

## **Product datasheet for RC220749**

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OriGene Technologies, Inc.

## SNRPN (NM\_022807) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: SNRPN (NM\_022807) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: SNRPN

Synonyms: HCERN3; PWCR; PWS; RT-LI; SM-D; sm-N; SMN; SNRNP-N; SNURF-SNRPN

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

ORF Nucleotide >RC220749 representing NM\_022807

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

 ${\tt TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC}$ 

GCCGCGATCGCC

ATGACTGTTGGCAAGAGTAGCAAGATGCTGCAGCACATTGACTATAGAATGAGATGTATCCTGCAAGATG
GCCGAATCTTCATTGGCACCTTTAAGGCTTTTGACAAGCATATGAATTTGATCCTCTGTGATTGTGATGA
GTTCAGAAAGATCAAGCCAAAGAATGCGAAGCAACCAGAGCGTGAAGAAAAAGCGGGTTTTTGGGTCTGGTG
TTGCTGCGTGGGGAGAACTTGGTATCCATGACTGTGGAGGGGCCACCCCCCAAAGATACTGGCATTGCTC
GGGTACCACTTGCTGGAGCTGCTGGAGGCCCTGGGGTTGGTAGGGCAGCTGGTAGAGGAGTACCAGCTGG
TGTGCCAATTCCCCAGGCCCCTGCTGGATTGGCAGGCCCTGTCCGAGGAGTTGGGGGACCATCCCAGCAG
GTAATGACTCCACAGGGAAGGCACTGTAGCAGCTGCTGTTGCTGCGACTGCCAGTATTGCTGGAG
CCCCAACACAGTACCCACCAGGACGGGGCACTCCGCCCCCACCCGTCGGCAGAGCAACCCCACCTCCAGG
CATTATGGCTCCTCCACCTGGTATGAGACCACCCATGGGCCCACCAATTGGGCTTCCCCCTGCTCGAGGG
ACGCCAATAGGCATGCCGCCTCCGGGAATGAGACCCCCTCCACCAGGCATTAGAGGTCCACCTCCCCAG
GAATGCGTCCACCAAGACCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA





Protein Sequence: >RC220749 representing NM\_022807

Red=Cloning site Green=Tags(s)

MTVGKSSKMLQHIDYRMRCILQDGRIFIGTFKAFDKHMNLILCDCDEFRKIKPKNAKQPEREEKRVLGLV LLRGENLVSMTVEGPPPKDTGIARVPLAGAAGGPGVGRAAGRGVPAGVPIPQAPAGLAGPVRGVGGPSQQ VMTPQGRGTVAAAAVAATASIAGAPTQYPPGRGTPPPPVGRATPPPGIMAPPPGMRPPMGPPIGLPPARG TPIGMPPPGMRPPPPGIRGPPPPGMRPPRP

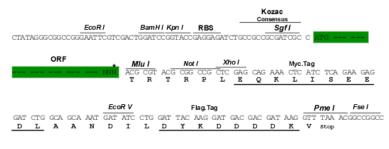
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: <a href="https://cdn.origene.com/chromatograms/mk6037">https://cdn.origene.com/chromatograms/mk6037</a> c07.zip

**Restriction Sites:** Sgfl-Mlul

Cloning Scheme:





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_022807

ORF Size: 720 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).



Domains:

**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: <u>NM 022807.5</u>

RefSeq Size: 1751 bp
RefSeq ORF: 723 bp
Locus ID: 6638
UniProt ID: P63162
Cytogenetics: 15q11.2

Protein Families: Stem cell - Pluripotency

Sm

**MW:** 24.4 kDa

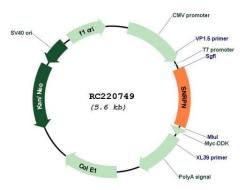
**Gene Summary:** This gene is located within the Prader-Willi Syndrome critical region on chromosome 15 and is

imprinted and expressed from the paternal allele. It encodes a component of the small nuclear ribonucleoprotein complex, which functions in pre-mRNA processing and may contribute to tissue-specific alternative splicing. Alternative promoter use and alternative splicing result in a multitude of transcript variants encoding the same protein. Transcript variants that initiate at the CpG island-associated imprinting center may be bicistronic and also encode the SNRPN upstream reading frame protein (SNURF) from an upstream open reading frame. In addition, long spliced transcripts for small nucleolar RNA host gene 14 (SNHG14) may originate from the promoters at this locus and share exons with this gene. Alterations in this region are associated with parental imprint switch failure, which may cause

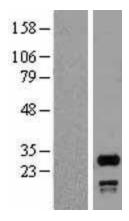
Angelman syndrome or Prader-Willi syndrome. [provided by RefSeq, Mar 2017]



## **Product images:**



Circular map for RC220749



Western blot validation of overexpression lysate (Cat# [LY411552]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220749 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).