

Product datasheet for **RG234830**

Amyloid Precursor Protein (APP) (NM_001204301) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Amyloid Precursor Protein (APP) (NM_001204301) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Amyloid Precursor Protein
Synonyms:	AAA; ABETA; ABPP; AD1; alpha-sAPP; APPI; CTFgamma; CVAP; PN-II; PN2; preA4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RG234830 representing NM_001204301
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCTGCCCGTTTGGCACTGCTCCTGCTGGCCGCTGGACGGCTCGGGCGCTGGAGGTACCCACTGATG
 GTAATGCTGGCCCTGCTGGCTGAACCCAGATTGCCATGTTCTGTGGCAGACTGAACATGCACATGAATGT
 CCAGAATGGGAAGTGGGATTCCAGATCCATCAGGGACAAAACCTGCATTGATACCAAGGAAGGCATCCTG
 CAGTATTGCCAAGAAGTCTACCCTGAACTGCAGATCACCAATGTGGTAGAAGCCAACCAACCAAGTACCA
 TCCAGAAGTGGTCAAGCGGGCCGCAAGCAGTGAAGACCCATCCCACTTTGTGATTCCTACCGCTG
 CTTAGTTGGTGGTGGTAAAGTATGCTTCTCGTTCCTGACAAGTCAAATTTACACCAGGAGAGG
 ATGGATGTTTGCAAACTCATCTCACTGGCACACCGTCGCCAAGAGACATGCAGTGAAGAGTACCA
 ACTTGCATGACTACGGCATGTTGCTGCCCTGCGGAATTGACAAGTCCGAGGGGTAGAGTTTGTGTGTTG
 CCCACTGGCTGAAGAAAGTGACAATGTGGATTCTGCTGATGCGGAGGAGGATGACTCGGATGTCTGGTGG
 GCGGAGCAGACACAGACTATGCAGATGGGAGTGAAGACAAAGTAGTAGAAGTAGCAGAGGAGGAAGAAG
 TGCTGAGGTGGAAGAAGAAGACCGATGATGACGAGGACGATGAGGATGGTGTGAGGTAGAGGAAGA
 GGCTGAGGAACCTACGAAGAAGCCACAGAGAGAACACCAGCATTGCCACCACCACCACCACCACACA
 GAGTCTGTGGAAGAGGTGGTTCGAGAGGTGTGCTCTGAACAAGCCGAGACGGGGCCGTGCCGAGCAATGA
 TCTCCCGTGGTACTTTGATGTGACTGAAGGGAAGTGTGCCCCATTCTTTACGGCGGATGTGGCGGCAA
 CCGGAACAACCTTTGACACAGAAGTACTGCATGGCCGTGTGTGGCAGGCCATGTCCCAAAGTTTACTC
 AAGACTACCCAGGAACCTTTGCCCGAGATCCTGTTAACTTCTACAACAGCAGCCAGTACCCCTGATG
 CCGTTGACAAGTATCTCGAGACACCTGGGGATGAGAATGAACATGCCATTTCAGAAAGCCAAAGAGAG
 GCTTGAGGCCAAGCACCGAGAGAGAATGTCCAGGTGATGAGAGAATGGGAAGAGGCAGAACGTCAGCA
 AAGAAGTTCCTAAAGCTGATAAGAAGGCAATTATCCAGATTTCCAGGAGAAAGTGAATCTTTGGAAC
 AGGAAGCAGCCAACGAGAGACAGCAGCTGGTGGAGACACACATGGCCAGAGTGAAGCCATGCTCAATGA
 CCGCCCGCCTGGCCCTGGAGAACTACATCACCGCTCTGCAGGCTGTTCTCTCGGCCTCGTCACGCTG
 TTCAATATGCTAAAGAAGTATGTCCGCGCAGAACAGAAGGACAGACAGCACACCCTAAAGCATTTCGAGC
 ATGTGCGCATGGTGGATCCCAAGAAAGCCGCTCAGATCCGGTCCCAGGTTATGACACACCTCCGTGTGAT
 TTATGAGCGCATGAATCAGTCTCTCCCTGCTCTACAACGTGCCTGCAGTGGCCGAGGAGATTCAGGAT
 GAAGTTGATGAGCTGCTCAGAAAGAGCAAACTATTCAGATGACGTCTTGCCCAACATGATTAGTGAAC
 CAAGGATCAGTTACGGAAACGATGCTCTCATGCCATCTTTGACCGAAACGAAAACCACCGTGGAGCTCCT
 TCCCGTGAATGGAGAGTTCAGCCTGGACGATCTCCAGCCGTGGCATTCTTTGGGGCTGACTCTGTGCCA
 GCCAACACAGAAAACGAAGTCTGGGTGACAAATATCAAGACGGAGGAGATCTCTGAAGTGAAGATGG
 ATGCAGAAATCCGACATGACTCAGGATATGAAGTTCATCATCAAAAATGGTGTCTTTGCAGAAGATGT
 GGGTTCAAACAAAGGTGCAATCATTGGACTCATGGTGGGCGGTGTGTGATAGCGACAGTGCATC
 ACCTTGGTGTGCTGAAGAAGAAACAGTACACATCCATTATCATGGTGTGGTGGAGGTTGACGCCGCTG
 TCACCCAGAGGAGCCACCTGTCCAAGATGCAGCAGAACGGCTACGAAAATCCAACCTACAAGTCTT
 TGAGCAGATGCAGAAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG234830 representing NM_001204301
Red=Cloning site Green=Tags(s)

MLPGLALLLLAAWTARALEVPTDGNAGLLAEPQIAMFCGRLNMHMNVQNGKWDSDPSGKTKCIDTKEGIL
 QYCQEVPELQITNVVEANQPVTIQNWCKRGRKQCKTHPHFVIPYRCLVGEFVSDALLVPDKCKFLHQR
 MDVCETHLHWHTVAKETCSEKSTNLHDYGMLPCGIDKFRGVEFVCCPLAEEEDNVDSDAAEEDSDVVM
 GGADTDYADGSEDKVVEVAEEEEVAEEEEADDEDEDEGDEVEEEAEEPYEEATERTTSIATTTTTTT
 ESVEEVVREVCSEQAETGPCRAMISRWFYDVTEGKCAPFFYGGCGGNRNNFDTEEYCMVCGSAMSQSL
 KTTQEPLARDPVKLPPTAASTPDAVDKYLETPGDENEHAFQKAKERLEAKHRERMSQVMREWEAEERQA
 KNLPKADKKAVIQHFQEKVESLEQEAANERQQLVETHMARVEAMLNDRRLALENYITALQAVPPRPRHV
 FNMLKKYVRAEQKDRQHTLKHFEHVRMVDPKAAQIRSQVMTHLRVIYERMNQLSLLYNVPAVAEEIQD
 EVDELLQKEQNYSDDLANMISEPRI SYGNDALMPSLTETKTTVELLPVNGEFLDQLPWSFGADSV
 ANTENEGSGLTNIKTEEISEVKMDAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIATVIVI
 TLVMLKKKQYTSIHGGVVEVDAAVTPEERHLSKMQQNGYENPTYKFFEQMQN

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001204301

ORF Size: 2256 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_001204301.2](#)

RefSeq Size: 3594 bp

RefSeq ORF: 2259 bp

Locus ID: 351

UniProt ID: [P05067](#)

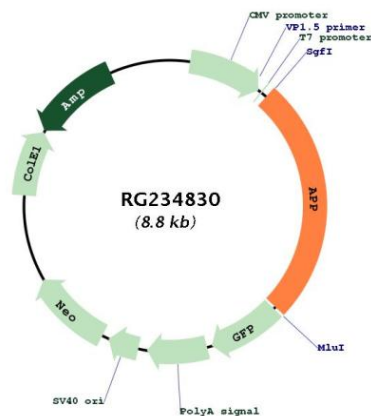
Cytogenetics: 21q21.3

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]

Product images:



Circular map for RG234830