

## Product datasheet for **RG203791**

### SMNDC1 (NM\_005871) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SMNDC1 (NM_005871) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SMNDC1
Synonyms:	SMNR; SPF30; TDRD16C
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG203791 representing NM_005871 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCAGAGGATTTAGCAAAGCAGCTGGCAAGCTACAAAGCTCAGCTCCAGCAAGTTGAAGCTGCATTAT  
CTGGAAATGGAGAAAATGAAGATTTGCTAAAATTGAAGAAAGATTTACAAGAAATTATAGAATAACCAA  
AGACCTTCTGTCAACTCAACCTTCTGAGACGCTTGCAAGTTCAGACAGTTTTGCTTCTACTCAACCTACT  
CATTTCATGGAAAGTAGGAGACAAGTGTATGGCAGTCTGGAGTGAAGATGGACAGTGTATGAAGCGGAGA  
TTGAGGAGATAGATGAAGAAAATGGCACCGCTGCAATCACCTTTGCTGGTTATGGCAATGCTGAAGTGAC  
TCCACTGTTGAACCTCAAGCCTGTAGAAGAAGGAAGGAAGGCAAAGGAGGACAGTGGCAACAAACCCATG  
TCAAAAAAAGAAATGATTGCCAGCAGCGTGAATATAAAAAAGAAAGCTTTGAAAAAGCTCAGAGAA  
TAAAAGAACTTGAGCAGGAAAGAGAGGACCAGAAAGTAAATGGCAACAATTCAACAACAGAGCCTATTC  
TAAAACAAAAAGGCCAGGTAAGAGGAGTATTTTTCCTCACCTGAGAGTGTGACTGGTAAAGTTGGA  
GTAGGAACCTGTGAATTGCTGATAAACCTATGACACAATATCAAGATACCTCTAAATACAATGTCAGGC  
ATTTGATGCCTCAA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG203791 representing NM\_005871  
 Red=Cloning site Green=Tags(s)

MSEDLAKQLASYKAQLQQVEAALSGNGENEDLLKLLKDLQEVIELTKDLLSTQPSETLASSDSFASTQPT  
 HSWKVGDKCMAVWSEDDGQCYEAEIEEIDEENGTAAITFAGYGNAEVTPLLNLKPVEEGRKAKEDSGNKPM  
 SKKEMIAQQREYKKKKALKKAQRRIKELEQEREDQKVKWQQFNNRAYSKNKKGQVKRSIFASPESVTGKVG  
 VGTTCGIADKPMTYQDTSKYNVRHLMPO

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_005871

**ORF Size:** 714 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\\_005871.4](#)

**RefSeq Size:** 2033 bp

**RefSeq ORF:** 717 bp

**Locus ID:** 10285

**UniProt ID:** [O75940](#)

**Cytogenetics:** 10q25.2

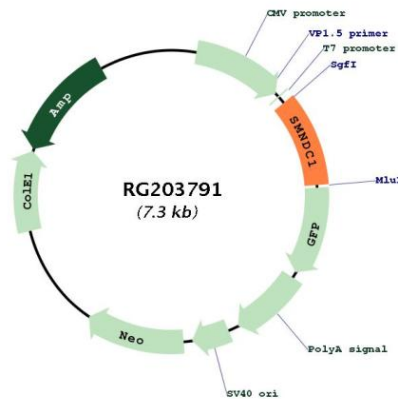
**Domains:** TUDOR

**Protein Families:** Stem cell - Pluripotency

**Protein Pathways:** Spliceosome

**Gene Summary:** This gene is a paralog of SMN1 gene, which encodes the survival motor neuron protein, mutations in which are cause of autosomal recessive proximal spinal muscular atrophy. The protein encoded by this gene is a nuclear protein that has been identified as a constituent of the spliceosome complex. This gene is differentially expressed, with abundant levels in skeletal muscle, and may share similar cellular function as the SMN1 gene. [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RG203791