

Product datasheet for RC221339L2

OriGene Technologies, Inc.

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Amyloid Precursor Protein (APP) (NM_000484) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Amyloid Precursor Protein (APP) (NM_000484) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: Amyloid Precursor Protein

Synonyms: AAA; ABETA; ABPP; AD1; alpha-sAPP; APPI; CTFgamma; CVAP; PN-II; PN2; preA4

Mammalian Cell None

Selection:

Vector: pLenti-C-mGFP (PS100071)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC221339).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





st The last codon before the Stop codon of the ORF.

ACCN: NM_000484

ORF Size: 2310 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 customercom 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. <u>More info</u>

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: <u>NM 000484.2</u>

RefSeq Size: 3641 bp
RefSeq ORF: 2313 bp
Locus ID: 351
UniProt ID: P05067

Cytogenetics: 21q21.3

Domains: Beta-APP, KU, A4_EXTRA

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Alzheimer's disease

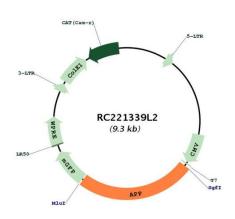
MW: 86.94 kDa



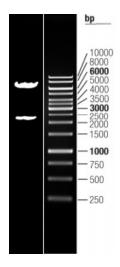
Gene Summary:

This gene encodes a cell surface receptor and transmembrane precursor protein that is cleaved by secretases to form a number of peptides. Some of these peptides are secreted and can bind to the acetyltransferase complex APBB1/TIP60 to promote transcriptional activation, while others form the protein basis of the amyloid plaques found in the brains of patients with Alzheimer disease. In addition, two of the peptides are antimicrobial peptides, having been shown to have bacteriocidal and antifungal activities. Mutations in this gene have been implicated in autosomal dominant Alzheimer disease and cerebroarterial amyloidosis (cerebral amyloid angiopathy). Multiple transcript variants encoding several different isoforms have been found for this gene. [provided by RefSeq, Aug 2014]

Product images:



Circular map for RC221339L2



Double digestion of RC221339L2 using Sgfl and Mlul $\,$