

## Product datasheet for MC208195

### Bmp4 (NM\_007554) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Bmp4 (NM_007554) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Bmp4
Synonyms:	Bmp-; Bmp-4; Bmp2; Bmp2b; Bmp2b-; Bmp2b-1; Bmp2b1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC208195 representing NM_007554 Red=Cloning site Blue=ORF Orange=Stop codon

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**C

ATGATTCTGGTAACCGAATGCTGATGGTCGTTTTATTATGCCAAGTCCTGCTAGGAGGCGCGAGCCATG  
CTAGTTTGATACCTGAGACCGGGAAGAAAAAGTCGCCGAGATTCAGGGCCACGCGGAGGACGCCGCTC  
AGGGCAGAGCCATGAGCTCCTGCGGGACTTCGAGGCGACACTTCTACAGATGTTTGGGCTGCGCCGCGT  
CCGCAGCCTAGCAAGAGCGCCGTCATTCGGATTACATGAGGGATCTTACCGGCTCCAGTCTGGGAGG  
AGGAGGAGGAAGAGCAGAGCCAGGAACCGGGCTTGAGTACCGGAGCGTCCCGCCAGCCGAGCCAACAC  
TGTGAGGAGTTTCCATCACGAAGAACATCTGGAGAACATCCAGGAGCAGTGAGAGCTCTGCTTTTCGT  
TTCTCTTCAACCTCAGCAGCATCCAGAAAAATGAGGTGATCTCCTCGGCAGAGCTCCGGCTCTTTCGGG  
AGCAGGTGGACAGGGCCCTGACTGGGAACAGGGCTTCCACCGTATAAACATTTATGAGGTTATGAAGCC  
CCCAGCAGAAATGGTTCTTGACACCTCATCACGACTACTGGACACCAGACTAGTCCATCACAATGTG  
ACACGGTGGGAACTTTCGATGTGAGCCCTGCAGTCCTTCGCTGGACCCGGGAAAGCAACCAATTATG  
GGCTGGCCATTGAGGTGACTCACCTCCACCAGACACGGACCCACCAGGGCCAGCATGTGAGAATCAGCCG  
ATCGTTACCTCAAGGGAGTGGAGATTGGGCCAACTCCGGCCCTCCTGGTCACTTTTGGCCATGATGGC  
CGGGGCCATACCTTGACCCGACGAGGGCCAAACGTAGTCCCAAGCATCACCCACAGCGGTCCAGGAAGA  
AGAATAAGAACTGCCGTGCCATTCACTATACGTGGACTTCAGTGACGTGGGCTGGAATGATTGGATTGT  
GGCCCCACCCGGCTACCAGGCCTTCTACTGCCATGGGGACTGTCCCTTTCAGTGGCTGATCACCTCAAC  
TCAACCAACCATGCCATTGTGCAGACCCTAGTCAACTCTGTTAATTCTAGTATCCCTAAGGCCTGTTGTG  
TCCCCACTGAAGTGAAGTCCATTTCCATGTTGTACCTGGATGAGTATGACAAGGTGGTGTGAAAAATTA  
TCAGGAGATGGTGGTAGAGGGGTGGATGCCG**TGA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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<b>Chromatograms:</b>	<a href="https://cdn.origene.com/chromatograms/ja1876_h04.zip">https://cdn.origene.com/chromatograms/ja1876_h04.zip</a>
<b>Restriction Sites:</b>	Sgfl-Mlul
<b>ACCN:</b>	NM_007554
<b>Insert Size:</b>	1227 bp
<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">BC013459</a> , <a href="#">AAH13459</a>
<b>RefSeq Size:</b>	1994 bp
<b>RefSeq ORF:</b>	1227 bp
<b>Locus ID:</b>	12159
<b>UniProt ID:</b>	<a href="#">P21275</a>
<b>Cytogenetics:</b>	14 23.95 cM

**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 regulates heart development and adipogenesis. Homozygous knockout mice die in utero, while a conditional knockout mouse exhibits defects in heart development. Transgenic mice overexpressing this gene in a neuron-specific manner exhibit a phenotype resembling the rare hereditary connective tissue disease, fibrodysplasia ossificans progressiva. [provided by RefSeq, Jul 2016]

Transcript Variant: This variant (1) represents the longer transcript. Both variants 1 and 2 encode the same protein.