

## Product datasheet for **RG230776**

### **MADH7 (SMAD7) (NM\_001190822) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** MADH7 (SMAD7) (NM\_001190822) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** SMAD7  
**Synonyms:** CRCS3; MADH7; MADH8  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG230776 representing NM\_001190822  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGATCGCC

ATGTTCCAGGACCAACGATCTGCGCTCGTCCGGCTCTCTGGAGGAGCCGTGCGCCCGGGCGGAGGACG  
 AGGAGGAGGGCGCAGGGGAGGTGGAGGAGGAGGCGAGCTGCGGGGAGAAGGGGCGACGGACAGCCGAGC  
 GCATGGGGCCGGTGGCGGCGCCCGGGCAGGGCTGGATGCTGCCTGGCAAGGCGGTGCGAGGTGCCAAA  
 GGTACCACCATCCCACCCGACGCCGCGGGCGCGGGCGGGGGCGCCGAGGCGGATCTGAAGG  
 CGCTCACGCACTCGGTGCTCAAGAACTGAAGGAGCGGCAGCTGGAGCTGCTGCTCCAGGCCGTGGAGTC  
 CCGCGGCGGGACGCGCACCGCTGCTCCTGCTGCCCGGCCGCTGGACTGCAGGCTGGGCCCGGGGGCG  
 CCCGCGGCGCGCAGCCTGCGCAGCCGCCCTCGTCTACTCGCTCCCCCTCCTGCTGTGCAAAGTGTTC  
 GGTGGCCGGATCTCAGGCATTCCTCGGAAGTCAAGAGGCTGTGTTGCTGTGAATCTTACGGGAAGATCAA  
 CCCCAGCTGGTGTGCTGCAACCCCATCACCTTAGCCGACTCTGCGAAGTACAGTCTCCCCCTCCT  
 TACTCCAGATACCCGATGGATTTCTCAAACCACTGCAGACTGTCCAGATGCTGTGCCCTCCTCCGCTG  
 AACAGGGGAACGAATTATCTGGCCCCGGGGGCTTTCAGATCCCACTTCTTGGAGCCTGGGGA  
 TCGGTACACTGGTGGTGGTGGCATACTGGGAGGAGAAGACGAGAGTGGGAGGCTCTACTGTGTCAG  
 GAGCCCTCTGGATATCTTCTATGATCTACCTCAGGGGAATGGCTTTTGCCTCGGACAGCTCAATTCGG  
 ACAACAAGAGTCAGCTGGTGCAGAAGGTGCGGAGCAAAATCGGCTGCGGCATCCAGCTGACGCGGGAGGT  
 GGATGGTGTGGGTGTACAACCGCAGCAGTTACCCCATCTTCATCAAGTCCGCCACACTGGACAACCCG  
 GACTCCAGGACGCTGTTGGTACACAAGGTGTTCCCGGTTTCTCCATCAAGGCTTTCGACTACGAGAAGG  
 CGTACAGCCTGCAGCGGCCAATGACCACGAGTTTATGCAGCAGCCGTGGACGGGCTTACCGTGCAGAT  
 CAGCTTTGTGAAGGCTGGGGCCAGTGCTACACCCGCCAGTTCATCAGCAGCTGCCCGTGTGGCTAGAG  
 GTCATCTCAACAGCCGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG230776 representing NM\_001190822  
 Red=Cloning site Green=Tags(s)

MFRTKRSALVRRLLWRSRAPGGDEEEAGGGGGGGELRGEGATDSRAHGAGGGGPGRAGCCLGKAVRGAK  
 GHHHPHPPAAGAGAAGGAEDLKALTHSVLKKLKERQLELLLQAVESRGGTRTACLLLPGRLCDRLGPGA  
 PAGAQAQPPSSYSYSLPLLLCKVFRWDLRHSSEVKRLCCCESYGKINPELVCCNPHHLSRLCELESPPPP  
 YSRYPMDFLKPTADCPDPAVSSAETGGTNYLAPGGLSDSQLLLEPGDRSHWCVVAYWEEKTRVGRLYCVQ  
 EPSLDIFYDLPQNGFCLGQLNSDNKSQLVQKVRKIGCGIQLTREVDGVWVYNRSSYPIFKSATLDNP  
 DSRTLLVHKVFPGFSIKAFDYEKAYSLQRPNDHEFMQQPWTGFTVQISFVKGWGQCQYTRQFISSCPCWLE  
 VIFNSR

TRTRPLE - GFP Tag - V

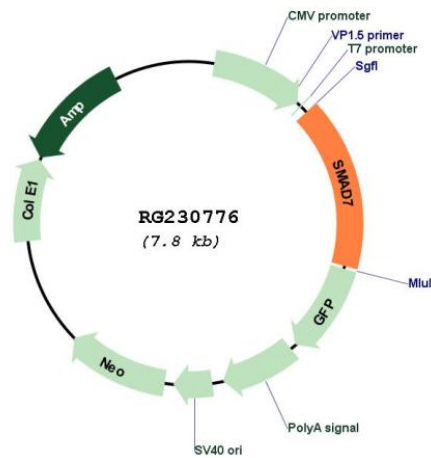
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:**

NM\_001190822

<b>ORF Size:</b>	1281 bp
<b>OTI Disclaimer:</b>	<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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001190822.1</a> , <a href="#">NP_001177751.1</a>
<b>RefSeq Size:</b>	2293 bp
<b>RefSeq ORF:</b>	636 bp
<b>Locus ID:</b>	4092
<b>UniProt ID:</b>	<a href="#">O15105</a>
<b>Cytogenetics:</b>	18q21.1
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>Protein Pathways:</b>	TGF-beta signaling pathway
<b>Gene Summary:</b>	<p>The protein encoded by this gene is a nuclear protein that binds the E3 ubiquitin ligase SMURF2. Upon binding, this complex translocates to the cytoplasm, where it interacts with TGF-beta receptor type-1 (TGFBR1), leading to the degradation of both the encoded protein and TGFBR1. Expression of this gene is induced by TGFBR1. Variations in this gene are a cause of susceptibility to colorectal cancer type 3 (CRCS3). Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jun 2010]</p>