

Product datasheet for **RC219954**

BAX (NM_004324) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
 Product Name: BAX (NM_004324) Human Tagged ORF Clone
 Tag: Myc-DDK
 Symbol: BAX
 Synonyms: BCL2L4
 Mammalian Cell Selection: Neomycin
 Vector: pCMV6-Entry (PS100001)
 E. coli Selection: Kanamycin (25 ug/mL)
 ORF Nucleotide Sequence: >RC219954 representing NM_004324
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGACGGGTCCGGGAGCAGCCAGAGGCGGGGGCCACCAGCTCTGAGCAGATCATGAAGACAGGGG
 CCCTTTTGCTTCAGGGTTTCATCCAGGATCGAGCAGGGCGAATGGGGGGGAGGCACCCGAGCTGGCCCT
 GGACCCGGTGCCCTCAGGATGCGTCCACCAAGAAGCTGAGCGAGTGTCTCAAGCGCATCGGGGACGAAGT
 GACAGTAACATGGAGCTGCAGAGGATGATTGCCCGGTGGACACAGACTCCCCCGAGAGGTCTTTTTCC
 GAGTGGCAGCTGACATGTTTTCTGACGGCAACTTCAACTGGGGCCGGTGTGCGCCCTTTTCTACTTTGC
 CAGCAAACCTGGTCTCAAGGCCCTGTGCACCAAGGTGCCGGAAGTATCAGAACCATCATGGGCTGGACA
 TTGGACTTCTCCGGGAGCGGCTGTTGGGCTGGATCCAAGACCAGGGTGGTGGGTGAGACTCCTCAAGC
 CTCTCACCCACCACCGCGCCCTCACCAACCGCCCTGCCACCGTCCCTGCCCCCGCCACTCCTCT
 GGGACCTGGCCCTTCTGGAGCAGGTCACAGTGGTGCCTCTCCCATCTTCAGATCATCAGATGTGGTC
 TATAATGCGTTTTCTTACGTGTC

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC219954 representing NM_004324
 Red=Cloning site Green=Tags(s)

MDGSGEQPRGGGPTSSEQIMKTGALLLQGFIQDRAGRMGGEAPELALDPVPQDASTKKLSECLKRIGDEL
 DSNMELQRMIAAVDTPREVFRVAADMFSDFGNFNWGRVVALFYFASKLVLKALCTKVPKELIRITMGWT
 LDFLRERLLGWIQDQGGWVRLKPPHPHHRALTTAPAPSLPPATPLGPWAFWSRSQWCPLPIFRSSDVV
 YNAFSLRV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6114_a01.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_004324

ORF Size: 654 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_004324.4](#)

RefSeq Size: 891 bp

RefSeq ORF: 657 bp

Locus ID: 581

UniProt ID: [Q07812](#)

Cytogenetics: 19q13.33

Domains: Bcl-2

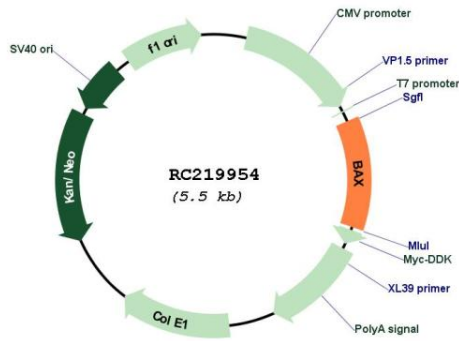
Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Amyotrophic lateral sclerosis (ALS), Apoptosis, Colorectal cancer, Huntington's disease, Neurotrophin signaling pathway, p53 signaling pathway, Pathways in cancer, Prion diseases

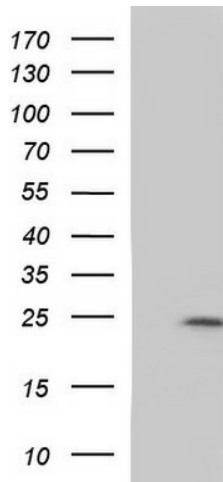
MW: 24 kDa

Gene Summary: The protein encoded by this gene belongs to the BCL2 protein family. BCL2 family members form hetero- or homodimers and act as anti- or pro-apoptotic regulators that are involved in a wide variety of cellular activities. This protein forms a heterodimer with BCL2, and functions as an apoptotic activator. The association and the ratio of BAX to BCL2 also determines survival or death of a cell following an apoptotic stimulus. This protein is reported to interact with, and increase the opening of, the mitochondrial voltage-dependent anion channel (VDAC), which leads to the loss in membrane potential and the release of cytochrome c. The expression of this gene is regulated by the tumor suppressor P53 and has been shown to be involved in P53-mediated apoptosis. Multiple alternatively spliced transcript variants, which encode different isoforms, have been reported for this gene. [provided by RefSeq, Dec 2019]

Product images:



Circular map for RC219954



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY BAX (Cat# RC219954, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-BAX(Cat# [TA590174]).