

Product datasheet for **RC212538**

BMP1 (NM_001199) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BMP1 (NM_001199) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BMP1
Synonyms:	OI13; PCOLC; PCP; PCP2; TLD
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC212538 representing NM_001199
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCCGCGTGGCCCGCTGCCGTGCTGCTCGGGCTGCTGCTGCCGCTCCCGGCTCCCGGCCGGCCGCTGG
 ACTTGGCCGACTACACCTATGACCTGGCGGAGGAGGACGACTCGGAGCCCTCAACTACAAAGACCCTG
 CAAGGCGGCTGCCTTTCTGGGGACATTGCCCTGGACGAAGAGGACCTGAGGGCCTTCCAGGTACAGCAG
 GCTGTGGATCTCAGACGGCACACAGCTCGTAAGTCTCCATCAAAGTGCAGTTCAGGAAACACTTCTA
 CCCCCAGCTGCCAGAGCACCAACGGGCAGCCTCAGAGGGGAGCCTGTGGGAGATGGAGAGGTAGATCCCG
 TAGCCGGCGGGCGGACGTCGCCAGCAGAGCGTGTGGCCGATGGGGTATCCCTTTGTCTATTGGG
 GAAACTTCACTGGTAGCCAGAGGGCAGTCTCCGGCAGGCCATGAGGCACTGGGAGAAGCACACCTGTG
 TCACCTTCTGGAGCGCACTGACGAGGACAGCTATATTGTGTTACCTATCGACCTTGGGGTGTGCTC
 CTACGTGGGTGCGCGCGGGGGCCCCAGGCCATCTCCATCGCAAGAACTGTGACAAGTTCCGGCATT
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 TTTCCATCGTTTCGTGAGAACATCCAGCCAGGGCAGGAGTAACTTCTGAAGATGGAGCCTCAGGAGGT
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 CGCATCTCTGCACACCCGGGGAGAAGATCATCTGAACCTCACGTCCCTGGACCTGTACCGCAGCCGCC
 TGTGCTGGTACGACTATGTGGAGTCCGAGATGGCTTCTGGAGGAAGGGCGCCCTCCGAGGCCGCTTCTG
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 GACTATCTGGAGGTGCGCGACGGGCACAGTGAGAGCAGCACCTCATCGGGCGCTACTGTGGCTATGAGA
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 AAAGAAACCGGACCCCCAG

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC212538 representing NM_001199
 Red=Cloning site Green=Tags(s)

MPGVARLPLLLGLLLLPRPGRPLDLADYTYDLAEEDDSEPLNYKDPCKAAAF LGDIALDEEDLRAFVQVQ
 AVDLRRHTARKSSIKAAVPGNTSTPSCQSTNGQPQRGACGRWRGRSRRAATSRPERVWPDGVIPFVIG
 GNFTGSQRAVFRQAMRHWEKHTCVTFLETRDDEDSYIVFTYRPGCCSYVGRGGGPQAISIGKNCDFGI
 VVHELGHVVGFWHEHTRPDRDRHVSIVRENIQPGQEYNFLKMEPQEVESLGETYDFDSIMHYARNTFSRG
 IFLDTIIVPKYEVNGVKPPIGRTRL SKGDIAQARKLYKCPACGETLQDSTGNFSSPEYPNGYSAHMHCVW
 RISVTPGEEKIILNFTSLDLYRSRLCWYDYVEVRDGFWRKAPLRGRFCGSKLPEPIVSTDSRLWVEFRSS
 NWWGKGF FAVYE AICGGDVKKDYGHIQSPNYPDDYRPSKVCIWRIQVSEGFHVGLTFQSFEIERHDSCAY
 DYLEVRDGHSESSTLIGRYCGYEKPD DIKSTSSRLWLFVSDGSINKAGFAVNFKEVDECSRPNRGGCE
 QRCLNTLGSYKSCDPGYELAPDKRCEAACGGFLTKLNGSITSPGWPKEYPPNKNCIWQLVAPTQYRIS
 LQFDF FETEGNDVCKYDFVEVRSGLTADSKLHGKFCGSEKPEVITSQYNNMRVEFKSDNTVSKKGFKAHF
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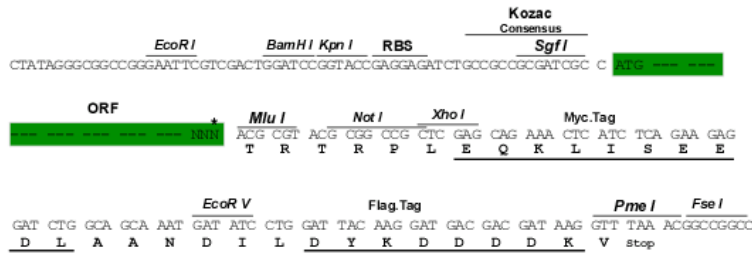
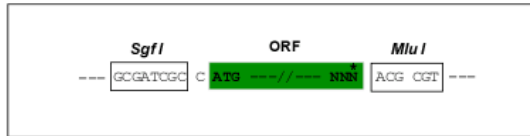
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Chromatograms: https://cdn.origene.com/chromatograms/mk6167_a10.zip

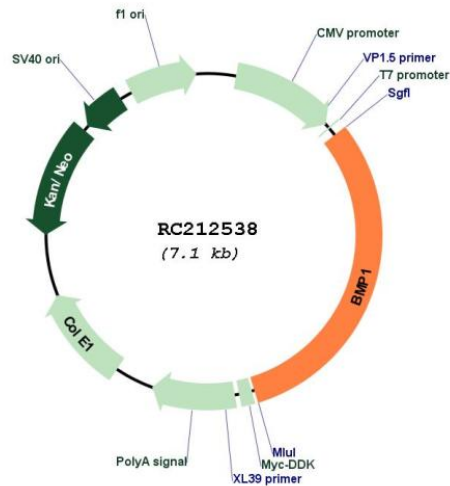
Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001199

ORF Size: 2190 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.

RefSeq: [NM_001199.4](#)

RefSeq Size: 2487 bp

RefSeq ORF: 2193 bp

Locus ID: 649

UniProt ID: [P13497](#)

Cytogenetics: 8p21.3

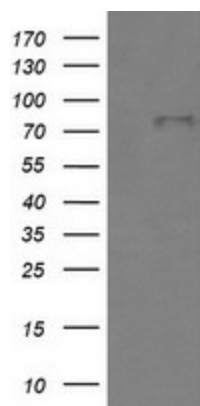
Domains: CUB, Astacin, EGF_CA, ZnMc, EGF, EGF

Protein Families: Druggable Genome, Protease

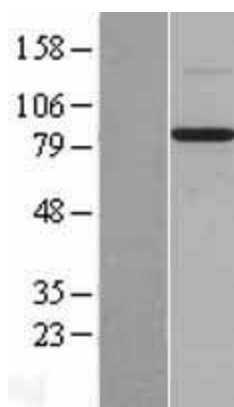
MW: 82.9 kDa

Gene Summary: This gene encodes a protein that is capable of inducing formation of cartilage in vivo. Although other bone morphogenetic proteins are members of the TGF-beta superfamily, this gene encodes a protein that is not closely related to other known growth factors. This gene is expressed as alternatively spliced variants that share an N-terminal protease domain but differ in their C-terminal region. [provided by RefSeq, Aug 2008]

Product images:



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY BMP1 (Cat# RC212538, 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-BMP1 (Cat# [TA505813]). Positive lysates [LY400480] (100ug) and [LC400480] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400480]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212538 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).