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Product datasheet for RC213203

Bcl2 Binding component 3 (BBC3) (NM_014417) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Bcl2 Binding component 3 (BBC3) (NM_014417) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Bcl2 Binding component 3
Synonyms:	JFY-1; JFY1; PUMA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC213203 representing NM_014417
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCCGCGCACGCCAGGAGGGCAGCTCCCCGGAGCCCGTAGAGGGCCTGGCCCGCGACGGCCCGCGCC
CCTTCCCGCTCGGCCGCCTGGTGCCCTCGGCAGTGTCCTGCGGCCTCTGCGAGCCCGGCCTGGCTGCCGC
CCCCGCCGCCCCCACCCTGCTGCCCGCTGCCTACCTCTGCGCCCCCACCGCCCCACCCGCCGTCACCGCC
GCCCTGGGGGGTTCCCGCTGGCCTGGGGGTCCCCGCAGCCGGCCCCGAGGCCCGCGCCCGGACGGTCCTC
AGCCCTCGCTCTCGCTGGCGGAGCAGCACCTGGAGTCGCCCGTGCCCAGCGCCCCGGGGGCTCTGGCGGG
CGGTCCCACCCAGGCGGCCCCGGGAGTCCGCGGGGAGGAGGAACAGTGGGCCCGGGAGATCGGGGCCCAG
CTGCGGCGGATGGCGGACGACCTCAACGCACAGTACGAGCGGCGGAGACAAGAGGAGCAGCAGCGGCACC
GCCCCTCACCCTGGAGGGTCCTGTACAATCTCATCATGGGACTCCTGCCCTTACCCAGGGGCCACAGAGC
CCCCGAGATGGAGCCCAAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC213203 representing NM_014417
Red=Cloning site Green=Tags(s)

MARARQEGSSPEPVEGLARDGPRPFPLGRLVPSAVSCGLCEPGLAAAPAAPTLLPAAYLCAPTAPPAVTA
ALGGSRWPGGPRSRPRGPRPDGPQPSLSLAEQHLESPVPSAPGALAGGPTQAAPGVRGEEEQWAREIGAQ
LRRMADDLNAQYERRRQEEQQRHRPSPWRVLYNLIMGLLPLPRGHRAPEMEPN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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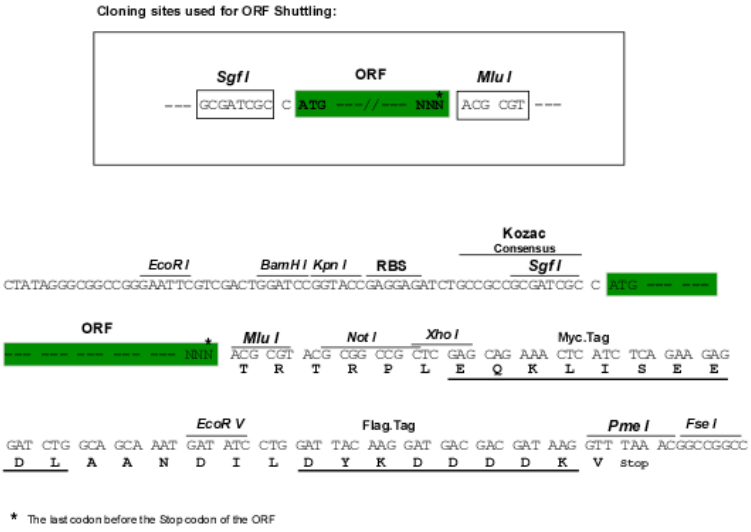
Chromatograms: https://cdn.origene.com/chromatograms/mk6116_h09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_014417

ORF Size: 579 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.

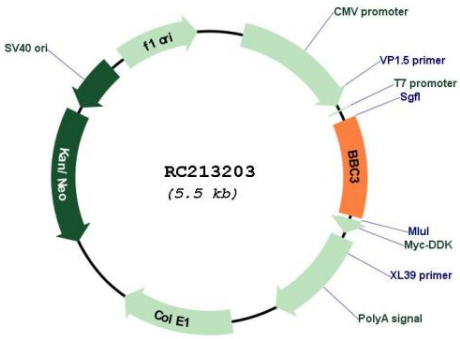
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NM_014417.5

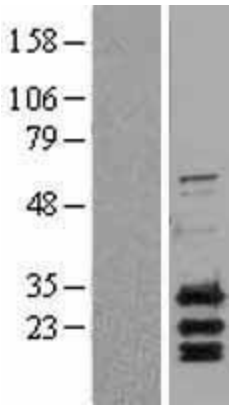
RefSeq Size: 1840 bp

RefSeq ORF:	582 bp
Locus ID:	27113
UniProt ID:	Q9BXH1
Cytogenetics:	19q13.32
Protein Families:	Druggable Genome
Protein Pathways:	Huntington's disease, p53 signaling pathway
MW:	20.4 kDa
Gene Summary:	This gene encodes a member of the BCL-2 family of proteins. This family member belongs to the BH3-only pro-apoptotic subclass. The protein cooperates with direct activator proteins to induce mitochondrial outer membrane permeabilization and apoptosis. It can bind to anti-apoptotic Bcl-2 family members to induce mitochondrial dysfunction and caspase activation. Because of its pro-apoptotic role, this gene is a potential drug target for cancer therapy and for tissue injury. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2011]

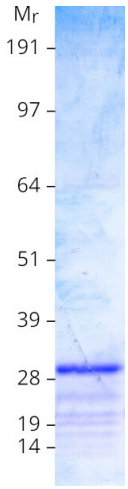
Product images:



Circular map for RC213203



Western blot validation of overexpression lysate (Cat# [LY402330]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213203 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified BBC3 protein (Cat# [TP313203]). The protein was produced from HEK293T cells transfected with BBC3 cDNA clone (Cat# RC213203) using MegaTran 2.0 (Cat# [TT210002]).