

## Product datasheet for **RC215047**

### **BMP8A (NM\_181809) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	BMP8A (NM_181809) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BMP8A
Synonyms:	OP-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC215047 representing NM_181809 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCGCGCGCCCGGACCGCTCTGGCTTCTGGCCTGACGTTGTGCGCGCTGGGCGGGGGCGGCCCG  
GCCTGCGACCCCGCCCGGCTGTCCCGAGCAGCTCTGGGCGCGCGAGCGCCGGGACGTGCAGCGCGA  
GATCCTGGCGGTGCTCGGGCTACCGGGCGGCCCGGCCCGCGCCACCGCCGCTCCCGGCTGCC  
GCGTCCGCGCCGCTTTCATGCTGGACCTGTACCAGCCATGGCTGGCGACGACGAGGACGGCGCGC  
CCGCGGAGCAGCGCTGGGCCGCGCCGACTGGTCATGAGCTTCGTC AACATGGTGGAGCGAGACCGTGC  
CCTGGGCCACCAGGAGCCCATTTGGAAGGAGTTCGCTTTGACCTGACCCAGATCCCGGCTGGGGAGGCG  
GTCACAGCTGCGGAGTTCGGATTTACAAGGTGCCAGCATCCACCTGCTCAACAGGACCCCTCCAGTCA  
GCATGTTCCAGGTGGTCCAGGAGCAGTCCAACAGGGAGTCTGACTTGTCTTTTTGGATCTTCAGACGCT  
CCGAGCTGGAGACGAGGGCTGGCTGGTGTGGATGTCACAGCAGCCAGTACTGCTGGTTGCTGAAGCGT  
CACAAGGACCTGGGACTCCGCTCTATGTGGAGACTGAGGATGGGCACAGCGTGGATCCTGGCCTGGCCG  
GCCTGCTGGGTCAACGGGCCACGCTCCCAACAGCCTTCGTGGTCACTTTCTTCAGGGCCAGTCCGAG  
TCCCATCCGACCCCTCGGGCAGTGAGGCCACTGAGGAGGAGGACGCCGAAGAAAACCAACGAGCTGCC  
CAGGCCAACCGACTCCAGGGATCTTTGATGACGTCACGGCTCCACGGCCGCGAGTCTGCCGTCGGC  
ACGAGCTCTACGTCAGCTTCCAGGACCTTGGCTGGCTGGACTGGTTCATCGCCCCCAAGGCTACTCAGC  
CTATTACTGTGAGGGGAGTGCTCCTTCCGCTGGACTCTGCATGAACGCCACCAACACGCCATCCTG  
CAGTCCCTGGTGCACCTGATGAAGCCAAACGAGTCCCAAGGCGTGTGTGCACCCACCAAGCTGAGCG  
CCACCTCTGTGCTCTACTATGACAGCAGCAACAACGTATCCTGCGCAAGCACCGCAACATGGTGGTCAA  
GGCCTGCGGCTGCCAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC215047 representing NM\_181809  
Red=Cloning site Green=Tags(s)

MAARPGPLWLLGLTLCALGGGGPGLRPPPGCPQRRRLGARERRDVQREILAVLGLPGRPRPRAPPAASRLP  
 ASAPLFMLDLYHAMAGDDDEDGAPAEQRLGRADLVMSFVNMVERDRALGHQEPHWKEFRFDLTQIPAGEA  
 VTAAEFRIYKVPSTHLLNRTLHVSMFQVVQE QSNRESLFFLDLQTLRAGDEGLVLDVTAASDCWLLKR  
 HKDLGLRLYVETEDGHSVDPGLAGLLGQRAPRSQQPFVVTFFRASPSPIRTPRAVRPLRRRQPKKTNELP  
 QANRLPGIFDDVHGSHGRQVCRRELYVSFQDLGWL DWVIA PQGYSAYYCEGECFSFPLDSCMNATNHAIL  
 QSLVHLMKPNVAPKACCAPTKLSATSVLYDSSNNVILRKHNMVVKACGCH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6824\\_g03.zip](https://cdn.origene.com/chromatograms/mk6824_g03.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_181809

**ORF Size:** 1206 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\\_181809.4](#)

**RefSeq Size:** 1692 bp

**RefSeq ORF:** 1209 bp

**Locus ID:** 353500

**UniProt ID:** [Q7Z5Y6](#)

**Cytogenetics:** 1p34.3

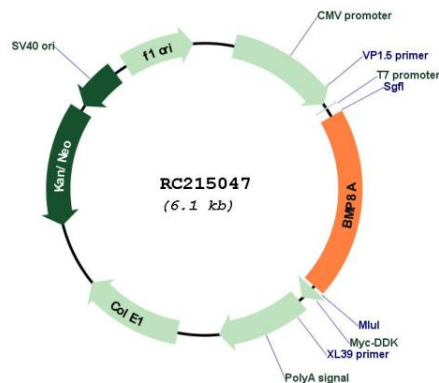
**Protein Families:** Secreted Protein

**Protein Pathways:** Hedgehog signaling pathway, TGF-beta signaling pathway

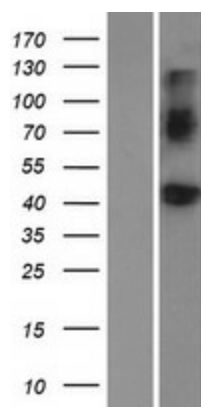
**MW:** 44.6 kDa

**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. This protein may play a role in development of the reproductive system. 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 RC215047



Western blot validation of overexpression lysate (Cat# [LY405600]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215047 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).