

Product datasheet for **RC206831**

SEPTIN5 (NM_002688) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SEPTIN5 (NM_002688) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SEPTIN5
Synonyms:	CDCREL; CDCREL-1; CDCREL1; H5; HCDCREL-1; PNUTL1; SEPT5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC206831 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGCACAGGCCTGCGGTACAAGAGCAAGCTGGCGACCCAGAGGACAAGCAGGACATTGACAAGCAGT
ACGTGGGCTTCGCCACACTGCCAACAGGTGCACCGCAAGTCGGTGAAGAAAGGCTTTGACTTCACACT
CATGGTGGCTGGTGAAGTCAAGCTGAGGAGCGCATCAGCCAGACGGTAGAGATTCTAAAACACACGGTGG
AAGGACCGGAAGCTGCTCAGTGTGAGGAGCGCATCAGCCAGACGGTAGAGATTCTAAAACACACGGTGG
ACATTGAGGAGAAGGGAGTCAAGCTGAAGCTCACCATCGTGGACACGCCGGGATTCGGGGACGCTGTCAA
CAACACCGAGTGTGGAAGCCATCACCAGACTATGTGGACCAGCAGTTTGAGCAGTACTTCGGTGTGAG
AGCGGCCCTCAACCGAAAGAACATCCAAGACAACCGAGTGCAGTGCCTATACTTCATCTCCCCCTTCG
GGCATGGGCTGCGGCCAGTGGATGTGGGTTTCATGAAGGCATTGCATGAGAAGGTCAACATCGTGCCTCT
CATCGCCAAAGCTGACTGTCTTGTCCCCAGTGAGATCCGGAAGCTGAAGGAGCGGATCCGGGAGGAGATT
GACAAGTTTGGGATCCATGTATACCAGTTCCTGAGTGTGACTCGGACGAGGATGAGGACTTCAAGCAGC
AGGACCGGGAAGTGAAGGAGAGCGGCCCTTCGCCGTTATAGGCAGCAACACGGTGGTGGAGGCCAAGGG
GCAGCGGTCCGGGCCGACTGTACCCCTGGGGGATCGTGGAGGTGGAGAACCAGGCGCATTGCGACTTC
GTGAAGCTGCGCAACATGCTCATCCGACGCATATGCACGACCTCAAGGACGTGACGTGCGACGTGCAT
ACGAGAACTACCGCGCGCACTGCATCCAGCAGATGACCAGCAAAGTACCAGGACAGCCGATGGAGAG
CCCCATCCCGATCCTGCCGCTGCCACCCCGGACGCCGAGACTGAGAAGTTATCAGGATGAAGGATGAG
GAACTGAGGCGCATGCAGGAGATGCTGCAGAGGATGAAGCAGCAGATGCAGGACCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >RC206831 protein sequence
Red=Cloning site Green=Tags(s)

MSTGLRYKSKLATPEDKQDIDKQYVGFATLPNQVHRKSVKKGDFFTLMVAGESGLGKSTLVHSLFLTDLY
 KDRKLLSAEERISQTVEILKHTVDIEEKGVKLLKLTIVDTPGFGDAVNNTCEWKPIIDYVDQQFEQYFRDE
 SGLNRKNIQDNRVHCCLYFISPFHGLRPVDVGFMKALHEKVNIPLIAKADCLVPSEIRLKERIREEI
 DKFGIHVYQFPECDSDEDEDFKQQDRELKESAPFAVIGSNTVVEAKGQVRGRLLYPWGIVEVENQAHCDF
 VKLRNMLIRTHMHDLDKDVTCDVHYENYRAHCIQQMTSKLTQDSRMESPIILPLPTDAETEKLIRMKDE
 ELRRMQEMLQRMKQQMQDQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6433_a05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_002688

ORF Size: 1107 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_002688.6](#)

RefSeq Size: 2090 bp

RefSeq ORF: 1110 bp

Locus ID: 5413

UniProt ID: [Q99719](#)

Cytogenetics: 22q11.21

Domains: GTP_CDC

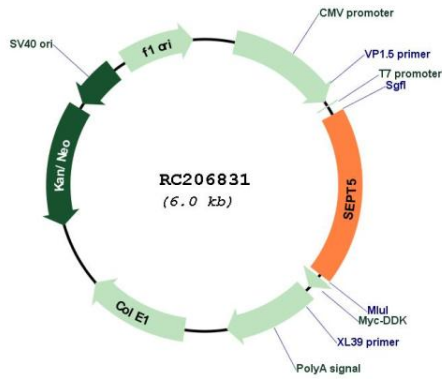
Protein Families: Druggable Genome

Protein Pathways: Parkinson's disease

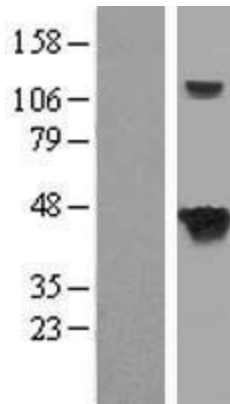
MW: 42.8 kDa

Gene Summary: This gene is a member of the septin gene family of nucleotide binding proteins, originally described in yeast as cell division cycle regulatory proteins. Septins are highly conserved in yeast, Drosophila, and mouse and appear to regulate cytoskeletal organization. Disruption of septin function disturbs cytokinesis and results in large multinucleate or polyploid cells. This gene is mapped to 22q11, the region frequently deleted in DiGeorge and velocardiofacial syndromes. A translocation involving the MLL gene and this gene has also been reported in patients with acute myeloid leukemia. Alternative splicing results in multiple transcript variants. The presence of a non-consensus polyA signal (AACAAAT) in this gene also results in read-through transcription into the downstream neighboring gene (GP1BB; platelet glycoprotein Ib), whereby larger, non-coding transcripts are produced. [provided by RefSeq, Dec 2010]

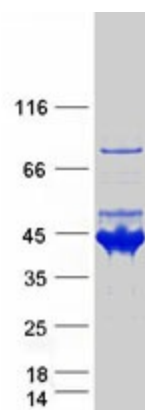
Product images:



Circular map for RC206831



Western blot validation of overexpression lysate (Cat# [LY419167]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206831 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SEPTIN5 protein (Cat# [TP306831]). The protein was produced from HEK293T cells transfected with SEPTIN5 cDNA clone (Cat# RC206831) using MegaTran 2.0 (Cat# [TT210002]).