

Product datasheet for **RC224517**

RB associated KRAB repressor (RBAK) (NM_021163) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	RB associated KRAB repressor
Synonyms:	ZNF769
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



ORF Nucleotide Sequence: >RC224517 ORF sequence, **codon optimized**.
Due to the complexity of NM_021163, the ORF clone is codon optimized for mammalian Expression.
The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGAACACCTTGCAGGGACCAAGTGTCTTTCAAAGACGTGGCTGTAGACTTTACACAAGAAGAATGGCAGC
AGCTGGATCCTGACGAAAAATCACCTACAGGGACGTGATGCTTGAGAACTACAGCCACCTGGTCAGCGT
GGGCTATGACACCACCAAGCCAAACGTGATTATCAAGCTCGAACAGGGCGAAGAGCCGTGGATCATGGGA
GGTGAATTCCTTGTGACGATTCACAGAGGCTGGAGGGTAGACGATCTGATTGAGAGAATTCAGGAGA
ACGAAGATAAGCATTCCAGACAAGCCGCTTGTATCAACTCCAAGACCCTACCGAGGAAAAGGAGAATAC
CTTCAGCCAGATCTACATGGAACCTCCCTCGTGCCCAAGTTCAATTATCGCCCACTGCGTGAGTTGT
GGAAAGAACCTCGAAAGCATTCTCAATTGATTCTAGTGACGGGTGCATACGCCCGCACCAAGCCGACG
AATGTAATGAGTGCGGCAAGACTTATCATGGCGAAAAGATGTGCGAGTTCAACCAGAATGGAGACACCTA
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AATGGAATGATAGCGGGCCGATTTTCATCCAGATGTCCAATTTTAACGCCTATCAGCGCTCCCAATGGA
GATGAAGCCGTTTGTGAGTGAATGCGGGAAGTCTTTCTGTAAGAAATCCAAGTTTATCATCCACCAG
AGGGCCACACAGGCGAGAAACCATATGAATGTAATGTTTGCGGGAAATCCTTTTACAGAAGGGCACGC
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TCAGAAGTTGCACCTGACTCAGCACTTGAGGACTCACTCTGGAGAAAAGCCATATGAATGCTCTGAGTGT
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CTTGCAATGAATGTGGCAAGAGTTTCTCCGAAAAAGCGCTCTGTCCGACCATCAGCGCACACATACTGG
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AGGACGCACACAGGCGAAAAAGCCTTATCAATGCAGCAATGTGAAAAATTTTTCAGCCGGGTGCTCTATC
TGACAATTCATTACAGATCTCACCTTGAGGAAAAGCCGTACGAGTGTAAACGAGTGTGAAAGACCTTCAA
TCTGAATTCAGCATTATTAGACATAGGAAGGTGCACACTGAAGAAAAATCTCATGAATGCTCAGAGTGT
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AAGTTACGAATGTAATGTGTGCGGAAAGCTGTTTAACGAATTTCTACTATACCGAACACTATAGGAGC
CACTCCGAAGAGAAACCTACGGATGTTCTGAGTGCAGTAAGACTTTCAGCCACAACAGCTCCCTTTTCC
GGCACCAACGGGTGCACACTGGCGAGAAGCCATATGAATGCTACGAATGCGGCAAAATCTTCTCCAGAA
AAGCTACCTCACCATCCACCACCGAATTCATTCCGGAGAGAAGCCCTACGAATGTTCTAAATGCGGAAAG
GTTTTTCCAGAATGTCTAATCTCAGAGTCACTATCGGAGCCATTAGGAGAGAAACCATACGAGTGT
ACGAATGCGGAAAGGTGTTAGCCAGAAGAGCTATCTGACCGTACACTATCGCACTATTAGGCGAGAA
ACCATATGAGTGCAACGAATGTGGGAAAAATTCATCACAGATCCGCCTTAACTCTACCAAAAGAATC
CATCGCCGGGGGAATATGAATGTTCTGGATGTGAAAAACCTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC224517 representing NM_021163

Red=Cloning site Green=Tags(s)

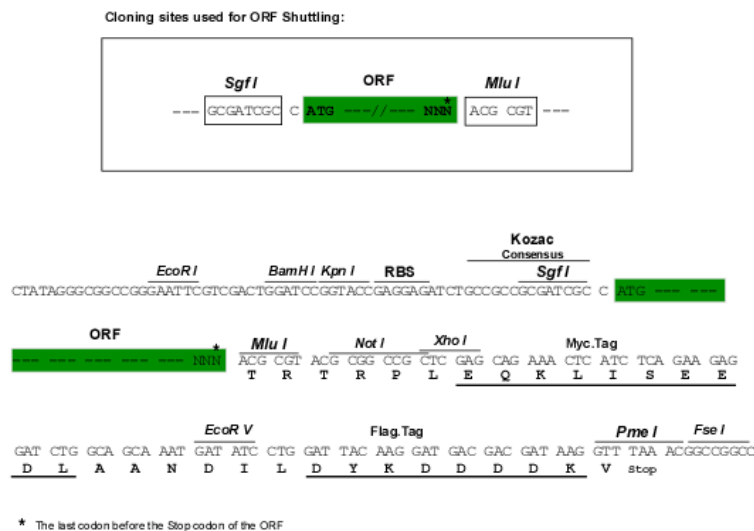
MNTLQGPVSFKDVAVDFTQEEWQQLDPDEKITYRDVMLENYSHLVSVDYDTTKPNVIKLEQGEEPWIMG
GEFPCQHSPEAWRVDDLIERIQENEDKHSRQAACINSKLTTEEKENTFSQIYMETSLVPSSIIAHNCVSC
GKNLESISQLISSDGSYARTKPDCEKTYHGEKMCFFNQNGDTYSHNEENILQKISILEKPFYEYNEC
MEALDNEAVFIAHKRAYIGEKPYEWNDSPDFIQMSNFNAYQRSQMEMKPFECSECGKSFCKKSKFIIHQ
RAHTGEKPYECNVCGKFSQKGLTLVHRRSHLEEKPYKCNECGKTFQCQLHLTQHLRTHSGEKPYECSEC
GKTFQCQKTHLTLHQRNHSGERPYPCNECGKFSRKSALSDHQRTHTGEKLYKCNECGKSYRKSTLITHQ
RTHTEKPYQCSECGKFFSRVSYLTIHYRSHLEEKPYECNECGKTFNLNSAFIRHRKVHTEEKSHCSEC
GKFSQLYLTDHHTAHLEEKPYECNECGKTFVNSAFDGHQPLPKGEKSYECNVCGKLFNELSYYTEHYRS
HSEKPYGCSECGKTFSHNSSLFRHQRVHTGEKPYECYECGKFFSQKSYLTIHHRHSGEKPYECCKCGK
VFSRMSNLTVHYRSHSGEKPYECNECGKVSQKSYLTVHYRTHSGEKPYECNECGKFFHRSFAFNHQRI
HRRGNMNVLDVENL

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN:

NM_021163

ORF Size:

2142 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:

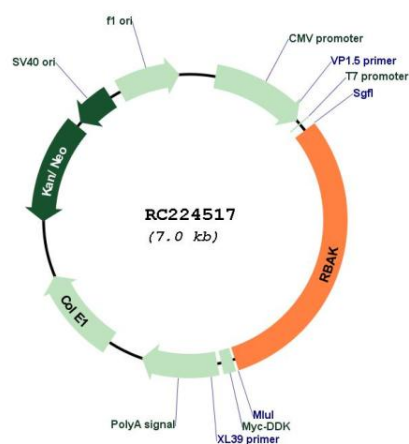
This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<u>NM_021163.1, NM_021163.2, NM_021163.3, NP_066986.1</u>
RefSeq Size:	6612 bp
RefSeq ORF:	2145 bp
Locus ID:	57786
UniProt ID:	<u>Q9NYW8</u>
Cytogenetics:	7p22.1
Domains:	KRAB, zf-C2H2
Protein Families:	Druggable Genome, Transcription Factors
MW:	83 kDa
Gene Summary:	This gene encodes a nuclear protein which interacts with the tumor suppressor retinoblastoma 1. The two interacting proteins are thought to act as a transcriptional repressor for promoters which are activated by the E2F1 transcription factor. This protein contains a Kruppel-associated box (KRAB), which is a transcriptional repressor motif. Read-through transcripts that include exons from the downstream gene LOC389458 are expressed from this locus. [provided by RefSeq, Mar 2011]

Product images:



Circular map for RC224517