

Product datasheet for **RC206821**

APOBEC3G (NM_021822) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	APOBEC3G (NM_021822) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	APOBEC3G
Synonyms:	A3G; ARCD; ARP-9; ARP9; bK150C2.7; CEM-15; CEM15; dj494G10.1; MDS019
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC206821 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGCCTCACTTCAGAAACACAGTGGAGCGAATGTATCGAGACACATTCTCTACAACTTTTATAATA
GACCCATCCTTTCTCGTCGGAATACCGTCTGGCTGTGCTACGAAGTAAAACAAAGGTCCTCAAGGCC
CCCTTTGGACGCAAAGATCTTTGAGGCCAGGTGATTCCGAACCTAAGTACCACCCAGAGATGAGATTC
TTCCACTGGTTTCAGCAAGTGGAGGAAGTGCATCGTGACCAGGAGTATGAGGTACCTGGTACATATCCT
GGAGCCCTGCACAAAGTGTACAAGGGATATGGCCACGTTCTGGCCGAGGACCCGAAGGTTACCCTGAC
CATCTTTGTTGCCCGCCTCTACTACTTCTGGGACCCAGATTACCAGGAGGCGCTTCGCAGCCTGTGTGAG
AAAAGAGACGGTCCGCGTGCCACCATGAAGATCATGAATTATGACGAATTTACGACTGTTGGAGCAAGT
TCGTGTACAGCCAAGAGAGACTATTTGAGCCTTGAATAATCTGCCTAAATATTATATTTACTGCACAT
CATGCTGGGGGAGATTCTCAGACACTCGATGGATCCACCCACATTCACCTTCAACTTTAAACAATGAACCT
TGGGTGAGAGGACGGCATGAGACTTACCTGTGTTATGAGGTGGAGCGCATGCACAATGACACCTGGGTCC
TGCTGAACCAGCGCAGGGGCTTTCTATGCAACCAGGCTCCACATAAACACGGTTTCTTGAAGGCCGCCA
TGCAGAGCTGTGCTTCTGGACGTGATTCCTTTTGAAGCTGGACCTGGACCAGGACTACAGGGTTACC
TGCTTACCTCCTGGAGCCCTGCTTACGCTGTGCCAGGAAATGGCTAAATTTCAAAAAACAAC
AGGTGAGCCTGTGCATCTTCACTGCCCGCATCTATGATGATCAAGGAAGATGTCAGGAGGGGCTGCGCAC
CCTGGCCGAGGCTGGGGCCAAAATTTCAATAATGACATACAGTGAATTTAAGCACTGCTGGGACACCTTT
GTGGACCACAGGGATGTCCCTTCCAGCCCTGGGATGGACTAGATGAGCACAGCCAAGACCTGAGTGGGA
GGCTGCGGGCCATTCTCCAGAATCAGGAAAAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC206821 protein sequence
Red=Cloning site Green=Tags(s)

MKPHFRNTVERMYRDTFSYNFYNRPIILSRNTVWLCYEVKTKGPSRPPLDAKIFRGQVYSELKYHPEMRF
FHWFSKWRKLRDQEYEVTWYISWSPCTKCTRDMATFLAEDPKVTLTIFVARLYYFWDPDYQEARSLCQ
KRDGPRATMKIMNYDEFQHCWSKFVYSQRELPEPWNPLPKYYILLHIMLGEILRHSMDDPPTFTFNFNNEP
WVRGRHETYLCEYVERMHNDTWLLNQRRGF LCNQAPHKHGFL EGRHAELCF L DVI PFWKLDLDQDYRVT
CFTSWSPCF SCAQEMAKFI SKNKHVSLCIFTARIYDDQGRCEGLR TLAEAGAKISIMTYSEFKHCWDTF
VDHQGCFQPDG LDEHSQDL SGRLRAILQNQEN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6066_f01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_021822

ORF Size: 1152 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_021822.4](#)

RefSeq Size: 1848 bp

RefSeq ORF: 1155 bp

Locus ID: 60489

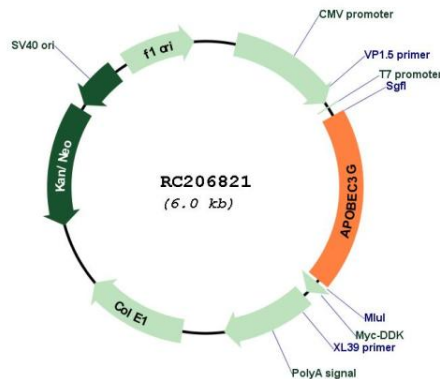
UniProt ID: [Q9HC16](#)

Cytogenetics: 22q13.1

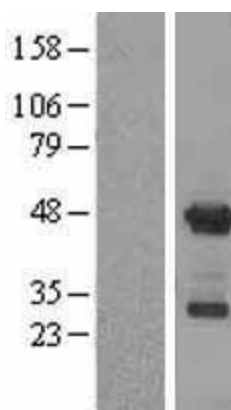
MW: 46.4 kDa

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 catalyzes site-specific deamination of both RNA and single-stranded DNA. The encoded protein has been found to be a specific inhibitor of human immunodeficiency virus-1 (HIV-1) infectivity. [provided by RefSeq, Mar 2017]

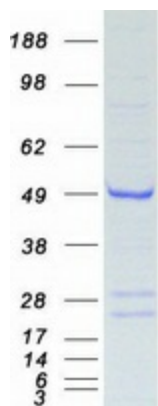
Product images:



Circular map for RC206821



Western blot validation of overexpression lysate (Cat# [LY411904]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206821 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified APOBEC3G protein (Cat# [TP306821]). The protein was produced from HEK293T cells transfected with APOBEC3G cDNA clone (Cat# RC206821) using MegaTran 2.0 (Cat# [TT210002]).