

Product datasheet for **SC324938**

SMAD3 (NM_001145102) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SMAD3 (NM_001145102) Human Untagged Clone
Tag:	Tag Free
Symbol:	SMAD3
Synonyms:	HSPC193; HsT17436; JV15-2; LDS1C; LDS3; MADH3
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001145102, the custom clone sequence may differ by one or more nucleotides

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ATGGAGCTGTGTGAGTTCGCCTTCAATATGAAGAAGGACGAGGTCTGCGTGAATCCCTAC
CACTACCAGAGAGTAGAGACACCAGTTCTACCTCCTGTGTTGGTGCCACGCCACACAGAG
ATCCCGGCGGAGTTCCCCCACTGGACGACTACAGCCATTCCATCCCGAAAACTAATC
TTCCCGCAGGCATCGAGCCCCAGAGCAATATTCCAGAGACCCACCCCTGGCTACCTG
AGTGAAGATGGAGAAACAGTGACCACCAGATGAACCACAGCATGGACGCAGGTTCTCCA
AACCTATCCCGAATCCGATGTCCCGAGCACATAATACTTGGACCTGCAGCCAGTTACC
TACTGCGAGCCGGCCTTCTGGTGCTCCATCTCCTACTACGAGCTGAACCAGCGCGTCGGG
GAGACATTCCACGCCTCGCAGCCATCCATGACTGTGGATGGCTTACCGACCCCTCCAAT
TCGGAGCGCTTCTGCCTAGGGCTGCTCTCCAATGTCAACAGGAATGCAGCAGTGGAGCTG
ACACGGAGACACATCGGAAGAGGCGTGCGGCTCTACTACATCGGAGGGGAGGTCTTCGCA
GAGTGCTCAGTGACAGCGCTATTTTGTCCAGTCTCCCAACTGTAACCAGCGCTATGGC
TGGCACCCGGCCACCGTCTGCAAGATCCCACAGGATGCAACCTGAAGATCTTCAACAAC
CAGGAGTTCGCTGCCCTCCTGGCCAGTCGGTCAACCAGGGCTTTGAGGCTGTCTACCAG
TTGACCCGAATGTGCACCATCCGCATGAGCTTCGTCAAAGGCTGGGGAGCGGAGTACAGG
AGACAGACTGTGACCAGTACCCCTGCTGGATTGAGCTGCACCTGAATGGGCCTTTGCAG
TGGCTTGACAAGTCTCACCAGATGGGCTCCCAAGCATCCGCTGTTCCAGTGTGTCT

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Restriction Sites:	Please inquire
ACCN:	NM_001145102
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).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.



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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>NM_001145102.1, NP_001138574.1</u>
RefSeq Size:	5997 bp
RefSeq ORF:	963 bp
Locus ID:	4088
UniProt ID:	<u>P84022</u>
Cytogenetics:	15q22.33
Protein Families:	Cancer stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS, Stem cell relevant signaling - JAK/STAT signaling pathway, Stem cell relevant signaling - TGFb/BMP signaling pathway, Transcription Factors
Protein Pathways:	Adherens junction, Cell cycle, Chronic myeloid leukemia, Colorectal cancer, Pancreatic cancer, Pathways in cancer, TGF-beta signaling pathway, Wnt signaling pathway
Gene Summary:	<p>The SMAD family of proteins are a group of intracellular signal transducer proteins similar to the gene products of the Drosophila gene 'mothers against decapentaplegic' (Mad) and the C. elegans gene Sma. The SMAD3 protein functions in the transforming growth factor-beta signaling pathway, and transmits signals from the cell surface to the nucleus, regulating gene activity and cell proliferation. It also functions as a tumor suppressor. Mutations in this gene are associated with aneurysms-osteoarthritis syndrome and Loeys-Dietz Syndrome 3.</p> <p>[provided by RefSeq, Nov 2019]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR and coding sequence compared to variant 1. The resulting isoform (2) is shorter at the N-terminus compared to isoform 1.</p> <p>Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>