

## Product datasheet for **SC125279**

### Amyloid Precursor Protein (APP) (NM\_201414) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Amyloid Precursor Protein (APP) (NM_201414) Human Untagged Clone
Tag:	Tag Free
Symbol:	Amyloid Precursor Protein
Synonyms:	AAA; ABETA; ABPP; AD1; alpha-sAPP; APPI; CTFgamma; CVAP; PN-II; PN2; preA4
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**Fully Sequenced ORF:** >OriGene ORF within SC125279 sequence for NM\_201414 edited (data generated by NextGen Sequencing)

```

ATGCTGCCCGTTTGGCACTGCTCCTGCTGGCCGCCTGGACGGCTCGGGCGCTGGAGGTA
CCCACTGATGGTAATGCTGGCCCTGCTGGCTGAACCCAGATTGCCATGTTCTGTGGCAGA
CTGAACATGCACATGAATGTCCAGAATGGGAAGTGGGATTAGATCCATCAGGGACAAA
ACCTGCATTGATACCAAGGAAGGCATCCTGCAGTATTGCCAAGAAGTCTACCTGAACTG
CAGATCACCAATGTGGTAGAAGCCAACCAACCAAGTACCATCCAGAAGTGGTGAAGCGG
GGCCGCAAGCAGTGAAGACCCATCCCCACTTTGTGATTCCCTACCGCTGCTTAGTTGGT
GAGTTTGAAGTATGTCCTTCTCGTTCCTGACAAGTGAATTTTACACCAGGAGAGG
ATGGATGTTTGCAGAACTCATCTTCACTGGCACACCGTCGCCAAAGAGACATGCAGTGAG
AAGAGTACCAACTGCATGACTACGGCATGTTGCTGCCCTGCGGAATTGACAAGTTCCGA
GGGGTAGAGTTTGTGTGTGCCACTGGCTGAAGAAAGTACAATGTGGATTCTGCTGAT
GCGGAGGAGGATGACTCGGATGTCTGGTGGGCGGAGCAGACACAGACTATGCAGATGGG
AGTGAAGACAAAGTAGTAGAAGTAGCAGAGGAGGAAGAAGTGGCTGAGGTGGAAGAAGAA
GAAGCCGATGATGACGAGGACGATGAGGATGGTGTAGAGTATGAGGAAGAGGCTGAGGAA
CCCTACGAAGAAGCCACAGAGAGAACCACCAGCATTGCCACCACCACCACCACCACACA
GAGTCTGTGGAAGAGGTGGTTCGAGTTCCTACAACAGCAGCCAGTACCCCTGATGCCGTT
GACAAGTATCTCGAGACACCTGGGGATGAGAATGAACATGCCATTTCCAGAAAGCCAAA
GAGAGGCTTGAGGCCAAGCACCAGAGAGAGAATGTCCCAGGTGATGAGAGAATGGGAAGAG
GCAGAACGTCAAGCAAAGAACTTGCCTAAAGCTGATAAGAAGGCAGTTATCCAGCATTTT
CAGGAGAAAGTGGAACTTTTGGAAAGGAGCAGCAACGAGAGACAGCAGCTGGTGGAG
ACACACATGGCCAGAGTGAAGCCATGCTCAATGACCGCCCGCCTGGCCCTGGAGAAC
TACATACCGCTCTGCAAGCTGTTCTCCTCGGCCTCGTACGTGTTCAATATGCTAAAG
AAGTATGTCCCGCAGAACAGAGGACAGACAGCACACCCTAAAGCATTTCGAGCATGTG
CGCATGGTGGATCCCAAGAAAGCCGCTCAGATCCGGTCCCAGGTTATGACACACCTCCGT
GTGATTTATGAGCGCATGAATCAGTCTCTCCTCCTGCTTACAACGTGCCTGCAGTGGCC
GAGGAGATTCAGGATGAAGTTGATGAGCTGCTTCAGAAAGAGCAAACTATTCAGATGAC
GTCTTGGCCAACATGATTAGTGAACCAAGGATCAGTTACGAAACGATGCTCTCATGCCA
TCTTTGACCGAAACGAAAACCACCGTGGAGCTCCTTCCCGTGAATGGAGAGTTCAGCCTG
GACGATCTCCAGCCGTGGCATTCTTTGGGGCTGACTCTGTGCCAGCCAACACAGAAAAC
GAAGTTGAGCCTGTTGATGCCCCCCTGCTGCCGACCGAGGACTGACCACTCGACCAGGT
TCTGGGTTGACAAATATCAAGACGGAGGAGATCTCTGAAGTGAAGATGGATGCAGAATTC
CGCATGACTCAGGATATGAAGTTCATCATCAAAAATTGGTGTCTTTGCAGAAGATGTG
GGTTCAAACAAAGGTGCAATCATTGGACTCATGGTGGGCGGTGTTGTCATAGCGACAGTG
ATCGTCATCACCTTGGTGTGCTGAAGAAGAAACAGTACACATCCATTTCATGGTGTG
GTGGAGTTGACGCCGCTGTACCCCAGAGGAGCGCCACCTGTCCAAGATGCAGCAGAAC
GGCTACGAAAATCCAACCTACAAGTTCTTTGAGCAGATGCAGAAGTAG
    
```

Clone variation with respect to NM\_201414.2

**Restriction Sites:** Please inquire

**ACCN:** NM\_201414

**Insert Size:** 3500 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](mailto: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](#)

**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\\_201414.1](#), [NP\\_958817.1](#)

**RefSeq Size:** 3416 bp

**RefSeq ORF:** 2088 bp

**Locus ID:** 351

**UniProt ID:** [P05067](#)

**Cytogenetics:** 21q21.3

**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Alzheimer's disease

**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]

Transcript Variant: This variant (3) lacks an alternate in-frame segment compared to variant 1. The resulting isoform (c, also known as PreA4 695) has the same N- and C-termini but is shorter compared to isoform a.