

Product datasheet for **RG220995**

APOBEC3A (NM_145699) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: APOBEC3A (NM_145699) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: APOBEC3A
Synonyms: A3A; ARP3; bK150C2.1; PHRBN
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG220995 representing NM_145699
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGAAGCCAGCCAGCATCCGGGCCAGACACTTGATGGATCCACACATATTCACCTTCCAACCTTAAACA
 ATGGCATTGGAAGGCATAAGACCTACCTGTGCTACGAAGTGAGCGCCTGGACAATGGCACCTCGGTCAA
 GATGGACCAGCACAGGGGCTTTCTACACAACCAGGCTAAGAATCTTCTGTGGCTTTTACGGCCGCAT
 GCGGAGCTGCGCTTCTTGACCTGGTTCCTTCTTGCAGTTGGACCCGGCCAGATCTACAGGGTCACTT
 GGTTCATCTCCTGGAGCCCTGCTTCTCCTGGGCTGTGCCGGGAAGTGCCTGCGTTCCCTCAGGAGAA
 CACACAGTGAGACTGCGCATCTTCGCTGCCCGCATCTATGATTACGACCCCTATATAAGGAGGGCGCTG
 CAAATGCTGCGGGATGCTGGGGCCAAAGTCTCCATCATGACCTACGATGAATTTAAGCACTGCTGGGACA
 CCTTTGTGGACCACCAGGGATGTCCCTTCCAGCCCTGGGATGGACTAGATGAGCACAGCCAAGCCCTGAG
 TGGGAGGCTGCGGGCCATTCTCCAGAATCAGGGAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG220995 representing NM_145699
 Red=Cloning site Green=Tags(s)

MEASPASGPRHLMDFHIFTSNFNNGIGRHKTYLCYEVEERLDNGTSVKMDQHRGFLHNQAKNLLCGFYGRH
 AELRFLDLVPSLQLDPAQIYRVTFIISWSPCFSWGAGEVRAFLQENTHVRLRIFAARIYDYDPLYKEAL
 QMLRDAGAQVSIIMTYDEFKHCWDTFVDHQGCPFPWDGLDEHSQALSGRLRAILQNQGN

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



[View online »](#)

Cloning Scheme:


ACCN: NM_145699

ORF Size: 597 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_145699.2](#), [NP_663745.1](#)

RefSeq Size: 1349 bp

RefSeq ORF: 600 bp

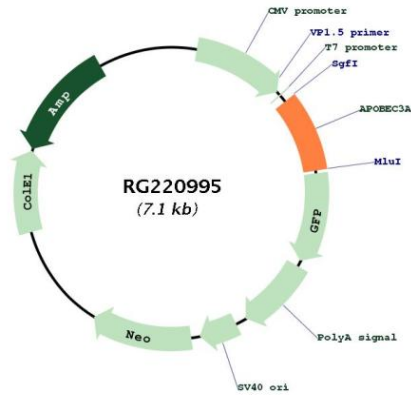
Locus ID: 200315

UniProt ID: [P31941](#)

Cytogenetics: 22q13.1

Gene Summary: This gene is a member of the cytidine deaminase gene family. It is one of seven related genes or pseudogenes found in a cluster, thought to result from gene duplication, on chromosome 22. Members of the cluster encode proteins that are structurally and functionally related to the C to U RNA-editing cytidine deaminase APOBEC1. The protein encoded by this gene lacks the zinc binding activity of other family members. The protein plays a role in immunity, by restricting transmission of foreign DNA such as viruses. One mechanism of foreign DNA restriction is deamination of foreign double-stranded DNA cytidines to uridines, which leads to DNA degradation. However, other mechanisms are also thought to be involved, as anti-viral effect is not dependent on deaminase activity. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2012]

Product images:



Circular map for RG220995