

Product datasheet for **MC207323**

Smad3 (NM_016769) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Smad3 (NM_016769) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Smad3
Synonyms:	AU022421; Madh3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >MC207323 representing NM_016769
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCGTCACCTCTGCCCTTACCCCCCGATCGTGAAGCGCCTGCTGGTTGGAAGAAGGGCGAGCAGA
 ACGGGCAGGAGGAGAAGTGGTGCAGAGAAGCGGTC AAGAGCTTGGTGAAGAAGCTCAAGAAGACGGGCA
 GTTGGACGAGCTGGAGAAGGCCATCACCACGCAGAACGTGAACACCAAGTGCATTACCATCCCCAGGTC
 CTGGATGGTGGCTGCAGGTGTCCATCGGAAGGGCTCCCTCACGTTATCTACTGCCGCCTGTGGCGAT
 GGCCCCACCTGCACAGCCACCATGAATTACGGGCCATGGAGCTCTGTGAGTTTGCCTTCAACATGAAGAA
 GGATGAAGTGTGTAAATCCTTACCACATCAGAGAGTAGAGACGCCAGTTCTACCTCCAGTGTGGTG
 CCACGCCACACCGAGATCCGGCCGAGTCCCCCACTGGATGACTACAGCCATTCCATTCCCGAGAACA
 CTAATTCCTGTGGCATTGAGCCCCAGAGCAATATCCAGAAACCCACCTCTGGCTACCTGAGTGA
 AGATGGAGAAACAGTGACCACCAGATGAACCACAGCATGGACGCAGGTTCTCCAACCTCTCCCGAAT
 CCGATGTCCCCAGCACACAATAACTTGGACCTACAGCCAGTCACCTACTGTGAGCCGGCCTTCTGGTGCT
 CCATCTCTACTACGAGCTGAACCAGCGAGTTGGGGAGACATTCCACGCCTCACAGCCATCCATGACAGT
 AGATGGCTTCACTGACCCCTCCAACCTCGGAGCGCTTCTGCCTGGGCTACTGTCCAATGTCAACCGAAT
 GCAGCCGTGGAACCTACAAGGCGACACATTGGGAGAGGTGTGGGCTCTACTACATCGGAGGGGAGGTCT
 TTGCGGAGTGCCTCAGTGACAGTGTATTTTCGTCCAGTCTCCAACCTGCAACCGAGCGCTATGGCTGGCA
 CCCGGCCACTGTCTCAAGATCCCACAGGCTGCAACCTGAAGATCTTCAACAACCGAATTTGCTGCC
 CTCCTAGCTCAGTCTGTCAACCAGGGCTTTGAGGCTGTCTACCAGCTGACGCGCATGTGCACCATCCGTA
 TGAGTTTCGTC AAAGGCTGGGGAGCAGAGTACAGGAGACAGACAGTGACCAGCACCCCTGCTGGATTGA
 GCTACACCTGAATGGACCCTTGACAGTGGCTTGACAAGGTCTCACCCAGATGGGTTCCCCGAGCATCCGC
 TGTTCAGTGTCT**TAG**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Chromatograms: https://cdn.origene.com/chromatograms/ja2222_e05.zip

Restriction Sites: SgfI-MluI

ACCN: NM_016769

Insert Size: 1278 bp

OTI Disclaimer: 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.

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](#)

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:	<u>BC066850</u> , <u>AAH66850</u>
RefSeq Size:	5090 bp
RefSeq ORF:	1278 bp
Locus ID:	17127
UniProt ID:	<u>Q8BUN5</u>
Cytogenetics:	9 C
Gene Summary:	Receptor-regulated SMAD (R-SMAD) that is an intracellular signal transducer and transcriptional modulator activated by TGF-beta (transforming growth factor) and activin type 1 receptor kinases. Binds the TRE element in the promoter region of many genes that are regulated by TGF-beta and, on formation of the SMAD3/SMAD4 complex, activates transcription. Also can form a SMAD3/SMAD4/JUN/FOS complex at the AP-1/SMAD site to regulate TGF-beta-mediated transcription. Has an inhibitory effect on wound healing probably by modulating both growth and migration of primary keratinocytes and by altering the TGF-mediated chemotaxis of monocytes. This effect on wound healing appears to be hormone-sensitive. Regulator of chondrogenesis and osteogenesis and inhibits early healing of bone fractures. Positively regulates PDPK1 kinase activity by stimulating its dissociation from the 14-3-3 protein YWHAQ which acts as a negative regulator (By similarity).[UniProtKB/Swiss-Prot Function]