

## **Product datasheet for RC204369**

## BAX (NM\_138761) Human Tagged ORF Clone

## **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** BAX (NM\_138761) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: BAX

Synonyms: BCL2L4

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

ORF Nucleotide >RC204369 representing NM\_138761

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

CTGGAAGAAGATGGGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC204369 representing NM\_138761

Red=Cloning site Green=Tags(s)

MDGSGEQPRGGGPTSSEQIMKTGALLLQGFIQDRAGRMGGEAPELALDPVPQDASTKKLSECLKRIGDEL DSNMELQRMIAAVDTDSPREVFFRVAADMFSDGNFNWGRVVALFYFASKLVLKALCTKVPELIRTIMGWT

LDFLRERLLGWIQDQGGWDGLLSYFGTPTWQTVTIFVAGVLTASLTIWKKMG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com

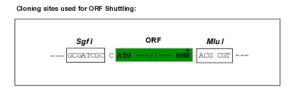


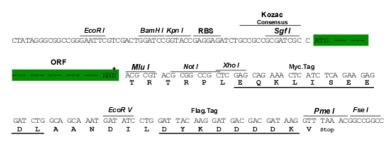
Chromatograms: <a href="https://cdn.origene.com/chromatograms/mg2890">https://cdn.origene.com/chromatograms/mg2890</a> b09.zip

Restriction Sites:

Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_138761

ORF Size: 576 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts

of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:customercom">customercom</a> or by

calling 301.340.3188 option 3 for pricing and delivery.

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:** <u>NM 138761.4</u>

RefSeq Size:888 bpRefSeq ORF:579 bpLocus ID:581

 UniProt ID:
 Q07812

 Cytogenetics:
 19q13.33

**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

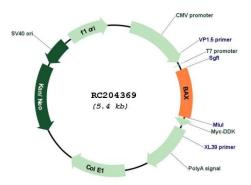
**MW:** 21 kDa

**Gene Summary:** The protein encoded by this gene belongs to the BCL2 protein family. BCL2 family members

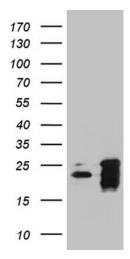
form hetero- or homodimers and act as anti- or pro-apoptotic regulators that are involved in a wide variety of cellular activities. This protein forms a heterodimer with BCL2, and functions as an apoptotic activator. The association and the ratio of BAX to BCL2 also determines survival or death of a 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:**

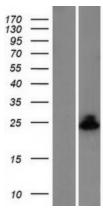


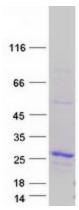
Circular map for RC204369



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY BAX (Cat# RC204369, 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 (1:2000) (Cat# [TA810334]). Positive lysates [LY408504] (100ug) and [LC408504] (20ug) can be purchased separately from OriGene.







Western blot validation of overexpression lysate (Cat# [LY408504]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204369 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified BAX protein (Cat# [TP304369]). The protein was produced from HEK293T cells transfected with BAX cDNA clone (Cat# RC204369) using MegaTran 2.0 (Cat# [TT210002]).