

## Product datasheet for **RC230776**

### **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:	Myc-DDK
Symbol:	MADH7
Synonyms:	CRCS3; MADH7; MADH8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC230776 representing NM\_001190822  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTTTCAGGACCAAACGATCTGCGCTCGTCCGGCTCTCTGGAGGAGCCGTGCGCCCGCGGCGAGGACG  
 AGGAGGAGGGCGCAGGGGAGGTGGAGGAGGAGCGAGCTGCGGGGAGAAGGGGCGACGGACAGCCGAGC  
 GCATGGGGCCGGTGGCGGCGCCCGGGCAGGGCTGGATGCTGCCTGGGCAAGGGCGTGCGAGGTGCCAAA  
 GGTCAACCATCCCCACCCAGCCGCGGGCGCGGGCGGGGGCGCGAGGCGGATCTGAAGG  
 CGCTCACGCACTCGGTGCTCAAGAACTGAAGGAGCGGCAGCTGGAGCTGCTGCTCCAGGCCGTGGAGTC  
 CCGCGGCGGGACGCGACCCGCTGCTCCTGCTGCCCGGGCGCTGGACTGCAGGCTGGGCCGGGGCG  
 CCCGCGGCGCGCAGCCTGCGCAGCCGCCCTCGTCTACTCGCTCCCCCTCTGCTGTGCAAAGTGTTC  
 GGTGGCCGGATCTCAGGCATTCCTCGAAGTCAAGAGGCTGTGTTGCTGTGAATTTACGGGAAGATCAA  
 CCCCAGCTGGTGTGCTCAACCCCATCACCTTAGCCGACTCTGCGAACTAGAGTCTCCCCCTCTCT  
 TACTCCAGATACCGATGGATTTCTCAAACCACTGCAGACTGTCCAGATGCTGTGCCTTCTCCGCTG  
 AAACAGGGGGAACGAATTATCTGGCCCTGGGGGCTTTCAGATCCCAACTTCTCTGGAGCCTGGGGA  
 TCGGTCACTGGTGCCTGGTGCATACTGGGAGGAGAAGACGAGAGTGGGGAGGCTCTACTGTGCCAG  
 GAGCCCTCTGGATATCTTATGATCTACCTCAGGGGAATGGCTTTTGCCTCGACAGCTCAATTCGG  
 ACAACAAGAGTCAGCTGGTGCAGAAGGTGCGGAGCAAAATCGGCTGCGGCATCCAGCTGACGCGGGAGGT  
 GGATGGTGTGGGTGTACAACCGCAGCAGTTACCCCATCTTCAAGTCCGCCACTGGACAACCCG  
 GACTCCAGGACGCTGTTGGTACACAAGGTGTTCCCGGTTTCTCCATCAAGGCTTTCGACTACGAGAAGG  
 CGTACAGCCTGCAGCGGCCAATGACCAGAGTTTATGCAGCAGCCGTGGACGGGCTTACCGTGCAGAT  
 CAGCTTTGTGAAGGGCTGGGGCCAGTGTACACCCGCCAGTTCATCAGCAGCTGCCCGTGTGGCTAGAG  
 GTCATCTTCAACAGCCGG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC230776 representing NM\_001190822  
 Red=Cloning site Green=Tags(s)

MFRTKRSALVRRLLWRSRAPGGEDEEEAGGGGGGGELRGEGATDSRAHGAGGGGPRAGCCCLGKAVRGAK  
 GHHPHPAAGAGAAGGAEADLKALTHSVLKKLKERQLELLQAVESRGGTRTACLLPGRLCDRLGPGA  
 PAGAQAQPPSSYSLPLLLCKVFRWDLRHSSEVKRLCCCESYGKINPELVCCNPHHLRSLCELESPPPP  
 YSRYPMDFLKPTADCPDVPSSAETGGTNYLAPGGLSDSQLLEPGDRSHWCVVAYWEEKTRVGRLYCVQ  
 EPSLDIFYDLPPQNGFCLGQLNSDNKSQLVQKVRKIGCGIQLTREVDGVWVYNRSSYPIFKSATLDNP  
 DSRTLLVHKVFPFSGIKAFDYEKAYSLQRPNDHEFMQQPWTGFTVQISFVKGWGQCYTRQFISSCPCWLE  
 VIFNSR

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_001190822

**ORF Size:** 1281 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](mailto: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).

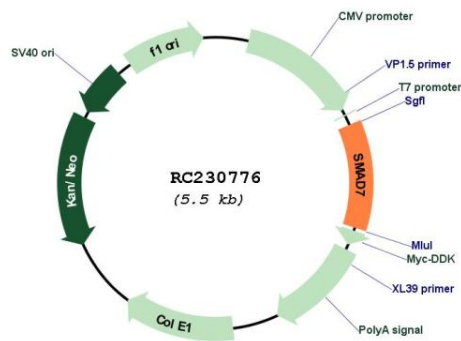
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
  2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
  3. Close the tube and incubate for 10 minutes at room temperature.
  4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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\\_001190822.1](#), [NP\\_001177751.1](#)

RefSeq Size: 2293 bp  
 RefSeq ORF: 636 bp  
 Locus ID: 4092  
 UniProt ID: [O15105](#)  
 Cytogenetics: 18q21.1  
 Protein Families: Druggable Genome, Transcription Factors  
 Protein Pathways: TGF-beta signaling pathway  
 MW: 46.4 kDa

**Gene Summary:** 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 (CRC3). Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jun 2010]

### Product images:



Circular map for RC230776