

Product datasheet for **RC211114**

Apolipoprotein L 1 (APOL1) (NM_003661) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Apolipoprotein L 1 (APOL1) (NM_003661) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	APOL1
Synonyms:	APO-L; APOL; APOL-I; FSGS4
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC211114 representing NM_003661 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGGAGGGAGCTGCTTTGCTGAGAGTCTCTGTCCTCTGCATCTGGATGAGTGCACATTTTCCTTGGTGTGG
GAGTGAGGGCAGAGGAAGCTGGAGCGAGGGTGAACAAAAACGTTCCAAGTGGGACAGATACTGGAGATCC
TCAAAGTAAGCCCTCGGTGACTGGGCTGCTGGCACCATGGACCCAGAGAGCAGTATCTTTATTGAGGAT
GCCATTAAGTATTTCAAGGAAAAAGTGAGCACACAGAATCTGCTACTCCTGCTGACTGATAATGAGGCTT
GGAACGGATTCTGGCTGCTGCTGAACTGCCAGGAATGAGGCAGATGAGCTCCGTAAAGCTCTGGACAA
CCTTGCAAGACAAATGATCATGAAAGACAAAACTGGCACGATAAAGGCCAGCAGTACAGAAAAGTGGTTT
CTGAAAGAGTTTCTCGGTTGAAAAGTAAGCTTGAGGATAACATAAGAAGGCTCCGTGCCCTTGAGATG
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TTTGGGTGAGAACATATCCAACCTTCTTCTTCTAGCTGGCAATACTTACCAACTCACACGAGGCATTGGG
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CCCGGGTCACTGAGCCAATCTCAGCTGAAAGCGGTGAACAGGTGGAGAGAGTTAATGAACCCAGCATCCT
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ACTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC211114 representing NM_003661
 Red=Cloning site Green=Tags(s)

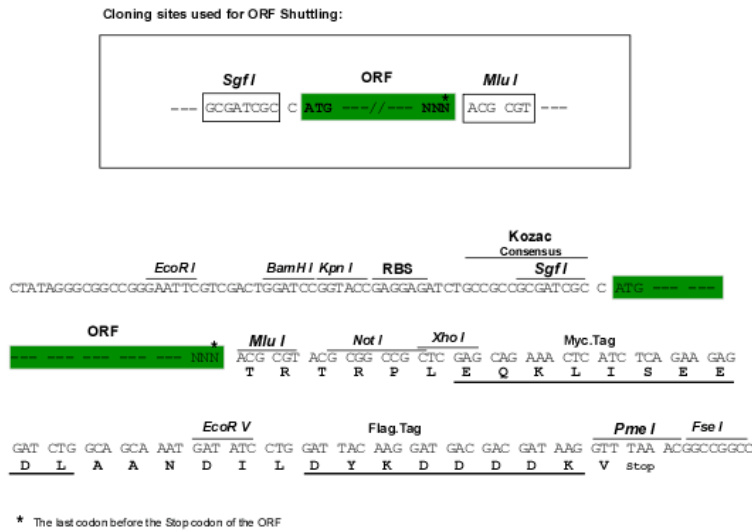
MEGAALLRVSVLCIWMSALFLGVGVRAEEAGARVQQNVPSGTDGDPQSKPLGDWAAGTMDPESSIFIED
 AIKYFKEKVSTQNL LLLLDNEAWNGFVAAAELPRNEADELRKALDNLARQMIMKDNWHDKGQQYRNWF
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 GMELGITAALTGITSSSTMDYGGKWWTQAQAHDLVIKSLDKLKEVREFLGENISNFLSLAGNTYQLTRGIG
 KDIRALRRARANLQSVPHASASRPVTEPI SAESGEQVERVNEPSILEMSRGVKLTDVAPVSVFLVDVY
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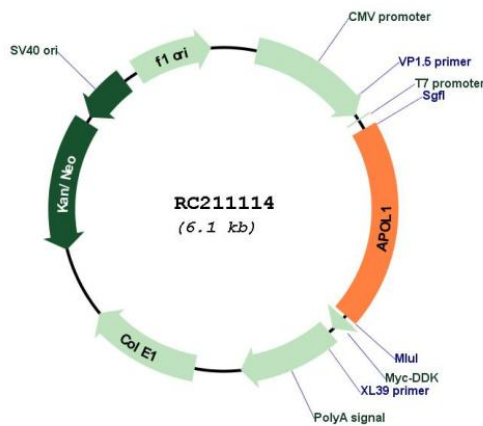
Chromatograms: https://cdn.origene.com/chromatograms/mk6270_c04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_003661

ORF Size: 1194 bp

OTI Disclaimer: 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.

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_003661.4](#)

RefSeq Size: 2856 bp

RefSeq ORF: 1197 bp

Locus ID: 8542

UniProt ID: [O14791](#)

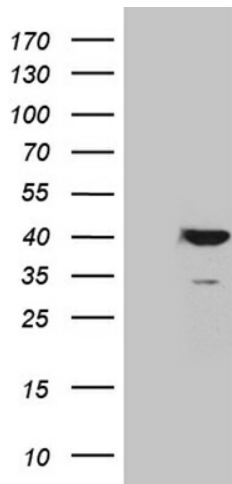
Cytogenetics: 22q12.3

Protein Families: Secreted Protein, Transmembrane

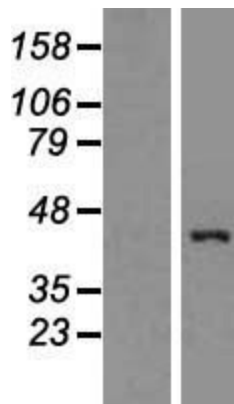
MW: 43.97 kDa

Gene Summary:

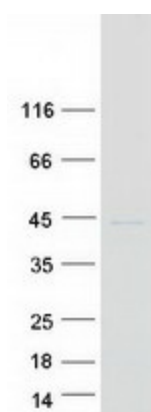
This gene encodes a secreted high density lipoprotein which binds to apolipoprotein A-I. Apolipoprotein A-I is a relatively abundant plasma protein and is the major apoprotein of HDL. It is involved in the formation of most cholesteryl esters in plasma and also promotes efflux of cholesterol from cells. This apolipoprotein L family member may play a role in lipid exchange and transport throughout the body, as well as in reverse cholesterol transport from peripheral cells to the liver. Several different transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2008]

Product images:


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY APOL1 (Cat# RC211114, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-APOL1 antibody (Cat# [TA812037]). Positive lysates [LY418517] (100ug) and [LC418517] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY427915]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC226566] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified APOL1 protein (Cat# [TP311114]). The protein was produced from HEK293T cells transfected with APOL1 cDNA clone (Cat# RC211114) using MegaTran 2.0 (Cat# [TT210002]).