

Product datasheet for **SC119058**

BMP7 (NM_001719) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BMP7 (NM_001719) Human Untagged Clone
Tag:	Tag Free
Symbol:	BMP7
Synonyms:	OP-1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001719, the custom clone sequence may differ by one or more nucleotides

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ATGCACGTGCGCTCACTGCGAGCTGCGGCGCCGCACAGCTTCGTGGCGCTCTGGGCACCCCTGTTCTCTGC
TGCGCTCCGCCCTGGCCGACTTCAGCCTGGACAACGAGGTGCACTCGAGCTTCATCCACCGGCGCCTCCG
CAGCCAGGAGCGGCGGAGATGCAGCGGAGATCCTCTCCATTTGGGCTTGCCCAACCGCCCGCGCCCG
CACCTCCAGGGCAAGCACAACCTCGGCACCCATGTTTCATGCTGGACCTGTACAACGCCATGGCGGTGGAGG
AGGGCGGCGGGCCGCGGCCAGGGCTTCTCTACCCCTACAAGGCCGTTCAGTACCCAGGGCCCCC
TCTGGCCAGCCTGCAAGATAGCCATTTCTCACCGACCGGACATGGTCATGAGCTTCGTC AACCTCGT
GAACATGACAAGGAATTCTTCCACCCACGCTACCACCATCGAGAGTTCCGGTTTGATCTTTCCAAGATCC
CAGAAGGGGAAGCTGTACGGCAGCCGAATTCGGATCTACAAGGACTACATCCGGGAACGCTTCGACAA
TGAGACGTTCCGGATCAGCGTTTATCAGGTGCTCCAGGAGCACTTGGGCAGGGAATCGGATCTTCTCTG
CTCGACAGCCGTACCCTCTGGGCCTCGGAGGAGGGCTGGCTGGTGTGACATCACAGCCACCAGCAACC
ACTGGGTGGTCAATCCGCGGCACAACCTGGGCCTGCAGCTCTCGGTGGAGACGCTGGATGGGCAGAGCAT
CAACCCCAAGTTGGCGGGCCTGATTGGGCGGCACGGGCCCCAGAACAAGCAGCCCTTCATGGTGGCTTTC
TTCAAGGCCACGGAGGTCCACTTCCGCAGCATCCGGTCCACGGGGAGCAAACAGCGCAGCCAGAACCCT
CCAAGACGCCCCAAGAACCAGGAAGCCCTGCGGATGGCCAACTGGCAGAGAACAGCAGCAGCGACCAGAG
GCAGGCCCTGTAAGAAGCAGGAGCTGTATGTCAGCTTCCGAGACCTGGGCTGGCAGGACTGGATCATCGCG
CCTGAAGGCTACGCCGCTACTACTGTGAGGGGAGTGTGCCTTCCCTCTGAACTCCTACATGAACGCCA
CCAACCACGCCATCGTGACAGCCTGGTCCACTTCATCAACCCGAAACGGTGCCCAAGCCCTGCTGTGC
GCCACGCAGCTCAATGCCATCTCCGCTCTACTTTCGATGACAGCTCCAACGTCATCTGAAGAAATAC
AGAAACATGGTGGTCCGGCCTGTGGCTGCCACTAG
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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_001719 unedited CGCCGTTGAGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGT TTAGTGAACCGTCAAGATTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGGCAC CAGCCAGGGCGCACAAAGGCTGGGAGAGCGCCCCGGGGCCCTGCTATCCGCGCCGAGGT TGGAAAGAGGGTGGGTTGCCGCCGCCGAGGGCGAGAGCGCCAGAGGAGCGGGAAGAAGGA GCGCTCGCCCCGCCCTGCCTCCTCGCTGCCTCCCCGGGTTGGCTCTCTGGACTCCTA GGCTTGTGGCTGCTCCTCCACCCGCGCCCGCTCCTCACTCGCCTTTTCGTTCCGCCG GGCTGCTTTCCAAGCCCTGCGGTGCGCCCGGGCGAGTGCGGGGCGAGGGGCCCGGGCCA GCACCGAGCAGGGGGCGGGGTCCGGGCAGAGCGCGCCGGCCGGGGAGGGGCCATGTCT GGCGCGGGCGCAGCGGGGCCGCTCTGCAGCAAGTGACCGAGCGCGCGGACGGCCGCTG CCCCCTCTGCCACCTGGGGCGGTGCGGGCCCGAGCCCGAGCCCGGTAGCGCTAGAG CCGGCGGATGCACGTGCGCTCACTGCGAGCTGCGGCGCCGCACAGCTTCGTGGCGCTCT GGGACCCCTGTTCTGCTGCGCTCCGCCCTGGCCGACTTACGCTGGACAACGAGGTGC ACTCGAGCTTCATCCACCGCGCCTCCGCAGCCAGAGCGGGGAGATGCAGCGCGAGAT CCTCCTCATTGTTGGGCTTGCCACCCGCCCGCCCGCACCTCAGGGCAAGCACAACCTC GCACCCATGTTATGCTGGACCTGTACAACGCCATGCGTGAGAGACGCGCCCGCGCAGC TCTCTACCTACAGCCGTCTTCACTACCAGGCCCCCTTCTGGCAGC</p>
Restriction Sites:	NotI-NotI
ACCN:	NM_001719
Insert Size:	4000 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>
OTI Annotation:	<p>This clone may be unstable or toxic at high copy number in common E. coli strain. We recommend using a lower copy number E. coli strain, such as CopyCutter strain (http://www.epibio.com/item.asp?ID=435) for transformation and plasmid preparation. Please be aware that the DNA yield could be low. Additional aliquots of this clone can be ordered from OriGene.</p>
Components:	<p>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).</p>

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_001719.1 , NP_001710.1
RefSeq Size:	1878 bp
RefSeq ORF:	1296 bp
Locus ID:	655
UniProt ID:	P18075
Cytogenetics:	20q13.31
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:	Cytokine-cytokine receptor interaction, Hedgehog signaling pathway, TGF-beta signaling pathway
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, which plays a role in bone, kidney and brown adipose tissue development. Additionally, this protein induces ectopic bone formation and may promote fracture healing in human patients. [provided by RefSeq, Jul 2016]