

Product datasheet for **RG203603**

SMAD6 (NM_005585) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SMAD6 (NM_005585) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SMAD6
Synonyms:	AOVD2; HsT17432; MADH6; MADH7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG203603 representing NM_005585
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTTTCAGGTCCAAACGCTCGGGCTGGTGC GGCGACTTTGGCGAAGTCGTGTGGTCCCCGACCGGGAGG
 AAGGCGGCAGCGCGCGCGGTGGCGGACGAGGATGGGAGCTTGGCAGCCGAGCTAGCCGGCCCC
 CGGGCAAGAGAGGGCGGAGGCTCGGGCGCTCCGAAGTCCGCCCGTAGCCCGCGCGCCCCGGGAC
 GCAGTGGGACAGCGAGGCGCCAGGGCGCGGGAGGCGCGCGCAGGGGGCCCCCGAGGCCATGT
 CGGAGCCAGGGCGCGCTGGGAGCTCCCTGCTGGACGTGGCGGAGCCGGGAGGCCGGCTGGCTGCC
 CGAGAGTGACTGCGAGACGGTGACTGCTGTCTTTTCGGAGCGGGACCGCCGGCGCGCCCCGGGAC
 GCCAGCGACCCCTGGCCGGGGCGCCCTGGAGCCGGCGGGCGGGCGGAGTCGCGAAGCGCGCTCGC
 GGCTGCTGCTGGAGCAGGAACCAAACCGTCACGTACTCGTGTGAAGCGGCTCAAGGAGCGCTC
 GCTGGACACGCTGCTGGAGCGGTGGAGTCCCGCGCGCGCTGCCGGCGGCTGCTGTGGTCCGCGC
 GCCGACCTCCGCCTGGCGGCCAGCCCGCGCCGCGCAGCTGCTGCTCGGCCGCCTTTTCGCTGGCCCC
 ACCTGCAGCACGCCGTGGAGCTGAAGCCCTGTGCGGCTGCCACAGCTTCGCCCGCCGCCGACGGCCC
 TACCGTGTGCTGCAACCCCTACCACTTACAGCCGCTCTGCGGGCCGAATCTCCGCCACCTCCCTACTCT
 CGGCTGTCTCCTCGCGACGAGTACAAGCCACTGGATCTGTCCGATTCCACATTGTCTTACTGAAACGG
 AGGCTACCAACTCCCTCATCACTGCTCCGGTGAATTCTCAGACGCCAGCATGTCTCCGGACGCCACAA
 GCCGAGCCACTGGTGCAGCGTGGCGTACTGGGAGCACCGGACGCGCGTGGGCCCTCTATGCGGTGAC
 GACCAGCCGTCAGCATCTTCTACGACCTACCTCAGGCGAGCGGCTTCTGCTGGCCAGCTCAACTGG
 AGCAGCGCAGCGAGTGGTGGCGGCAAGCGCAGCAAGATCGGCTTCGGCATCTGCTCAGCAAGGAGCC
 CGACGGCGTGTGGCCTACAACCGCGGCGAGCACCCATCTTCGCAACTCCCGACGCTGAGACCGGCC
 GCGCGCCGCGCCCTGGTGTGCGCAAGGTGCCCCCGGCTACTCCATCAAGGTGTTGACTTCGAGCGCT
 CGGGCTGCGAGCAGCGCCCGAGCCGACGCGCGGACGGCCCTACGACCCCAACAGCGTCCGCATCAG
 CTTCCGAAGGGCTGGGGCCCTGCTACTCCCGCAGTTCATCACCTCTGCCCTGCTGGTGGAGATC
 CTCCTCAACAACCCAGA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG203603 representing NM_005585
 Red=Cloning site Green=Tags(s)

MFRSKRSLVRRLLWRSRVVDPREEGSGGGGGDEEDGSLGSRAPAPRAREGGGCRSEVRPVAPRRPRD
 AVGQGAQAGARRRRRAGPPRPMSEPGAGAGSSLLDVAEPGGPGWLPESDCETVTCCLFSERDAAGAPRD
 ASDPLAGAALPAGGGRSREARSRLLLLEQELKTVTYSLKRLKERSLDTLLEAVESRGGVPGGCVLVR
 ADLRLGGQPAPPQLLLGRLFRWPDLQHAVELKPLCGHSFAAAADGPTVCCNPYHFSRLCGPESPPPPYS
 RLSRDEYKPLDLSSTLSYETEATNSLITAPGEFSDASMPDATKPSHWCSVAYWEHRTRVGRLYAVY
 DQAVSIFYDLPQGSFCLGQLNLEQRSESVRRTSKIGFGILLSKEPDGVWAYNRGEHPIFVNSPTLDAP
 GGRALVVRKVPPGYSIKVDFERSGLQHAPEPDAADGYPDPSVRI SFAKGWGPCYSRQFITSCPCWLEI
 LLNNPR

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_005585

ORF Size: 1488 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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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).

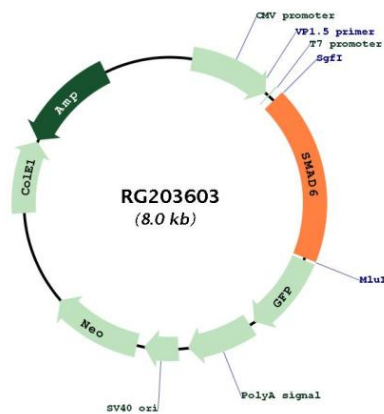
Reconstitution Method:

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_005585.5](#)

RefSeq Size:	2886 bp
RefSeq ORF:	1491 bp
Locus ID:	4091
UniProt ID:	O43541
Cytogenetics:	15q22.31
Domains:	DWB, DWA, MH1
Protein Families:	Cancer stem cells, Druggable Genome, ES Cell Differentiation/IPS, Transcription Factors
Protein Pathways:	TGF-beta signaling pathway
Gene Summary:	The protein encoded by this gene belongs to the SMAD family of proteins, which are related to Drosophila 'mothers against decapentaplegic' (Mad) and C. elegans Sma. SMAD proteins are signal transducers and transcriptional modulators that mediate multiple signaling pathways. This protein functions in the negative regulation of BMP and TGF-beta/activin-signalling. Multiple transcript variants have been found for this gene.[provided by RefSeq, Sep 2014]

Product images:



Circular map for RG203603