

Product datasheet for RC215336

BMP8B (NM_001720) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BMP8B (NM_001720) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BMP8B
Synonyms:	BMP8; OP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC215336 representing NM_001720 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACCGCGCTCCCCGGCCCGCTCTGGCTCCTGGCCTGGCGCTATGCGCGCTGGGCGGGGGCGGCCCG
GCCTGCGACCCCCGCCGGCTGTCCCCAGCGACGTCTGGGCGCGCGAGCGCCGGGACGTGCAGCGCGA
GATCCTGGCGGTGCTCGGGCTGCCTGGGCGGCCCGGCCCGCGCCACCCGCCCTCCCGGCTGCC
GCGTCCGCGCCGCTTTCATGCTGGACCTGTACCAGCCATGGCCGGCGACGACGACGAGGACGGCGCG
CCGCGGAGCGGCGCTGGGCCGCGCCGACTGGTCATGAGCTTCGTTAACATGGTGGAGCGAGACCGTGC
CCTGGGCCACCAGGAGCCCCATTGGAAGGAGTTCGCTTTGACCTGACCCAGATCCCGGCTGGGGAGGCG
GTCACAGCTGCGGAGTTCGGATTTACAAGGTGCCAGCATCCACCTGCTCAACAGGACCCCTCCAGTCA
GCATGTTCCAGGTGGTCCAGGAGCAGTCCAACAGGGAGTCTGACTTGTCTTTTTGGATCTTCAGACGCT
CCGAGCTGGAGACGAGGGCTGGCTGGTGTGGATGTCACAGCAGCCAGTACTGCTGGTTGCTGAAGCGT
CACAAGGACCTGGGACTCCGCTCTATGTGGAGACTGAGGACGGGCACAGCGTGGATCCTGGCCTGGCCG
GCCTGTGGGTCAACGGGCCACGCTCCCAACAGCCTTTCGTGGTCACTTTCTTCAGGGCCAGTCCGAG
TCCCATCCGACCCCTCGGGCAGTGAGGCCACTGAGGAGGAGGACGCCGAAGAAAAGCAACGAGCTGCC
CAGGCCAACCGACTCCCAGGGATCTTTGATGACGTCCACGGCTCCACGGCCGCGAGTCTGCCGTCCGG
ACGAGCTCTACGTCAGCTTCCAGGACCTCGGCTGGCTGGACTGGTTCATCGCTCCCAAGGCTACTCGGC
CTATTACTGTGAGGGGAGTGTCTCTCCACTGGACTCTGCATGAATGCCACCAACCAGCCATCCTG
CAGTCCCTGGTGCACCTGATGATGCCAGACGAGTCCCAAGGCGTGTGTGCACCCACCAAGCTGAGCG
CCACCTCTGTGCTCTACTATGACAGCAGCAACAATGTATCCTGCGCAAGCACCGCAACATGGTGGTCAA
GGCCTGCGGCTGCCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC215336 representing NM_001720
Red=Cloning site Green=Tags(s)

MTALPGPLWLLGLALCALGGGGPGLRPPPGCPQRRLGARERRDVQREILAVLGLPGRPRPRAPPAASRLP
 ASAPLFMLDLYHAMAGDDDEDGAPAERRLGRADLVMSFVNMVERDRALGHQEPHWKEFRFDLTQIPAGEA
 VTAAEFRIYKVPSTHLLNRTLHVSMFQVVQE QSNRESLFFLDLQTLRAGDEGWLVDVTAASDCWLLKR
 HKDLGLRLYVETEDGHSVDPGLAGLLGQRAPRSQQPFVVTFFRASPSPIRTPRAVRPLRRRQPKKSNELEP
 QANRLPGIFDDVHGSHGRQVCRRELYVSFQDLGWL DWVIA PQGY SAYYCEGECFPLDSCMNATNHAIL
 QSLVHLMPDAVPKACCAPTKLSATSVLYYDSSNNVILRKHNMVVKACGCH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6250_c06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001720

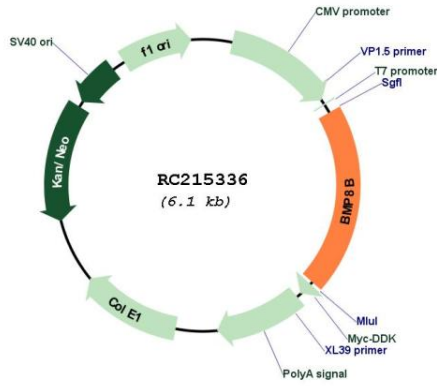
ORF Size: 1206 bp

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.

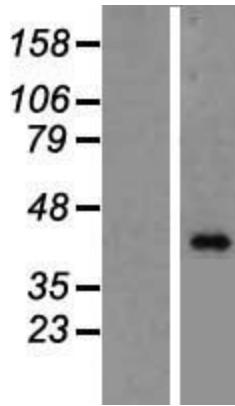
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<ol style="list-style-type: none">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_001720.5
RefSeq Size:	3773 bp
RefSeq ORF:	1209 bp
Locus ID:	656
UniProt ID:	P34820
Cytogenetics:	1p34.2
Domains:	TGFb_propeptide, TGF-beta
Protein Families:	Adult stem cells, Cancer stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS, Induced pluripotent stem cells, Secreted Protein, Stem cell relevant signaling - TGFb/BMP signaling pathway
Protein Pathways:	Hedgehog signaling pathway, TGF-beta signaling pathway
MW:	44.6 kDa
Gene Summary:	This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is proteolytically processed to generate each subunit of the disulfide-linked homodimer. The encoded protein stimulates thermogenesis in brown adipose tissue. Expression of this gene may be downregulated in pancreatic cancer. This gene may have arose from a gene duplication event and its gene duplicate is also present on chromosome 1. [provided by RefSeq, Jul 2016]

Product images:



Circular map for RC215336



Western blot validation of overexpression lysate (Cat# [LY419781]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215336 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).