

## Product datasheet for **RC230830**

### **MADH7 (SMAD7) (NM\_001190821) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	MADH7 (SMAD7) (NM_001190821) 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:**

>RC230830 representing NM\_001190821  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTTTCAGGACCAAACGATCTGCGCTCGTCCGGCTCTCTGGAGGAGCCGTGCGCCCGCGGCGAGGACG  
 AGGAGGAGGGCGCAGGGGAGGTGGAGGAGGAGCGAGCTGCGGGGAGAAGGGGCGACGGACAGCCGAGC  
 GCATGGGGCCGGTGGCGGCGCCCGGGCAGGGCTGGATGCTGCCTGGGCAAGGGCGTGCAGGTGCCAAA  
 GGTCAACCATCCCCACCCGCCAGCCGCGGGCGCCGGCGCGCCGGGGCGCCGAGGCGGATCTGAAGG  
 CGCTCACGCACTCGGTGCTCAAGAACTGAAGGAGCGGCAGCTGGAGCTGCTGCTCCAGGCCGTGGAGTC  
 CCGCGGCGGGACGCGACCCGCTGCTCCTGCTGCCCGGCCCTGGACTGCAGGCTGGCCCGGGGGCG  
 CCCGCGGCGCGCAGCCTGCGCAGCCGCCCTCGTCTACTCGCTCCCCCTCCTGCTGTGCAAAGTGTTC  
 GGTGGCCGGATCTCAGGCATTCCTCGAAGTCAAGAGGCTGTGTTGCTGTGAATTTACGGGAAGATCAA  
 CCCCAGCTGGTGTGCTCAACCCCATCACCTTAGCCGACTCTGCGAACTAGAGTCTCCCCCCTCCT  
 TACTCCAGATACCGATGGATTTCTCAAACCAACTGACTGTCCAGATGCTGTGCCTTCCCGCTGAAA  
 CAGGGGAACGAATTATCTGGCCCTGGGGGGCTTTCAGATCCCAACTTCTTCTGGAGCCTGGGGATCG  
 GTCACACTGGTGCCTGGTGGCATACTGGGAGGAGAAGACGAGAGTGGGGAGGCTCTACTGTGTCCAGGAG  
 CCCTCTCTGGATATCTTCTATGATCTACCTCAGGGGAATGGCTTTTGCCTCGGACAGCTCAATTCGGACA  
 ACAAGAGTCAGCTGGTGCAGAAGGTGCGGAGCAAAATCGGCTGCGGCATCCAGCTGACGCGGGAGGTGGA  
 TGGTGTGGGTGTACAACCGCAGCAGTTACCCCATCTTCATCAAGTCCGCCACACTGGACAACCCGGAC  
 TCCAGGACGCTGTTGGTACACAAGGTGTTCCCGGTTTCCATCAAGGCTTTGACTACGAGAAGGCGT  
 ACAGCCTGCAGCGGCCAATGACCACGAGTTTATGCAGCAGCCGTGGACGGGCTTTACCGTGCAGATCAG  
 CTTTGTGAAGGGCTGGGGCCAGTCTACACCCGCCAGTTCATCAGCAGCTGCCCGTGTGGCTAGAGGTC  
 ATCTTCAACAGCCGG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC230830 representing NM\_001190821  
 Red=Cloning site Green=Tags(s)

MFRTKRSALVRRLLWRSRAPGGEDEEEAGGGGGGGELRGEGATDSRAHGAGGGGPRAGCCCLGKAVRGAK  
 GHHPHPAAGAGAAGGAEADLKALTHSVLKKLKERQLELLQLQAVESRGGTRTACLLLPGRLCDRLGPGA  
 PAGAQAQPPSSYSPLLLLCKVFRWDLRHSSEVKRLCCESYGKINPELVCCNPHHLRSLCELESPPP  
 YSRYPMDFLKPTDCPDVPSAETGGTNYLAPGGLSDSQQLLLEPGDRSHWCVVAYWEEKTRVGRLYCVQE  
 PSLDIFYDL PQNGFCLGQLNSDNKSQLVQKVRKIGCGIQLTREVDGVVYVYRSSYPIFKSATLDNPD  
 SRTLLVHKVFPGF SIKAFDYEKAYSLQRPNDHEFMQQPWTGFTVQISFVKGWGQC YTRQF ISSPCWLEY  
 IFNSR

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001190821

**ORF Size:** 1275 bp

**OTI Disclaimer:** 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\\_001190821.1](#), [NP\\_001177750.1](#)
**RefSeq Size:** 3085 bp

**RefSeq ORF:** 1278 bp

**Locus ID:** 4092

**UniProt ID:** [O15105](#)
**Cytogenetics:** 18q21.1

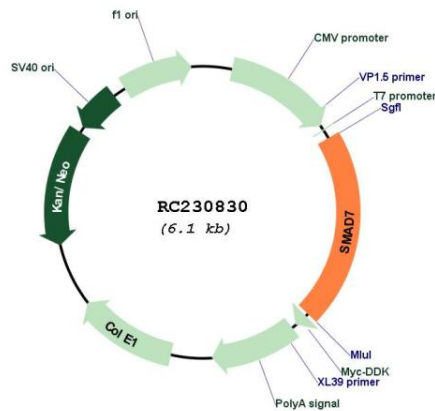
**Protein Families:** Druggable Genome, Transcription Factors

**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 RC230830