

## Product datasheet for MR206487

### Bmp8a (BC052168) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Bmp8a (BC052168) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Bmp8a
Synonyms:	OP2, OP-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR206487 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCTATGCGTCCCGGGCCACTCTGGCTATTGGCCTTGCTCTGTGCGCGCTGGGAGGCGGCCACGGTC  
CGCGTCCCCCGCACACCTGTCCCCAGCGTCGCTGGGAGCGCGAGCGCCGCGACATGCAGCGTGAAAT  
CCTGGCGGTGCTCGGGCTACCGGGACGGCCCCGACCCCGTGCACAACCCGCGCTGCCCGGACGCCAGCG  
TCCGCGCCCTCTTCATGTTGGACCTATACCACGCCATGACCGATGACGACGACGGCGGGCCACCACAGG  
CTCACTTAGGCCGTGCCGACCTGGTCATGAGCTTCGTCAACATGGTGGAACGCGACCGTACCCTGGGCTA  
CCAGGAGCCACACTGGAAGGAATTCACCTTTGACCTAACCCAGATCCCTGCTGGGAGGCTGTACAGCT  
GCTGAGTTCGGATCTACAAAGAACCAGCACCCACCCGCTCAACACAACCCCTCCACATCAGCATGTTTCG  
AAGTGGTCCAAGAGCACTCCAACAGGGAGTCTGACTTGTCTTTTTGGATCTTCAGACGCTCCGATCTGG  
GGACGAGGGCTGGCTGGTGGACATCACAGCAGCCAGTGACCGATGGCTGCTGAACCATCACAAAGGAC  
CTGGGACTCCGCCTCTATGTGAAACCGCGGATGGGCACAGCATGGATCCTGGCTGGCTGGTCTGCTTG  
GACGACAAGCACCACGCTCCAGACAGCCTTTTCATGGTAACCTTCTTCAGGGCCAGCCAGAGTCTGTGCG  
GGCCCCTCGGGACGCGAGACCACTGAAGAGGAGGACGCAAAGAAAACGAACGAGCTTCCGCACCCCAAC  
AAACTCCAGGGATCTTTGATGATGGCCACGGTTCGCGCGGAGAGGTTTGCCGAGGCATGAGCTCT  
ACGTGAGCTTCCGTGACCTTGGCTGGCTGGACTGGGTCAATCGCCCCAGGGCTACTCTGCCTATTACTG  
TGAGGGGGAGTGTGCTTTCCCACTGGACTCCTGTATGAACGCCACCAACCATGCCATCTTGCAGTCTCTG  
GTCAGTACCACAGTAGCCTGCTGCGACAGGTGGAGCGGGTGCACCTGATGAAGCCAGATGTTGTCCCCA  
AGGCATGCTGTGCACCCACAACTGAGTGCCACCTCTGTGCTGTACTATGACAGCAGCAACAATGTCAT  
CCTGCGTAAACACCGTAACATGGTGGTCAAGGCCTGTGGCTGCCAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



**Protein Sequence:** >MR206487 protein sequence  
Red=Cloning site Green=Tags(s)

MAMRPGPLWLLGLALCALGGGHGPRPPHTCPQRRLGARERRDMQREILAVLGLPGRPRPRAQPAAARQPA  
 SAPLFMLDLYHAMTDDDDGGPPQAHLAGRADLVMSFVNMVERDRTLGYQEPHWKEFHFDLTQIPAGEAVTA  
 AEFRIYKEPSTHPLNTTLHISMFEVVQEHNSRESDLFFLDLQTLRSGDEGWLVLDITAASDRWLLNHHKD  
 LGLRLYVETADGHSMDPGLAGLLGRQAPRSRQPFMVTFFRASQSPVRAPRAARPLKRRQPKKTNELPHPN  
 KLPGIFDDGHGSRGREVCRRHELIVSFRDLGWLDWVIAPQGYSAYYCEGECAFPDSCMNATNHAILQSL  
 VSTTVACCDRWSGVHLMKPDVVPKACCAPTKLSATSVLYYDSSNNVILRKHNMVVKACGCH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** BC052168

**ORF Size:** 1236 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:** [BC052168](#), [AAH52168](#)

**RefSeq Size:** 2412 bp

**RefSeq ORF:** 1238 bp

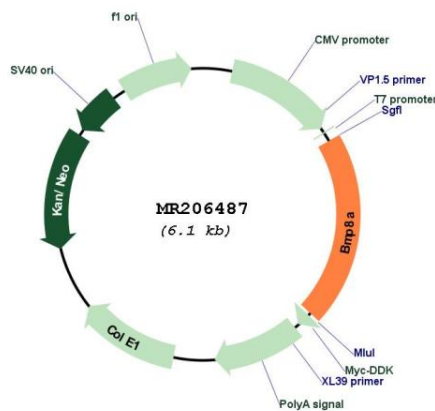
**Locus ID:** 12163

**Cytogenetics:** 4 57.42 cM

**MW:** 46.1 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. Mice lacking a functional copy of this gene exhibit degeneration of germ cells and the epididymal epithelium. This gene may have arose from a gene duplication event and its gene duplicate is also present on chromosome 4. [provided by RefSeq, Jul 2016]

**Product images:**



Circular map for MR206487