

Product datasheet for **RG236678**

BAX (NM_001291428) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BAX (NM_001291428) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	BAX
Synonyms:	BCL2L4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG236678 representing NM_001291428. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGACGGGTCCGGGGAGCAGCCAGAGGGGGGGGCCACCAGCTCTGAGCAGATCATGAAGACAGGG
GCCCTTTTGCTTCAGGGTTTCATCCAGGATCGAGCAGGGCGAATGGGGGGGAGGCACCCGAGCTGGCC
CTGGACCCGGTGCCTCAGGATGCGTCCACCAAGAAGCTGAGCGAGTGTCTCAAGCGCATCGGGGACGAA
CTGGACAGTAACATGGAGCTGCAGAGGATGATTGCCGCCGTGGACACAGACTCCCCCGAGAGGTCTTT
TTCCGAGTGGCAGCTGACATGTTTTCTGACGGCAACTTCAACTGGGGCCGGTGTGCGCCTTTTCTAC
TTTGCCAGCAAAGTGGTCTCAAGGCCCTGTGCACCAAGGTGCCGGAATGATCAGAACCATCATGGGC
TGGACATTGGACTTCCTCCGGGAGCGGCTGTTGGGCTGGATCCAAGACCAGGGTGGTTGGGGGCTGCC
CTGGCCGAGTCACTGAAGCGACTGATGTCCCTGTCTCCAGGACGGCTCCTCTCCTACTTTGGGACGCC
CACGTGGCAGACCGTGACCATCTTTGTGGCGGGAGTGCTCACCGCCTCACTCACCATCTGGAAGAAGAT
GGGCTGAGGCCCCAGCTGCCTTGGACTGTGTTTTCTCCA
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
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Protein Sequence: >Peptide sequence encoded by RG236678
 Blue=ORF Red=Cloning site Green=Tag(s)

MDGSGEQPRGGGPTSSEQIMKTGALLLQGFIQDRAGRMGGEAPELALDPVPQDASTKKLSECLKRIGDE
 LDSNMELQRMIAAVDTDSPREVFRRVADMFSNGNFWGRVVALFYFASKLVKALCTKVPPELIRTIMG
 WTLDFLRERLLGWIQDQGGWGLPLAESLKRLMSLSPGRPPLLLWDAHVADRDLHLCGSAHRLTHHLEED
 GLRPPAALDCVFPP

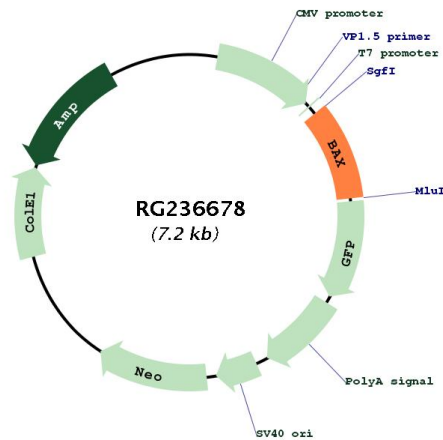
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
 MGYGFYHFGTYPSTYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
 SVIFTDKIIRSNAVTEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001291428

ORF Size:	663 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).
RefSeq:	NM_001291428.1 , NP_001278357.1
RefSeq Size:	869 bp
RefSeq ORF:	666 bp
Locus 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:	24.8 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]