

Product datasheet for **SC308024**

Amyloid Precursor Protein (APP) (NM_201413) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Amyloid Precursor Protein (APP) (NM_201413) 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>pCMV6-XL6</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_201413 edited
AGCACGCGGAGGAGCGTGC GCGGGGCCCCGGGAGACGGCGGTGGCGCGCGGGCAG
AGCAAGGACGCGCGGATCCC ACTCGCACAGCAGCGCACTCGGTGCCCGCGCAGGGTCG
CGATGCTGCCCGGTTTGCACTGCTCCTGCTGGCCGCTGGACGCTCGGGCGCTGGAGG
TACCCACTGATGGTAATGCTGGCCTGCTGGCTGAACCCAGATTGCCATGTTCTGTGGCA
GACTGAACATGCACATGAATGTCCAGAATGGGAAGTGGGATTCAGATCCATCAGGGACCA
AAACCTGCATTGATACCAAGGAAGGCATCCTGCAGTATTGCCAAGAAGTCTACCTGAAC
TGCAGATACCAATGTGGTAGAAGCCAACCAACCAGTGACCATCCAGAAGTGGTGAAGC
GGGGCCGAAGCAGTGCAAGACCCATCCC ACTTTGTGATTCCCTACCGCTGCTTAGTTG
GTGAGTTTGAAGTGATGCCCTTCTCGTTCCTGACAAGTGCAAATCTTACACCAGGAGA
GGATGGATGTTTGC GAACTCATCTTCACTGGCACACCGTCGCCAAAGAGACATGCAGTG
AGAAGAGTACCAACTTGCATGACTACGGCATGTTGCTGCCCTGCCGAATTGACAAGTTC
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CAGAGTCTGTGGAAGAGGTGGTTCGAGAGGTGTGCTCTGAACAAGCCGAGACGGGGCCGT
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TTTACGGCGGATGTGGCGCAACCGGAACACTTTGACACAGAAGAGTACTGCATGGCCG
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AGGCCAAGCACCAGAGAGAATGTCCCAGGTCATGAGAGAATGGGAAGAGGCAGAACGTC
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TGAATCTTTGGAACAGGAAGCAGCCAACGAGAGACAGCAGCTGGTGGAGACACACATGG
CCAGAGTGAAGCCATGCTCAATGACCGCCGCCCTGGCCCTGGAGAATACATCACCG
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GCGCAGAACAGAAGGACAGACAGCACACCCTAAAGCATTCGAGCATGTGCGCATGGTGG
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AGCGCATGAATCAGTCTCTCTCCCTGCTCTACAACGTGCCTGCAGTGGCCGAGGAGATTC
AGGATGAAGTTGATGAGCTGCTTCAAAAAGAGCAAAACTATTCAGATGACGTCTTGGCCA
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AGCCGTGGCATTCTTTTGGGGCTGACTCTGTGCCAGCCAACACAGAAAACGAAGTTGAGC
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CCTTGGTGTGCTGAAGAAGAAACAGTACACATCCATTATCATGGTGTGGTGGAGGTTG
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CACAAGTAGATGCCTGAACCTGAATTAATCCACACATCAGTAATGTATTCTATCTCTCT
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CATTAGGCATTGAGACTTCAAGCTTTTCTTTTTTGTCCACGTATCTTTGGGCTTTGAT
AAAGAAAAGAATCCCTGTTCAATTGTAAGCACTTTTACGGGGCGGGTGGGAGGGGTGCTC
TGCTGGTCTTCAATTACCAAGAATTCTCCAAAACAATTTTCTGCAGGATGATTGTACAGA
ATCATTGCTTATGACATGATCGCTTTCTACACTGTATTACATAAATAAATAAATAAAT
AAAAAAAAAAAAAAAAAAAA
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- Restriction Sites:** NotI-NotI
- ACCN:** NM_201413
- Insert Size:** 3300 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- OTI Annotation:** The ORF of this clone has been fully sequenced and found to contain one SNP compared with NM_201413.1.
- 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_201413.1](#), [NP_958816.1](#)

RefSeq Size: 3584 bp

RefSeq ORF: 2256 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 (2) lacks an alternate in-frame exon compared to variant 1. The resulting isoform (b, also known as PreA4 751) has the same N- and C-termini but is shorter compared to isoform a.