

## Product datasheet for **RC234793**

### Amyloid Precursor Protein (APP) (NM\_001204302) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Amyloid Precursor Protein (APP) (NM_001204302) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Amyloid Precursor Protein
Synonyms:	AAA; ABETA; ABPP; AD1; alpha-sAPP; APPI; CTFgamma; CVAP; PN-II; PN2; preA4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC234793 representing NM\_001204302  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCTGCCCGTTTGGCACTGCTCTGCTGGCCGCTGGACGGCTCGGGCGCTGGAGGTACCCACTGATG  
 GTAATGCTGGCCTGCTGGCTGAACCCAGATTGCCATGTTCTGTGGCAGACTGAACATGCACATGAATGT  
 CCAGAATGGGAAGTGGGATTCCAGATCCATCAGGGACAAAACCTGCATTGATACCAAGGAAGGCATCCTG  
 CAGTATTGCCAAGAAGTCTACCCTGAACTGCAGATCACCAATGTGGTAGAAGCCAACCAACCAGTGACCA  
 TCCAGAAGTGGTCAAGCGGGCCGCAAGCAGTGAAGACCCATCCCACCTTTGTGATTCCCTACCCTG  
 CTTAGTTGGTGGTGGTAAAGTATGCTGCTGCTGCTGCAAGTGCATTTCTACACCAGGAGAGG  
 ATGGATGTTTGCAAAATCATCTTCACTGGCACACCGTCGCCAAAGAGACATGCAGTGAAGAGTACCA  
 ACTTGCATGACTACGGCATGTTGCTGCCCTGCGGAATTGACAAGTCCGAGGGGTAGAGTTTGTGTGTTG  
 CCCACTGGCTGAAGAAAGTGAATGTGGATTCTGCTGATGCGGAGGAGGATGACTCGGATGTCTGGTGG  
 GCGGAGCAGACAGACTATGCAGATGGGAGTGAAGACAAAGTGTAGAAAGTAGCAGAGGAGGAAGAAG  
 TGCTGAGGTGGAAGAAGAAGACCGATGATGACGAGGACGATGAGGATGGTGTGAGGTAGAGGAAGA  
 GGCTGAGGAACCTACGAAGAAGCCACAGAGAGAACACCAGCATTGCCACCACCACCACCACCACACA  
 GAGTCTGTGGAAGAGGTGGTTCGAGAGGTGTGCTCTGAACAAGCCGAGACGGGGCCGTGCCGAGCAATGA  
 TCTCCCGTGGTACTTTGATGTGACTGAAGGAAAGTGTGCCCCATTTTACGGCGGATGTGGCGGCAA  
 CCGGAACAACCTTTGACACAGAAGTACTGCATGGCCGTGTGTGGCAGCGCCATTCTACAACAGCAGCC  
 AGTACCCTGATGCCGTTGACAAGTATCTCGAGACACCTGGGGATGAGAATGAACATGCCATTTCCAGA  
 AAGCCAAAGAGAGGCTTGAGGCCAAGCAGCAGAGAGAATGTCCAGGTGATGAGAGAATGGGAAGAGGC  
 AGAACGTCAAGCAAGAAGTTCCTAAAGCTGATAAGAAGGCAGTTATCCAGCATTTCAGGAGAAAGTG  
 GAATCTTTGGAACAGGAAGCAGCAACGAGAGACAGCAGCTGGTGGAGACACATGCCCAGAGTGGAAAG  
 CCATGCTCAATGACCGCCGCCCTGGCCCTGGAGAACTACATCACCGCTCTGCAGGCTGTTCTCCTCG  
 GCCTCGTACGTGTTCAATATGCTAAAGAAGTATGTCCGCGCAGAACAGAAGGACAGACAGCACACCCTA  
 AAGCATTCGAGCATGTGCGCATGGTGGATCCCAAGAAAGCCGCTCAGATCCGGTCCCAGGTTATGACAC  
 ACCTCCGTGTGATTTATGAGCGCATGAATCAGTCTCTCCTGCTCTACAACGTGCTGCAGTGGCCGA  
 GGAGATTCAGGATGAAGTTGATGAGCTGCTTCAGAAAGAGCAAACTATTCAGATGACGTCTTGGCCAAC  
 ATGATTAGTGAACCAAGGATCAGTTACGGAAACGATGCTCTCATGCCATTTTGACCGAAACGAAAACCA  
 CCGTGGAGCTCCTCCCGTGAATGGAGAGTTCAGCCTGGACGATCTCCAGCCGTGGCATTCTTTTGGGGC  
 TGAATCTGTGCCAGCAACACAGAAAACGAAGTTCTGGGTTGACAAATATCAAGACGGAGGAGATCTCT  
 GAAGTGAAGATGGATGCAGAATTCGACATGACTCAGGATATGAAGTTCATCATAAAAATTGGTGTCT  
 TTGAGAAGATGTGGGTTCAAACAAAGGTGCAATCATTGGACTCATGGTGGGCGGTGTTGTCATAGCGAC  
 AGTGATCGTCATCACCTTGGTGTGCTGAAGAAGAAACAGTACACATCCATTATCATGTTGTTGGTGGAG  
 GTTGACCGCGTGTACCCAGAGGAGCGCCACCTGTCCAAGATGCAGCAGAACGGCTACGAAAATCCAA  
 CCTACAAGTCTTTGAGCAGATGCAGAAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

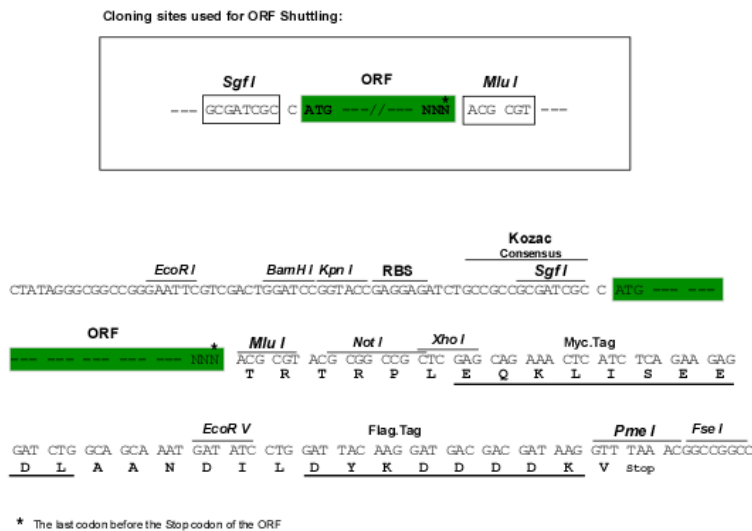
**Protein Sequence:** >RC234793 representing NM\_001204302  
Red=Cloning site Green=Tags(s)

MLPGLALLLLAAWTARALEVPTDGNAGLLAEPQIAMFCGRLNMHMNVQNGKWDSDPSGKTKCIDTKEGIL  
 QYCQEVPELQITNVVEANQPVTIQNWCKRGRKQCKTHPHFVIPYRCLVGEFVSDALLVPDKCKFLHQR  
 MDVCETHLHWHTVAKETCSEKSTNLHDYGMLPCGIDKFRGVEFVCCPLAEESDNVDSADAEEDSDVWW  
 GGADTDYADGSEDKVVEVAEEEEVAEEEEADDEDEDEGDEVEEEAEEPYEEATERTTTSIATTTTTTT  
 ESVEEVVREVCSEQAETGPCRAMISRWFYFDVTEGKCAPFFYGGCGNRRNFDTEEYCMAVCGSAIPTTAA  
 STPDAVDKYLETPGDENEHAHFQKAKERLEAKHRERMSQVMREWEAERQAKNLPKADKKAIVIQHFQEKV  
 ESLEQEAANERQQLVETHMARVEAMLNDRRLALENYITALQAVPPRPRHVNMLKKYVRAEQKDRQHTL  
 KHFEHVRMVPKKAQIRSQVMTHLRVIYERMNQLSLLYNVPAVAEEIQDEVELLQKEQNYSDVLAN  
 MISEPRISYGNLMPSLTETKTTVELLPVNGEFLDDLQPWHSFGADSVANTENEGSGLTNIKTEEIS  
 EVKMDAEFRHDSGYEVHHQKLVFFAEDVGSNGKAIIGLMVGGVVIATVIVITLVMKKKQYTSIHGGVVE  
 VDAAVTPEERHL SKMQQNGYENPTYKFFEQMQN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001204302

**ORF Size:** 2199 bp

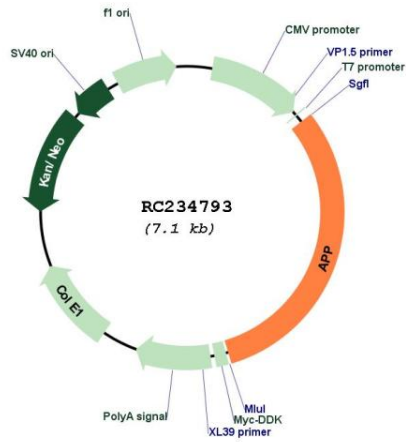
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001204302.2</a>
<b>RefSeq Size:</b>	3537 bp
<b>RefSeq ORF:</b>	2202 bp
<b>Locus ID:</b>	351
<b>UniProt ID:</b>	<a href="#">P05067</a>
<b>Cytogenetics:</b>	21q21.3
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Alzheimer's disease
<b>MW:</b>	83.4 kDa
<b>Gene Summary:</b>	<p>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]</p>

Product images:



Circular map for RC234793