

## Product datasheet for **RC205995**

### **BMP2K (NM\_017593) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	BMP2K (NM_017593) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BMP2K
Synonyms:	BIKE; HRIHFB2017
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide  
Sequence:**

>RC205995 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAAGAAGTTCTCTCGGATGCCAAGTCGGAGGGCGGCAGCGGCGCGGAGCGGCGGTGGCGGGGCTG  
 GCGGGGCCGGGGCCGGGCGCGCTCGCGCTCCGGCGGCTCGTCCGTGGGGTCCGGGTGTTGCGGGTCGG  
 CCGCCACCAGGTCAACCCTGGAAGAGTCGCTGGCCGAAGTGGATTCTCCACAGTTTTCTCGTGCCTACT  
 CACGGTGAATCCGATGTGCATTGAAGCGAATGTATGTCAATAACATGCCAGACCTCAATGTTTGTAAAA  
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 AAGCTGTTGCAAGTTGCATCAGTGAAGACTCCAATAATTCACCGGGATCTGAAGGTAGAAAAATTTT  
 GTTGAATGATGGTGGAACTATGTACTTTGTGACTTTGGCAGTGCCACTAATAAATTTCTTAATCCTCAA  
 AAAGATGGAGTTAATGTAGTAGAAGAAGAAATTAAGTATAACAACCTGTGCATACAGAGCCCTGAAA  
 TGATCAACCTTTATGGAGGGAAACCCATCACCACCAAGGCTGATATCTGGGCACTGGGATGTCTACTCTA  
 TAAACTTTGTTTCTTCACTCTTCTTTTGGTGAGAGTCAGGTTGCTATCTGTGATGGCAACTTACCATC  
 CCAGACAATTCTCGTTACTCCCCTAACATACATTGCTTAATAAGGTTTCATGCTTGAACCAGATCCGGAAC  
 ATAGACCTGATATATTTCAAGTGCATATTTTGCATTTAAATTTGCCAAAAGGATTGTCCAGTCTCCAA  
 CATCAATAATCTTCTATTCCTTCAAGTCTTCTTGAACCGATGGCTGCTAGTGAAGCAGCTGCTAGGAAA  
 AGCCAAATAAAAGCCAGAATAACAGATACCATTGGACCAACAGAAACCTCAATTGCACCAAGACAAAGAC  
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 GAGATTGGAGATTACAGCAACTCCATTTACAGCATCGTCATCCTCACCAGCAGCAGCAGCAGCAGCAGCA  
 GCAACAGCAACAGCAGCAGCAGCAACAGCAACGGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGC  
 CACCACCACCACCTACTTCAAGATGCTTATATGCAGCAGTATCAACATGCAACACAGCAGCAACAGATGC  
 TTCAACAACAATTTTAAATGCATTGGTATATCAACCACAACCTTCTGCATCACAGTATCCTACAATGAT  
 GCCGCAGTATCAGCAGGCTTTCTTTCAACAGCAGATGCTAGCTCAACATCAGCCGTCTCAACAACAGGCA  
 TCACCTGAATATCTTACCTCCCCTCAAGAGTTCTCACCAGCCTTAGTTTCTTACACTTCACTTCCAG  
 CTCAGGTTGGAACCATAATGGACTCCTCCTATAGTGCCAATAGGTCAGTTGCTGATAAAGAGGCCATTGC  
 AAATTTCACAAAATCAGAAGAATCAGCAATCCACCTGATATGTCAGGGTGGAAATCCTTTTGGAGAGGAT  
 AATTTCTTAAGTTAACAGAAGAGGAAGTATTGGACAGAGAATTTGACCTTCAAGATCAAGTAAGGGAC  
 ACTTGAAGGCTTATTTTGTCTTACAA

**ACGCGT**ACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC205995 protein sequence  
Red=Cloning site Green=Tags(s)

```
MKKFSRMPKSEGGSGGGAAGGGAGGAGAGCGSGSSVGVVAVGRHQVTLEESLAEGGFSTVFLVRT
HGGIRCALKRMYVNNMFDLNVCKREITIMKELSGHKNIYVGLDCAVNSISDNVWEVLILMEYCRAGQVFN
QMNKQLQTFTEPEVLQIFCDTCEAVARLHQCKTPIIHRDLKVENILLNDGGNYVLCDFGSAATNKFNLNPQ
KDGNNVVEEIIKKYTTLSYRAPEMINLYGGKPIITKADIWALGCLLYKLCFFTLPPFGESQVAICDGNFTI
PDNSRYSRNIHCLIRFMLEPDPEHRPDIQVSYFAFKFAKKDCPVSNINSSIPSALPEPMAASEAAARK
SQIKARITDITGPTETSIAPRQRPKANSATTATPSVLTIQSSATPVKVLAPGEFSNHRPKGALRPGNGPE
ILLGQPPQPPQHRVLQQLQQGDWRLQQLHLQHRHPHQQQQQQQQQQQQQQQQQQQQQQQQQQQQQHHHH
HHHHLLQDAYMQYQHATQQQMLQQQLMHSVYQPQPSASQYPTMMPQYQQAFFQQMLAQHQPSQQQA
SPEYLTSPQEFSPALVSYTSSLPAQVGTIMDSSYSANRSVADKEAIANFTNQKNI SNPPDMSGWNPFGED
NFKLLEEELLDREFDLLRSSKGHLKAYFASQ
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6820\\_f08.zip](https://cdn.origene.com/chromatograms/mk6820_f08.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_017593

**ORF Size:** 1986 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\\_017593.3](#), [NP\\_060063.2](#)

**RefSeq Size:** 2681 bp

**RefSeq ORF:** 1989 bp

**Locus ID:** 55589

**UniProt ID:** [Q9NSY1](#)

**Cytogenetics:** 4q21.21

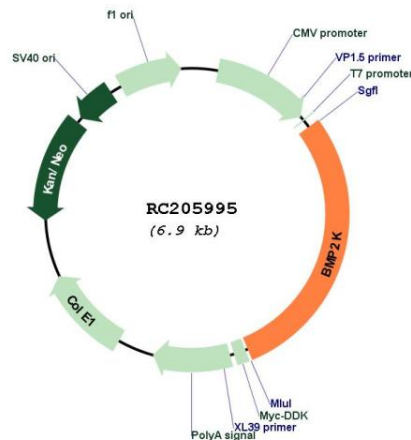
**Domains:** pkinase, TyrKc, S\_TKc

**Protein Families:** Druggable Genome, Protein Kinase

**MW:** 73.9 kDa

**Gene Summary:** This gene is the human homolog of mouse BMP-2-inducible kinase. Bone morphogenic proteins (BMPs) play a key role in skeletal development and patterning. Expression of the mouse gene is increased during BMP-2 induced differentiation and the gene product is a putative serine/threonine protein kinase containing a nuclear localization signal. Therefore, the protein encoded by this human homolog is thought to be a protein kinase with a putative regulatory role in attenuating the program of osteoblast differentiation. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RC205995