

## Product datasheet for MR220937

### Aph1a (NM\_146134) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Aph1a (NM\_146134) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Aph1a  
**Synonyms:** 6530402N02Rik; APH-1a  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR220937 representing NM\_146134  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGGGGCTGCTGTGTTTTTCGGATGCACCTTCGTCGCGTTCGGCCAGCCTTCTCCTTTTCTGATCA  
 CTGTAGCTGGAGACCCACTTCGGGTTATCATCCTGGTGGCGGGAGCCTTTTTCTGGCTGGTCTCCCTGCT  
 CTTGGCTTCTGTGGTCTGGTTCATCTTGGTCCATGTGACAGACCGATCAGATGCACGGCTCCAGTATGGC  
 CTCCTGATTTTTGGTGTGCTGTCTCTGTCTTCTACAGGAAGTGTCCGTTTTGCTTACTACAAGCTCC  
 TTAAGAAGGCAGATGAGGGCTTAGCATCACTGAGTGAGGACGGAAGATCACCCATCTCCATCCGACAGAT  
 GGCTATGTTTCTGGTCTGTCTTCGGTATCATCAGTGGTGTCTTCTCTGTTATCAATATTTGGCTGAT  
 GCACTTGGGCCAGGTGTGGTTGGATCCATGGAGACTCACCTATTACTTCTGACTTCAGCCTTTCTGA  
 CAGCAGCCATTATCCTGCTCCACACCTTTTGGGGAGTTGTGTTCTTTGATGCCTGTGAGAGGAGACGGTA  
 CTGGGCTTTGGGCTGGTAGTTGGGAGTCACCTTCTGACATCGGGACTGACATTCCTGAACCCCTGGTAT  
 GAGGCTAGCCTGCTGCCATCTATGCAGTCACCGTTTCCATGGGGCTCTGGGCGTTCATCACAGCCGGAG  
 GCTCCCTCCGAAGTATCCAGCGCAGCCTTTCGTGCCCGCCGAGGAGGACAGTCCGGTGTGTTACTC  
 TGCCCTGCGCATCCCACCCGAGGAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR220937 representing NM\_146134  
Red=Cloning site Green=Tags(s)

MGAAVFFGCTFVAFGPAFSLFLITVAGDPLRVIIIVAGAFFWLVSLLLASVWVWILVHVHTDRSDARLQYG  
 LLIFGAAVSVLLQEVRFAYYKLLKKADEGLASLSEDRSPISIRQMAYVSGLSFGIISGVFVSVINILAD  
 ALGPGVVGIIHGDSPIYFLTSAFLTAAIILLHTFWGVVFFDACERRRYWALGLVVGSHLLTSGLTFLNPWY  
 EASLLPIYAVTVSMGLWAFITAGGSLRSIQRSLSCRRQEDSRVMVYSALRIPPED

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9024\\_c03.zip](https://cdn.origene.com/chromatograms/mm9024_c03.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_146134

**ORF Size:** 795 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\\_146134.2](#), [NP\\_666246.1](#)

**RefSeq Size:** 2882 bp

**RefSeq ORF:** 798 bp

**Locus ID:** 226548

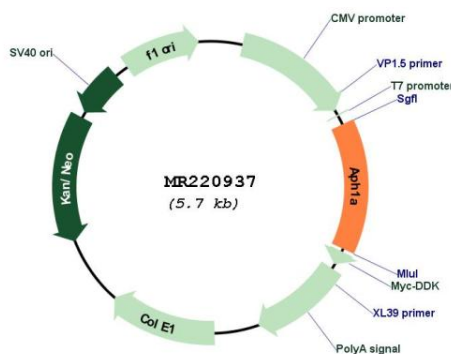
**UniProt ID:** [Q8BVF7](#)

**Cytogenetics:** 3 F2.1

**MW:** 29.4 kDa

**Gene Summary:** This gene encodes a subunit of the gamma-secretase complex, which is localized to the endoplasmic reticulum and golgi apparatus. Gamma-secretase is a multi-protein enzyme that catalyzes intramembraneous proteolysis of type I transmembrane proteins and is essential for many signaling pathways, including the Notch signaling pathway. Studies suggest that the protein encoded by this locus binds directly to substrates of the gamma-secretase complex, including the beta-amyloid precursor protein which is associated with Alzheimer disease progression. This gene is required for normal embryonic development and survival, and disruption is associated with defects in the yolk sack angiogenesis, neural tube formation, and somitogenesis. A pseudogene of this gene is located on chromosome 1. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2013]

### Product images:



Circular map for MR220937