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Datasheet for ABIN4920671

Human APOBEC3A_B ORF Clone in Mammalian Expression Vector (DYKDDDDK Tag)

Overview	
Quantity:	10 μg
Gene:	APOBEC3A/B (APOBEC3A_B)
Species:	Human
Fusion tag:	DYKDDDDK Tag
Insert:	ORF
Vector:	Mammalian Expression Vector
Application:	Protein Expression (PExp)
Product Details	
Purpose:	Expression/transfection ready cDNA ORF clone of Human APOBEC3A_B with C terminal DYKDDDDK tag is ideal for express proteins in E.coli & mammalian cells.
Brand:	GenEZ™
Insert Length:	600 bp
Vector Backbone:	pcDNA3.1+C-(K)-DYK
Promoter:	CMV Promoter
Selectable Marker:	Neomycin
Bacterial Resistance:	Ampicillin
Expression Type:	Transient, Stable
Sequence:	ATGGAAGCCA GCCCAGCATC CGGGCCCAGA CACTTGATGG ATCCACACAT ATTCACTTCC AACTTTAACA ATGGCATTGG AAGGCATAAG ACCTACCTGT GCTACGAAGT GGAGCGCCTG GACAATGGCA CCTCGGTCAA GATGGACCAG CACAGGGGCT TTCTACACAA CCAGGCTAAG AATCTTCTCT GTGGCTTTTA CGGCCGCCAT GCGGAGCTGC GCTTCTTGGA CCTGGTTCCT

TCTTTGCAGT TGGACCCGGC CCAGATCTAC AGGGTCACTT GGTTCATCTC CTGGAGCCCC
TGCTTCTCCT GGGGCTGTGC CGGGGAAGTG CGTGCGTTCC TTCAGGAGAA CACACACGTG
AGACTGCGTA TCTTCGCTGC CCGCATCTAT GATTACGACC CCCTATATAA GGAGGCACTG
CAAATGCTGC GGGATGCTGG GGCCCAAGTC TCCATCATGA CCTACGATGA ATTTAAGCAC
TGCTGGGACA CCTTTGTGGA CCACCAGGGA TGTCCCTTCC AGCCCTGGGA TGGACTAGAT
GAGCACAGCC AAGCCCTGAG TGGGAGGCTG CGGGCCATTC TCCAGAATCA GGGAAACTGA

Specificity:

ORF Insert Method: CloneEZ® Seamless cloning technology, recombination-based cloning technology

Characteristics:

Gene cDNA ORF clone sequences were retrieved from the NCBI Reference Sequence Database (RefSeq). These sequences represent the protein coding region of the gene cDNA ORF which is encoded by the open reading frame (ORF) sequence.

Sequencing Primer:

- Forward primer: 5'-TAATACGACTCACTATAGGG-3'
- Reverse primer: 5'-CCTCGACTGTGCCTTCTA-3'

Grade:

End-sequenced

Components:

The GenEZ ORF clone is delivered as 10 µg of lyophilized plasmid DNA in a vial.

Target Details

Gene:

APOBEC3A/B (APOBEC3A_B)

Alternative Name:

APOBEC3A_B (APOBEC3A_B Products)

Background:

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. The protein encoded by this gene is the same as that encoded by APOBEC3A, however, this gene is a hybrid gene that results from the deletion of approximately 29.5 kb of sequence between the APOBEC3A gene and the adjacent gene APOBEC3B. The breakpoints of the deletion are within the two genes, so the deletion hybrid is predicted to have the promoter and coding region of APOBEC3A, but the 3' UTR of APOBEC3B. [provided by RefSeq, Jul 2012].

Target Details 100913187 Gene ID: NCBI Accession: NM_001193289 **Application Details** Restrictions: For Research Use only Handling Format: Lyophilized Storage: RT/-20 °C Storage Comment: • Keep the vial sealed and store at -20°C for long-term storage. • Before use, centrifuge the vial at 6,000 g x g for 1 minute at 4°C. • Open the lid and add 100 µl (or other volume depending on your desired final concentration) of distilled water (or TE buffer) to dissolve the DNA. • If necessary, heat the solution at 50°C for 15 minutes to dissolve the DNA. • Close the lid and vortex the vial for 1 minute. • Aliquot the dissolved plasmid DNA and store in small aliquots at -20°C. **Expiry Date:** 12 months **Publications** Product cited in: Johnson, Drugan, Miller, Evans: "38" in: , Vol. 1363, Issue Nucleic acids research, pp. 28-39, (1991)