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Product datasheet for SC119392

BMP2 (NM_001200) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BMP2 (NM_001200) Human Untagged Clone
Tag:	Tag Free
Symbol:	BMP2
Synonyms:	BDA2; BMP2A; SSFSC; SSFSC1
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC119392 sequence for NM_001200 edited (data generated by NextGen Sequencing)

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ATGGTGGCCGGGACCCGCTGTCTTCTAGCGTTGCTGCTTCCCCAGGTCCTCCTGGGCGGC
GCGGCTGGCCTCGTTCCGGAGCTGGGCCGCAGGAAGTTCGCGGCGGCGTCGTCGGGCCGC
CCCTCATCCCAGCCCTCTGACGAGGTCCTGAGCGAGTTCGAGTTGCGGCTGCTCAGCATG
TTCGGCCTGAAACAGAGACCCACCCCCAGCAGGGACGCCGTGGTGCCCCCCTACATGCTA
GACCTGTATCGCAGGCACTCGGGTCAGCCGGGCTCACCCGCCCCAGACCACCGGTTGGAG
AGGGCAGCCAGCCGAGCCAACACTGTGCGCAGCTTCCACCATGAAGAATCTTTGGAAGAA
CTACCAGAAACGAGTGGGAAAACAACCCGGAGATTCTTCTTTAATTTAAGTTCTATCCCC
ACGGAGGAGTTTATCACCTCAGCAGAGCTTCAGGTTTTCCGAGAACAGATGCAAGATGCT
TTAGGAAACAATAGCAGTTTCCATCACCGAATTAATATTTATGAAATCATAAAACCTGCA
ACAGCCAACTCGAAATTCCCCGTGACCAGTCTTTTGGACACCAGGTTGGTGAATCAGAAT
GCAAGCAGGTGGGAAAGTTTTGATGTCACCCCCGCTGTGATGCGGTGGACTGCACAGGGA
CACGCCAACCATGGATTCGTGGTGGAAGTGGCCCACTTGGAGGAGAAACAAGGTGTCTCC
AAGAGACATGTTAGGATAAGCAGGTCTTTGCACCAAGATGAACACAGCTGGTCACAGATA
AGGCCATTGCTAGTAACTTTTGGCCATGATGGAAAAGGGCATCCTCTCCACAAAAGAGAA
AAACGTCAAGCCAAACACAAACAGCGGAAACGCCTTAAGTCCAGCTGTAAGAGACACCCT
TTGTACGTGGACTTCAGTGACGTGGGGTGGAATGACTGGATTGTGGCTCCCCCGGGGTAT
CACGCCTTTTACTGCCACGGAGAATGCCCTTTTCCTCTGGCTGATCATCTGAACTCCACT
AATCATGCCATTGTTCAGACGTTGGTCAACTCTGTTAACTCTAAGATTCCTAAGGCATGC
TGTGTCCCGACAGAACTCAGTGCTATCTCGATGCTGTACCTTGACGAGAATGAAAAGGTT
GTATTAAAGAACTATCAGGACATGGTTGTGGAGGGTTGTGGGTGTCGCTAG

Clone variation with respect to NM_001200.2
261 a=>g;570 a=>t
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_001200 unedited
TCTTTACCCGCCCGTTGNCGCATAGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAG
CAGAGCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGCG
AATTCGGCACGAGGCCCAGGATGGCTGCCCCGAGCCATGGGCCGCGGCGGAGCTAGCGCG
GAGCGCCCGACCCTCGACCCCCGAGTCCCGGAGCCGGCCCCGCGCGGGGCCACGCGTCCC
TCGGGCGCTGGTTCCTAAGGAGGACGACAGCACCAGCTTCTCCTTTCTCCCTTCCCTTCC
CTGCCCCGCACTCCTCCCCCTGCTCGCTGTTGTTGTGTGTCAGCACTTGGCTGGGGACTT
CTTGAACTTGCAGGGAGAATAACTTGCGCACCCCACTTTGCGCCGGTGCCTTTGCCCCAG
CGGAGCCTGCTTCGCCATCTCCGAGCCCCACCGCCCCTCCACTCCTCGGCCTTGCCCGAC
ACTGAGACGCTGTTCCCAGCGTGAAAAGAGAGACTGCGCGGCCGGCACCCGGGAGAAGGA
GGAGGCAAAGAAAAGGAACGGACATTCGGTCCTTGCGCCAGGTCCTTTGACCAGAGTTTT
TCCATGTGGACGCTCTTTCAATGGACGTGTCCCCGCGTGCTTCTTAGACGGACTGCGGTC
TCCTAAAGGTCGACCATGGTGGCCGGGACCCGCTGTCTTCTAGCGTTGCTGCTTCCCCAG
GTCCTCCTGGGCGGCGCGGCTGGCCTCGTTCCGGAGCTGGGCCGCATGATGTTCGCGGCG
GCGTCGTCAGGCCGNCCCTCATCCCAGCCCTCTGACGATGTCCTGAGCGAGTTCGAGTTG
CAGCTGCTCAGCATGTTTCGCCCTGAACAGAGACCCACCCCAGCATGGACGCCGTGGNTG
CCCCCCTACATGCTAGACCTGTATCGCAAGCACTCGGGNTCAGCCGGGCTCACCCGNCCC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_001200 unedited
GGAAAATCAGGTACGTCGCCGCAATTCNAGATCGAGTTTTTTTTTTTTTTTTTNTCTAAA
ATATATATATATATATATATTTATGTATTTAATTTTGCTGTACTAGCGACACCCACAACC
CTCCACAACCATGTCCTGATAGTTCTTTAATACAACCTTTTCATTCTCGTCAAGGTACAG
CATCGAGATAGCACTGAGTTCTGTCGGGACACAGCATGCCTTAGGAATCTTAGAGTTAAC
AGAGTTGACCAACGTCTGAACAATGGCATGATTAGTGGAGTTCAGATGATCAGCCAGAGG
AAAAGGGCATTCTCCGTGGCAGTAAAAGGCGTGATACCCCGGGGGAGCCACAATCCAGTC
ATTCCACCCCACGTCACTGAAGTCCACGTACAAAGGGTGTCTCTTACAGCTGGACTTAAG
GCGTTTCCGCTGTTTGTGTTTGGCTTGACGTTTTTCTCTTTTGTGGAGAGGATGCCCTTT
TCCATCATGGCCAAAAGTTACTAGCAATGGCCTTATCTGTGACCAGCTGTGTTCATCTTG
GTGCAAAGACCTGCTTATCCTAACATGTCTCTTGAAGACACCTTTGTTCTCCTCCAAGTG
GGCCACTTCCACCACGAATCCATGGTTGGCGTGTCCCTGTGCAGTCCACCCGATCACAGC
GGGGGGTGACATCAAAAACTTTCCCACCCGCTTTGGATTCTGGATTCACCAACCCTGTTT
GTTCAAAAAGACTGGTCCACGGGGAAATTTCAAGTTGGCCGGTTGCAGGGTTTTAGGATT
TCATAAAATATTAATTCCGGGGAAGGAAACTGCTATTGTTTCCTAAAACATTTTGCATCT
GGTTTTCGGAAAACCGGAAACTCTGCTGGGGGGATAAACCTCCTCCGCGGGGGTAGAACC
TTAATTAAGAAAAAT

Restriction Sites: NotI-NotI

ACCN: NM_001200

Insert Size: 2000 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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).

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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_001200.1, NP_001191.1
RefSeq Size:	1547 bp
RefSeq ORF:	1191 bp
Locus ID:	650
UniProt ID:	P12643
Cytogenetics:	20p12.3
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, Transmembrane
Protein Pathways:	Acute myeloid leukemia, Basal cell carcinoma, Cytokine-cytokine receptor interaction, Endocytosis, Hedgehog signaling pathway, Hematopoietic cell lineage, Melanogenesis, Pathways in cancer, 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 and cartilage development. Duplication of a regulatory region downstream of this gene causes a form of brachydactyly characterized by a malformed index finger and second toe in human patients. [provided by RefSeq, Jul 2016]

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