

Product datasheet for **RC202002**

BMX (NM_203281) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BMX (NM_203281) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BMX
Synonyms:	ETK; PSCTK2; PSCTK3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC202002 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGATACAAAATCTATTCTAGAAGAACTTCTTCTCAAAAGATCACAGCAAAAAGAAGAAAATGTCACCAA
 ATAATTACAAAGAACGGCTTTTTGTTTTGACCAAAACAAACCTTCTACTATGAATATGACAAAATGAA
 AAGGGGCAGCAGAAAAGGATCCATTGAAATTAAGAAAATCAGATGTGTGGAGAAAAGTAAATCTCGAGGAG
 CAGACGCCTGTAGAGAGACAGTACCCATTTAGATTGTCTATAAAGATGGGCTTCTCTATGTCTATGCAT
 CAAATGAAGAGAGCCGAAGTCAGTGGTTGAAAGCATTACAAAAGAGATAAGGGGTAAACCCACCTGCT
 GGTCAAGTACCATAGTGGTTCTTCGTGGACGGGAAGTTCCTGTGTTGCCAGCAGAGCTGTAAGCAGCC
 CCAGGATGTACCTCTGGGAAGCATATGCTAATCTGCATACTGCAGTCAATGAAGAGAAACAGAGTTC
 CCACCTTCCCAGACAGAGTGTGAAGATACCTCGGGCAGTTCCTGTTCTCAAAATGGATGCACCATCTTC
 AAGTACCCTCTAGCCCAATATGACAACGAATCAAAGAAAACCTATGGCTCCCAGCCACCATCTTCAAGT
 ACCAGTCTAGCGCAATATGACAGCAACTCAAAGAAAATCTATGGCTCCCAGCCAACTTCAACATGCAGT
 ATATTCGAAGGAAGACTTCCCTGACTGGTGGCAAGTAAGAAAACCTGAAAAGTAGCAGCAGCAGTGAAGA
 TGTTGCAAGCAGTAACCAAAAAGAAAGAAATGTGAATCACACCACCTCAAAGATTTATGGGAAATCCCT
 GAGTCAAGTTCATCTGAAGAAGAGGAAAACCTGGATGATTATGACTGGTTTGGTGGTAACATCTCCAGAT
 CACAATCTGAACAGTTACTCAGCAAAAAGGAAAAGAAGGAGCATTATGGTTAGAAAATTCGAGCCAAGT
 GGGAAATGTACACAGTGCCTTATTTAGTAAGGCTGTGAATGATAAAAAGGAACTGTCAAACATTACCAC
 GTGCATACAAATGCTGAGAACAAATTACCTGGCAGAAAACCTACTGTTTTGATTCCATTCAAAGCTTA
 TTCATTATCATCAACACAATTCAGCAGGCATGATCACACGGCTCCGCCACCCTGTGTCAACAAAGGCCAA
 CAAGGTCCCGACTCTGTGTCCCTGGGAAATGGAATCTGGGAACCTGAAAAGAGAAGAGATTACCTTGTTG
 AAGGAGCTGGGAAGTGGCCAGTTTGGAGTGGTCCAGCTGGGCAAGTGGAAAGGGCAGTATGATGTTGCTG
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 CAGCCATCCCAAGCTGGTTAAATCTATGGAGTGTGTTCAAAGGAATACCCCATATACATAGTGACTGAA
 TATATAAGCAATGGCTGCTTGTGAATTACCTGAGGAGTCACGAAAAGGACTTGAACCTTCCCAGCTCT
 TAGAAATGTGCTACGATGTCTGTGAAGGCATGGCCTTCTTGGAGAGTCACCAATTCATACACCGGGACTT
 GGCTGCTCGTAACTGCTTGGTGGACAGAGATCTCTGTGTGAAAGTATCTGACTTTGGAATGACAAGGTAT
 GTTCTTGATGACCAGTATGTCAGTTCAGTCGGAACAAAGTTTCCAGTCAAGTGGTCAGCTCCAGAGGTGT
 TTCATTACTTCAAATACAGCAGCAAGTCAGACGTATGGGCATTTGGGATCCTGATGTGGGAGGTGTTCCAG
 CCTGGGGAAGCAGCCCTATGACTTGTATGACAACCTCCCAGGTGGTTCTGAAGGTCTCCCAGGGCCACAGG
 CTTTACCGGCCCCACCTGGCATCGGACACCATCTACCAGATCATGTACAGCTGCTGGCAGCAGCTCCAG
 AAAAGCGTCCCACATTTAGCAACTCCTGTCTTCCATTGAACCACTTCGGGAAAAGACAAGCAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC202002 protein sequence
Red=Cloning site Green=Tags(s)

MDTKSILEELLLKRSQQKKKMPNPKERL FVLTKTNLSYYEYDKMKRGSRKGSIEIKKIRCVEKVNLEE
 QTPVERQYPFQIVYKDGLLVYASNEESRSQWLKALQKEIRGNPHLLVKYHSGFFVDGKFLCCQQSCKAA
 PGCTLWEAYANLHTAVNEEKHRVPTFPDRVLKIPRAVPVLKMDAPSSSTLAQYDNESSKKNYGSQPPSSS
 TSLAQYDSNSKKIYGSQPNFMQYIPREDFPDWWQVRLKSSSSSEDEVASSNQKERNVNHTTSKISWEFP
 ESSSSEEEENDDYDFWAGNISRSQSEQLLRQKGEKAFMVRNSSQVGMVTVSLFSKAVNDKKGTVKHYH
 VHTNAENKLYLAENYCFDSIPKLIHYHQHNSAGMITRLRHPVSTKANKVPDSVSLGNGIWELKREEITLL
 KELGSGQFGVVQLGKWKQYDVAVKMIKEGSMSEDEFFQEAQTMMKLSHPKLVKFGVCSKEYPIYIVTE
 YISNGCLLNLYRSHGKLEPSQLLEMCYDVCEGMAFLESHQFIHRDLAARNCLVDRDLCKVVSDFGMTRY
 VLDDQYVSSVGTKFPVKWSAPEVFHYFKYSSKSDVWAFGILMWEVFLGKQPYDLYDNSQVVLKVSQGH
 LYRPHLASDTIYQIMYSCWHELPEKRPTFQQLSSIEPLREKDKH

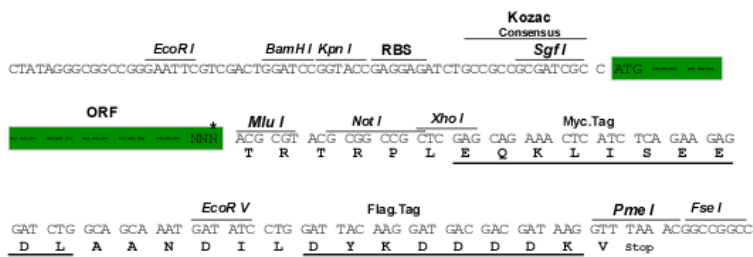
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6165_g03.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_203281

ORF Size: 2025 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 custsupport@origene.com 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.

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

RefSeq: [NM_203281.3](#)

RefSeq Size: 2592 bp

RefSeq ORF: 2028 bp

Locus ID: 660

UniProt ID: [P51813](#)

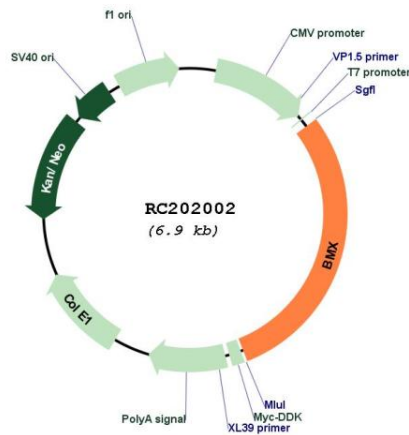
Cytogenetics: Xp22.2

Protein Families: Druggable Genome, Protein Kinase

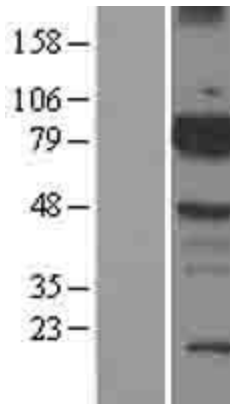
MW: 78 kDa

Gene Summary:

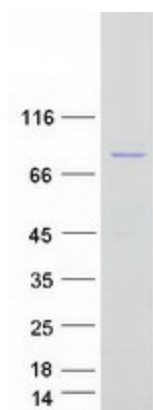
This gene encodes a non-receptor tyrosine kinase belonging to the Tec kinase family. The protein contains a PH-like domain, which mediates membrane targeting by binding to phosphatidylinositol 3,4,5-triphosphate (PIP3), and a SH2 domain that binds to tyrosine-phosphorylated proteins and functions in signal transduction. The protein is implicated in several signal transduction pathways including the Stat pathway, and regulates differentiation and tumorigenicity of several types of cancer cells. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Mar 2016]

Product images:


Circular map for RC202002



Western blot validation of overexpression lysate (Cat# [LY400648]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC221915] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified BMX protein (Cat# [TP302002]). The protein was produced from HEK293T cells transfected with BMX cDNA clone (Cat# RC202002) using MegaTran 2.0 (Cat# [TT210002]).