAGAAGGCCAAGCCCG
CGCTCGAGGACCTCCGCCAAGGCCTGCTGCCGTGCTGGAGAGCTTCAAGGTCAGCTTCTGAGCGCTCT
CGAGGAGTACACTAAGAAGCTCAACACCCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG210762 representing NM_000039
 Red=Cloning site Green=Tags(s)

MKAAVLTLAVLFLTGSQARHFQQDEPPQSPWDRVKDLATVYVDVLKDSGRDYVSQFEQSALGKQLNLKL
 LDNWDSTSTFSKLRQLGPVTQEFWDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDFQKKWQEEMEL YR
 QKVEPLRAELQEGARQKLHELQEKLSPLGEEMDRARAHVDALRTHLAPYSDELQRRLAARLEALKENGG
 ARLAEYHAKATEHLSTLSEKAKPALEDLRQGLLPVLESFKVSFLSALEEYTKKLNTQ

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000039

ORF Size: 801 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_000039.3](#)

RefSeq Size: 897 bp

RefSeq ORF: 804 bp

Locus ID: 335

UniProt ID: [P02647](#)

Cytogenetics: 11q23.3

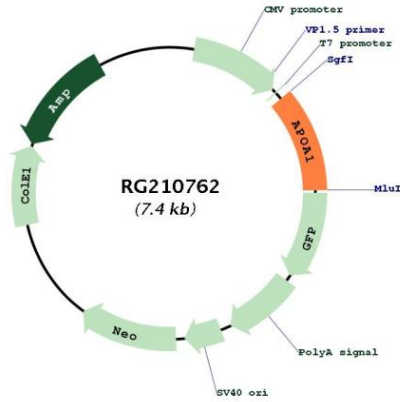
Domains: Apolipoprotein

Protein Families: Druggable Genome, Secreted Protein

Protein Pathways: PPAR signaling pathway

Gene Summary: This gene encodes apolipoprotein A-I, which is the major protein component of high density lipoprotein (HDL) in plasma. The encoded preproprotein is proteolytically processed to generate the mature protein, which promotes cholesterol efflux from tissues to the liver for excretion, and is a cofactor for lecithin cholesterolacyltransferase (LCAT), an enzyme responsible for the formation of most plasma cholesteryl esters. This gene is closely linked with two other apolipoprotein genes on chromosome 11. Defects in this gene are associated with HDL deficiencies, including Tangier disease, and with systemic non-neuropathic amyloidosis. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein. [provided by RefSeq, Dec 2015]

Product images:



Circular map for RG210762