

Product datasheet for RC203791

SMNDC1 (NM_005871) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SMNDC1 (NM_005871) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SMNDC1
Synonyms:	SMNR; SPF30; TDRD16C
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC203791 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCAGAGGATTTAGCAAAGCAGCTGGCAAGCTACAAAGCTCAGCTCCAGCAAGTTGAAGCTGCATTAT
CTGGAAATGGAGAAAATGAAGATTTGCTAAAATTGAAGAAAGATTTACAAGAAATTATAGAATAACCAA
AGACCTTCTGTCAACTCAACCTTCTGAGACGCTTGCAAGTTCAGACAGTTTTGCTTCTACTCAACCTACT
CATTTCATGGAAAGTAGGAGACAAGTGTATGGCAGTCTGGAGTGAAGATGGACAGTGTATGAAGCGGAGA
TTGAGGAGATAGATGAAGAAAATGGCACCGCTGCAATCACCTTTGCTGGTTATGGCAATGCTGAAGTGAC
TCCACTGTTGAACCTCAAGCCTGTAGAAGAAGGAAGGAAGGCAAAGGAGGACAGTGGCAACAAACCCATG
TCAAAAAAAGAAATGATTGCCAGCAGCGTGAATATAAAAAAGAAAGCTTTGAAAAAGCTCAGAGAA
TAAAAGAACTTGAGCAGGAAAGAGAGGACCAGAAAGTAAATGGCAACAATTCAACAACAGAGCCTATTC
TAAAACAAAAAGGCCAGGTAAGAGGAGTATTTTTGCTTACCTGAGAGTGTGACTGGTAAAGTTGGA
GTAGGAACCTGTGAATTGCTGATAAACCTATGACACAATATCAAGATACCTCTAAATACAATGTCAGGC
ATTTGATGCCTCAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC203791 protein sequence
Red=Cloning site Green=Tags(s)

MSEDLAKQLASYKAQLQQVEAALSGNGENEDLLKLLKDLQEVIELTKDLLSTQPSETLASSDSFASTQPT
 HSWKVGDKCMAVWSEDDGQCYEAEIEEIDEENGTAAITFAGYGNAEVTPLLNLPVVEGRKAKEDSGNKPM
 SKKEMIAQQREYKKKKALKKAQRILEQEREDQKVKWQQFNNRAYSKNKKGQVKRSIFASPEVTKGVG
 VGTTCGIADKPMTYQDTSKYNVRHLMPQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6306_g06.zip

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: 2043 bp

RefSeq ORF: 717 bp

Locus ID: 10285

UniProt ID: [O75940](#)

Cytogenetics: 10q25.2

Domains: TUDOR

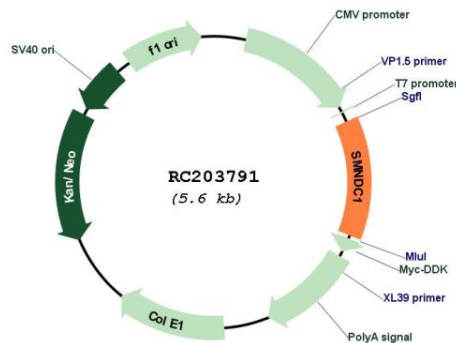
Protein Families: Stem cell - Pluripotency

Protein Pathways: Spliceosome

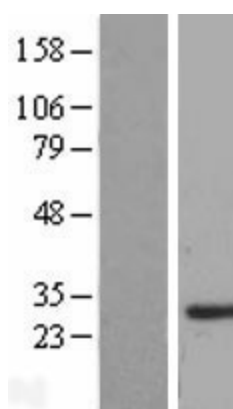
MW: 26.7 kDa

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]

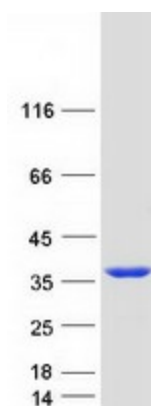
Product images:



Circular map for RC203791



Western blot validation of overexpression lysate (Cat# [LY417013]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203791 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SMNDC1 protein (Cat# [TP303791]). The protein was produced from HEK293T cells transfected with SMNDC1 cDNA clone (Cat# RC203791) using MegaTran 2.0 (Cat# [TT210002]).