

## Product datasheet for **RG237410**

### Apolipoprotein E (APOE) (NM\_001302691) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Apolipoprotein E (APOE) (NM_001302691) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	APOE
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:	>RG237410 representing NM_001302691. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTGTGAAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGAAGGTTCTGTGGGCTGCGTTGCTGGTACATTCTGGCAGGATGCCAGGCCAAGGTGGAGCAAGCG
GTGGAGACAGAGCCGGAGCCGAGCTGCGCCAGCAGACCGAGTGGCAGAGCGGCCAGCGCTGGGAACTG
GCACTGGGTCGCTTTTGGGATTACCTGCGCTGGGTGCAGACTGTCTGAGCAGGTGCAGGAGGAGCTG
CTCAGCTCCCAGGTCACCCAGGAACTGAGGGCGCTGATGGACGAGACCATGAAGGAGTTGAAGGCCCTAC
AAATCGGAACTGGAGGAACAACGACCCCGGTGGCGGAGGAGACGCGGGCACGGCTGTCCAAGGAGCTG
CAGGCGGCGCAGGCCCGCTGGGCGCGGACATGGAGGACGTGTGCGGCCGCTGGTGCAGTACCGCGGC
GAGGTGCAGGCCATGCTCGGCCAGACACCGAGGAGCTGCGGGTGCCTCGCCTCCACCTGCGCAAG
CTGCGTAAGCGGCTCCTCCGCGATGCCGATGACCTGCAGAAGCGCCTGGCAGTGTACCAGCCGGGGCC
CGCGAGGGCGCCGAGCGCGGCTCAGCGCCATCCGCGAGCGCCTGGGGCCCTGGTGAACAGGGCCGC
GTGCGGGCCGCACTGTGGGCTCCCTGGCCGCGCAGCCGCTACAGGAGCGGGCCAGGCCTGGGGCGAG
CGGCTGCGCGCGGATGGAGGAGATGGGACGCGGACCCGCGACCGCTGGACGAGGTGAAGGAGCAG
GTGGCGGAGGTGCGCGCAAGCTGGAGGAGCAGGCCAGCAGATACGCTGCAGGCCGAGGCTTCCAG
GCCCGCTCAAGAGCTGGTTCGAGCCCCGTGGTGAAGACATGCAGCGCCAGTGGCCGGGCTGGTGGAG
AAGGTGCAGGCTGCCGTGGGACACGCGCCCGCTGTGCCAGCGACAATCAC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



[View online »](#)

**Protein Sequence:** >Peptide sequence encoded by RG237410  
 Blue=ORF Red=Cloning site Green=Tag(s)

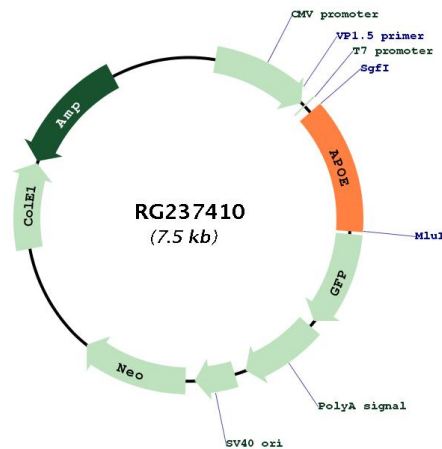
MKVLWAALLVTFLAGCQAKVEQAVETEPEPELRQQTEWQSGQRWELALGRFWDYLRWVQTLSEQVQEEL  
 LSSQVTQELRALMDETMKELKAYKSELEEQLTPVAEETRARLSKELQAAQARLGADMEDVCGRLVQYRG  
 EVQAMLQGSTTEELRVRLASHLRKLRKLLRDADDLQKRLAVYQAGAREGAERGLSAIRERLGPLVEQGR  
 VRAATVGSLAGQPLQERAQAWGERLRARMEEMGSRTDRDLDEVKEQVAEVRAKLEEQAQQIRLQAEAFQ  
 ARLKSWFEPLVEDMQRQWAGLVEKVQAAVGTSAAPVPSDNH  
**TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV**  
 MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPEP  
 SVIFTDKIIRSNAIVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001302691

<b>ORF Size:</b>	951 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>RefSeq:</b>	<a href="#">NM_001302691.2</a>
<b>RefSeq Size:</b>	1249 bp
<b>RefSeq ORF:</b>	954 bp
<b>Locus ID:</b>	348
<b>UniProt ID:</b>	<a href="#">P02649</a>
<b>Cytogenetics:</b>	19q13.32
<b>Protein Families:</b>	Adult stem cells, Druggable Genome, Secreted Protein, Stem cell - Pluripotency
<b>Protein Pathways:</b>	Alzheimer's disease
<b>MW:</b>	36.2 kDa
<b>Gene Summary:</b>	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]