

Product datasheet for **RG216253**

Septin 8 (SEPT8) (NM_001098813) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	Septin 8
Synonyms:	SEP2; SEPT8
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG216253 representing NM_001098813
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAACACACTCTTCAACACGACCTTCGAGACTGAGGAAGCCAGTCACCATGAGGCATGCGTGCGCCTGC
GGCCCCAGACCTATGACCTCCAGGAGAGCAACGTGCAGCTCAAGCTGACCATTTGTGGATGCCGTGGGCTT
TGGGGATCAGATCAATAAGGATGAGAGTTACAGGCCCATAGTTGACTACATCGATGCGCAGTTTGAAAAT
TATCTGCAGGAGGAGCTGAAGATCCGCCGCTCGCTCTTCGACTACCATGACACAAGGATCCACGTTTGCC
TCTACTTCATCACGCCACAGGGCACTCCCTGAAGTCTCTAGATCTAGTGACCATGAAGAACTAGACAG
CAAGGTGAACATTATCCCATCATCGCAAGGCTGACACCATCTCCAAGAGCGAGCTCCACAAGTTCAAG
ATCAAGATCATGGCGAGTTGGTCAGCAACGGGTCCAGATCTACCAAGTCCCCACGGATGATGAGGCTG
TTGCAGAGATTAAACGAGTCATGAATGCACATCTGCCCTTTGCCGTGGTGGCAGCACCGAGGAGGTGAA
GGTGGGGAACAAGCTGGTCCGAGCACGGCAGTACCCCTGGGGAGTGGTGCAGGTGGAGAATGAGAATCAC
TGCGACTTCGTGAAGCTGCGGGAGATGTTGATCCGGGTGAACATGGAAGACCTCCGCGAGCAGACCCACA
GCCGGCACTACGAGCTCTACCGCGCTGCAAGTTGGAGGAGATGGGCTTTCAGGACAGCGATGGTGACAG
CCAGCCCTTCAGCTACAAGAGACATACGAGGCCAAGAGGAAGGAGTTCCTAAGTGAGCTGCAGAGGAAG
GAGGAAGAGATGAGGCAGATGTTTGTCAACAAAGTGAAGGAGACAGAGCTGGAGCTGAAGGAGAAGGAAA
GGGAGCTCCATGAGAAGTTTGAACCTGAAGCGGCTCCACAGGAGGAGAAGCGCAAGGTGGAGGAAAA
GCGCCGGGAAGTGGAGGAGGAGACCAACGCCTTCAATCGCCGAAGGCTGCGGTGGAGGCCCTGCAGTCG
CAGGCTTGACGCCACCTCGCAGCAGCCCTGAGGAAGGACAAGGACAAGAAGAAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence:

>RG216253 representing NM_001098813

Red=Cloning site Green=Tags(s)

MNTLFNTTFETEEASHHEACVRLRPQTYDLQESNVQLKLTIVDAVGFGDQINKDESYRPIVDYIDAQFEN
YLQEELKIRRLSLFDYHDTRIHVCLYFITPTGHSLSKSLDLVTMKKLDSKVNIPIIAKADTISKSELHKFK
IKIMGELVSNQVQIYQFPTDDEAVAEINAVMNAHLPFVVGSTEEVKVGNKLVRARQYPWGVVQVENENH
CDFVKLREMLIRVNMDLREQTHSRHYEL YRRCKLEEMGFQDSDSQPFSLQETYEAKRKEFLSELQRK
EEEMRQMFVNKVKETELKEKERELHEKFEHLKRVHQEEKRKVEEKRRELEETNAFNRKAAVEALQS
QALHATSQQPLRKDKDKKN

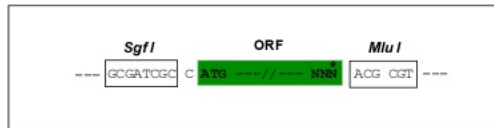
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



CTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGCCGCCAGATCT

EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI

CAAGCTTAAGTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC ---

HindIII NheI RsrII MluI NotI XhoI GFP Tag

T R T R P L E M E S D - - -

--- GAA GAA AGA GTT TAA ACGGCCGCCGCCGAGCT

- - E E R V Stop

PmeI FseI

ACCN:

NM_001098813

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001098813.1](#), [NP_001092283.1](#)

RefSeq Size: 4270 bp

RefSeq ORF: 1110 bp

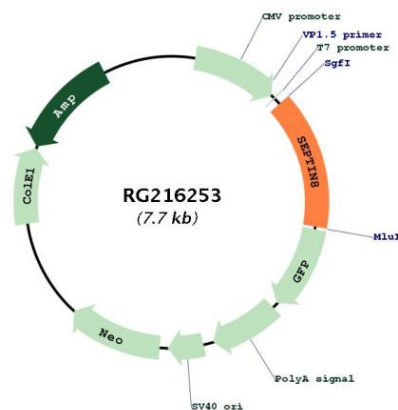
Locus ID: 23176

UniProt ID: [Q92599](#)

Cytogenetics: 5q31.1

Gene Summary: This gene is a member of the septin 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. Multiple alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2014]

Product images:



Circular map for RG216253