

Product datasheet for **MC208197**

Bmp8b (NM_007559) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Bmp8b (NM_007559) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Bmp8b
Synonyms:	O; Op3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC208197 representing NM_007559 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTGCGCGTCCGGGACTCCTATGGCTACTGGCCTGGCTCTGTGCGTGTTGGGCGCGGTACCTCT
CGCATCCCCGCACGTCTTCCCGAGCTCGACTAGGAGTACGCGAGCCCCGCGACATGCAGCGGAGAT
TCGGGAGGTGCTGGGGCTGCCGGGGCGGCCCGATCCCGAGCACCAGTCCGGGGCTGCCAGCAGCCAGCG
TCTGCGCCCTCTTTATGTTGGACCTGTACCGTGCCATGACGGATGACAGTGGCGGTGGGACCCCGCAGC
CTCACTTGGACCGTGTGACCTGATTATGAGCTTTGTCAACATAGTGAACGCGACCGTACCCTGGGCTA
CCAGGAGCCACACTGGAAGGAATTCACCTTTGACCTAACCAGATCCCTGCTGGGAGGCTGTACAGCT
GCTGAGTTCGGATCTACAAAGAACCAGTACCCACCCGCTCAACACAACCCTCCACATCAGCATGTTTCG
AAGTGGTCCAAGAGCACTCCAACAGGGAGTCTGACTTGTCTTTTTGGATCTTCAGACGCTCCGATCTGG
GGACGAGGGCTGGCTGGTGTGGACATCACAGCAGCCAGTACCAGTGGCTGTGAACCATCACAAAGGAC
CTAGGACTCCGCCTCTATGTGAAACCGAGGATGGGCACAGCATAGATCCTGGCCTAGCTGGTCTGCTTG
GACGACAAGCACCACGCTCCAGACAGCCTTTTCATGGTTGGTTTCTTCAGGGCCAACCAGAGTCTGTGCG
GGCCCCCGAACAGCAAGACCACTGAAGAAGAAGCAGCTAAATCAAATCAACCAGCTGCCCACTCCAAC
AAACACCTAGGAATCCTTGATGATGGCCACGGTCTCACGGCAGAGAAGTTTGCCGACGATGAGCTCT
ATGTCAGCTTCCGTGACCTTGGCTGGCTGGACTCTGTCAATGCCCCCAGGGCTACTCCGCCTATTA
TGCTGGGAGTGCATCTACCACTGAACTCCTGTATGAACTCCACCAACCAGCCACTATGCAGGCCCTG
GTACATCTGATGAAGCCAGATATCATCCCCAAGGTGTGCTGTGTGCTACTGAGCTGAGTGCCATTTCTC
TGCTCTACTATGATAGAAACAATAATGTCATCCTGCGCAGGGAGCGCAACATGGTAGTCCAGGCCTGTGG
CTGCCAC**TGA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Chromatograms:	https://cdn.origene.com/chromatograms/ja2449_h01.zip
Restriction Sites:	Sgfl-Mlul
ACCN:	NM_007559
Insert Size:	1200 bp
OTI Disclaimer:	<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 custsupport@origene.com 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. More info</p>
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:	BC137890 , AAI37891
RefSeq Size:	2940 bp
RefSeq ORF:	1200 bp
Locus ID:	12164
UniProt ID:	P55105
Cytogenetics:	4 57.38 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 preprotein is proteolytically processed to generate each subunit of the disulfide-linked homodimer. The encoded protein may play a role in the generation of primordial germ cells, and has been shown to stimulate thermogenesis in brown adipose tissue. Male mice lacking a functional copy of this gene exhibit variable degrees of germ-cell deficiency. Homozygous knockout mice of both sexes exhibit impaired thermogenesis and reduced metabolic rate, resulting in weight gain. 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]