

## Product datasheet for **RG234793**

### 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:	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)



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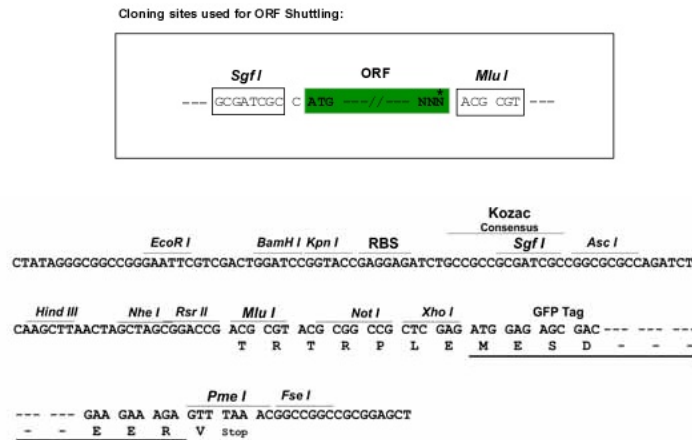
**Protein Sequence:** >RG234793 representing NM\_001204302  
 Red=Cloning site Green=Tags(s)

MLPGLALLLLAAWTARALEVPTDGNAGLLAEPQIAMFCGRLNMHMNVQNGKWDSDPSGKTKCIDTKEGIL  
 QYCQEVPELQITNVVEANQPVTIQNWCKRGRKQCKTHPHFVIPYRCLVGEFVSDALLVPDKCKFLHQR  
 MDVCETHLHWHTVAKETCSEKSTNLHDYGMLPCGIDKFRGVEFVCCPLAEEEDNVDSADAEEEDSDVWW  
 GGADTDYADGSEDKVVEVAEEEEVAEEEEADDEDEDEGDEVEEEAEEPYEEATERTTSIATTTTTTT  
 ESVEEVVREVCSEQAETGPCRAMISRWFYFDVTEGKCAPFFYGGCGGNRNFDTEEYCMVCGSAIPTTAA  
 STPDAVDKYLETPGDENEHAHFQKAKERLEAKHRERMSQVMREWEAERQAKNLPKADKKAIVIQHFQEKV  
 ESLEQEAANERQQLVETHMARVEAMLNDRRLALENYITALQAVPPRPRHVNMLKKYVRAEQKDRQHTL  
 KHFEHVRMVPKKAQIRSQVMTHLRVIYERMNQLSLLYNVPAVAEEIQDEVELLQKEQNYSDVLAN  
 MISEPRISYGNDALMPSLTETKTTVELLPVNGEFLDDLQPWHSFGADSVANTENEGSGLTNIKTEEIS  
 EVKMDAEFRHDSGYEVHHQKLVFFAEDVGSNGKAIIGLMVGGVVIATVIVITLVMLKKKQYTSIHGGVVE  
 VDAAVTPEERHL SKMQQNGYENPTYKFFEQMQN

TRTRPLE - GFP Tag - V

**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).

**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\\_001204302.2](#)

**RefSeq Size:** 3537 bp

**RefSeq ORF:** 2202 bp

**Locus ID:** 351

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

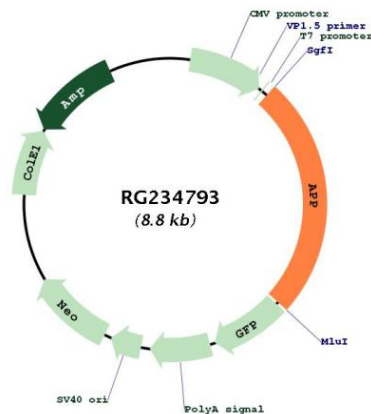
**Cytogenetics:** 21q21.3

**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 RG234793