

Product datasheet for **RC206566**

Apolipoprotein CIII (APOC3) (NM_000040) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Apolipoprotein CIII (APOC3) (NM_000040) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Apolipoprotein CIII
Synonyms:	APOCIII
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC206566 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCAGCCCCGGTACTCCTTGTGTGGCCCTCTGGCGCTCCTGGCCTCTGCCGAGCTTCAGAGGCCG
AGGATGCCTCCCTTCTCAGCTTCATGCAGGTTACATGAAGCACGCCACCAAGACCGCCAAGGATGCACT
GAGCAGCGTGCCAGGAGTCCCAGGTGGCCAGCAGGCCAGGGCTGGGTGACCGATGGCTTCAGTTCCTG
AAAGACTACTGGAGCACCGTTAAGGACAAGTTCTCTGAGTCTGGGATTTGGACCCTGAGGTCAGACCAA
CTTCAGCCGTGGCTGCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC206566 protein sequence Red=Cloning site Green=Tags(s)
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MQPRVLLVYVALLALLASARASEAEDASLLSFMQGYMKHATKTAKDALSSVQESQVAQQARGWVTDGFSSL
KDYWSTVKDKFSEFWLDPEVRPTSAVAA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6016_a05.zip

Restriction Sites: SgfI-MluI



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Cloning Scheme:


ACCN: NM_000040

ORF Size: 297 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_000040.3](#)

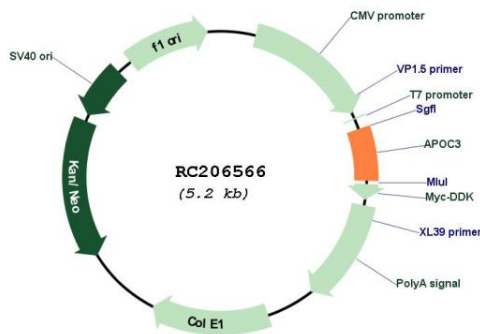
RefSeq Size: 533 bp

RefSeq ORF: 300 bp

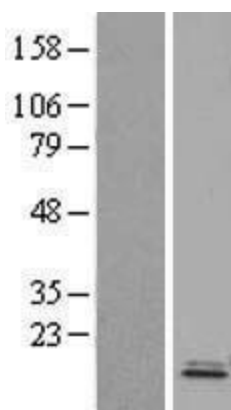
Locus ID: 345
UniProt ID: [P02656](#)
Cytogenetics: 11q23.3
Protein Families: Druggable Genome, Secreted Protein
Protein Pathways: PPAR signaling pathway
MW: 10.9 kDa
Gene Summary:

This gene encodes a protein component of triglyceride (TG)-rich lipoproteins (TRLs) including very low density lipoproteins (VLDL), high density lipoproteins (HDL) and chylomicrons. The encoded protein plays a role in the metabolism of these TRLs through multiple modes. This protein has been shown to promote the secretion of VLDL1, inhibit lipoprotein lipase enzyme activity, and delay catabolism of TRL remnants. Mutations in this gene are associated with low plasma triglyceride levels and reduced risk of ischemic cardiovascular disease, and hyperalphalipoproteinemia, which is characterized by elevated levels of high density lipoprotein (HDL) and HDL cholesterol in human patients. This gene and other related genes comprise an apolipoprotein gene cluster on chromosome 11. [provided by RefSeq, Sep 2017]

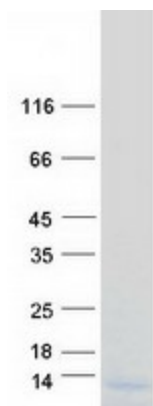
Product images:



Circular map for RC206566



Western blot validation of overexpression lysate (Cat# [LY400010]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206566 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified APOC3 protein (Cat# [TP306566]). The protein was produced from HEK293T cells transfected with APOC3 cDNA clone (Cat# RC206566) using MegaTran 2.0 (Cat# [TT210002]).