

Product datasheet for **RG200395**

Apolipoprotein E (APOE) (NM_000041) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Apolipoprotein E (APOE) (NM_000041) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Apolipoprotein E
Synonyms:	AD2; APO-E; ApoE4; LDLCQ5; LPG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG200395 representing NM_000041 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGTTCTGTGGCTGCGTTGCTGGTCACATTCCTGGCAGGATGCCAGGCCAAGGTGGAGCAAGCGG
TGGAGACAGAGCCGAGCCGAGCTGCGCCAGCAGACCGAGTGGCAGAGCGGCCAGCGCTGGAACTGGC
ACTGGGTCGCTTTGGGATTACCTGCGCTGGGTGCAGACTGTCTGAGCAGGTGCAGGAGGAGCTGCTC
AGCTCCCAGGTCACCCAGGAAGTGAAGGAGTGAAGGCCTACAAT
CGGAAGTGGAGGAACAAGTACCCCGGTGGCGGAGGAGACGCGGGCACGGCTGTCCAAGGAGCTGCAGGC
GGCGCAGGCCCGCTGGGCGCGGACATGGAGGACGTGTGCGGCCCGCTGGTGCAGTACCGCGGCGAGGTG
CAGGCCATGCTCGGCCAGAGCACCGAGGAGCTGCGGGTGCCTCGCCTCCCACCTGCGCAAGCTGCGTA
AGCGGCTCCTCCGCGATGCCGATGACCTGCAGAAGCGCCTGGCAGTGTACCAGGCCGGGGCCCGGAGGG
CGCCGAGCGCGGCTCAGCGCCATCCGCGAGCGCTGGGGCCCTGGTGGAAACAGGGCCGCTGCGGGCC
GCCACTGTGGGCTCCCTGGCCGGCCAGCCGCTACAGGAGCGGGCCAGGCCTGGGGCGAGCGGCTGCGCG
CGCGGATGGAGGAGATGGGCAGCCGACCCGCGACCGCTGGACGAGGTGAAGGAGCAGGTGGCGGAGGT
GCGGCCAAGCTGGAGGAGCAGGCCAGCAGATACGCTGCAGGCCGAGGCCCTCCAGGCCCGCCTCAAG
AGCTGGTTCGAGCCCCTGGTGAAGACATGCAGCGCCAGTGGCCGGGCTGGTGGAGAAGGTGCAGGCTG
CCGTGGGACACGCGCCGCCCTGTGCCAGCGACAATCAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >RG200395 representing NM_000041
 Red=Cloning site Green=Tags(s)

MKVLWAALLVTFLAGCQAKVEQAVETEPEPEL RQQTEWQSGQRWELALGRFWDYLRWVQTLSEQVQEELL
 SSQVTQELRALMDETMKELKAYKSELEEQLTPVAEETRARLSKELQAAQARLGADMEDVCGRLVQYRGEV
 QAMLGQSTEELRVRLASHLRKLRKLLRDADDLQKRLAVYQAGAREGAERGLSAIRERLGPLVEQGRVRA
 ATVGSLAGQPLQERAQAWGERLRARMEEMGSRTDRDLDEVKEQVAEVRAKLEEQAQQIRLQAEAFQARLK
 SWFEPLVEDMQRQWAGLVEKVQAAVGTSAAPVPSDNH

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000041

ORF Size: 951 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_000041.4](#)

RefSeq Size: 1223 bp

RefSeq ORF: 954 bp

Locus ID: 348

UniProt ID: [P02649](#)

Cytogenetics: 19q13.32

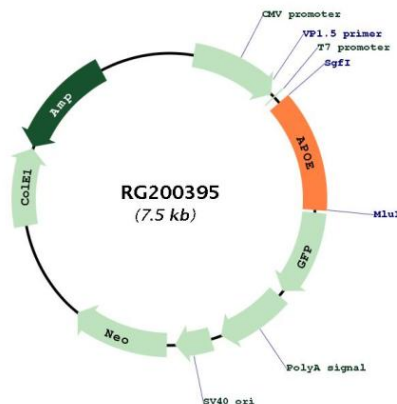
Domains: Apolipoprotein

Protein Families: Adult stem cells, Druggable Genome, Secreted Protein, Stem cell - Pluripotency

Protein Pathways: Alzheimer's disease

Gene Summary: The protein encoded by this gene is a major apoprotein of the chylomicron. It binds to a specific liver and peripheral cell receptor, and is essential for the normal catabolism of triglyceride-rich lipoprotein constituents. This gene maps to chromosome 19 in a cluster with the related apolipoprotein C1 and C2 genes. Mutations in this gene result in familial dysbetalipoproteinemia, or type III hyperlipoproteinemia (HLP III), in which increased plasma cholesterol and triglycerides are the consequence of impaired clearance of chylomicron and VLDL remnants. [provided by RefSeq, Jun 2016]

Product images:



Circular map for RG200395