Product datasheet for MC209019

Sept2 (NM_001159718) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sept2 (NM_001159718) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Sept2
Synonyms:	AW208991; mKIAA0158; Nedd-5; Nedd5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC209019 representing NM_001159718 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTGGTTGGTGAATCTGGTCTAGGAAAATCAACTCTCATAAACAGCTTATTCCTGACTGATCTCTACC
CAGAAAGAATTATTCCTGGAGCTGCAGAGAAAATTGAAAGAACTGTCCAGATAGAGGCTTCGACTGTTGA
GATTGAAGAGCGGGGTGTGAAGCTGCGGCTTACAGTAGTGGACACTCCCGGCTACGGGGATGCCATCAAC
TGCAGGGATTGTTTCAAGACAATTATCTCCTACATTGATGAGCAGTTTGAACGCTACCTACATGATGAGA
GTGGACTGAACAGGCGTCACATCATTGATAACAGGGTACATTGTTGCTTCTACTTCATTTCACCTTTTGG
ACATGGACTGAAGCCCTTAGATGTTGCATTTATGAAAGCGATACACAATAAGGTGAATATTGTGCCTGTC
ATTGCGAAAGCTGACACTCTCACTCTGAAGGAGCGTGAGCGGCTTAAGAAAAGGATTTTGGATGAAATTG
AAGAGCATAGCATTAAAATCTATCACTTACCTGATGCAGAGTCAGATGAAGATGAAGACTTTAAGGAGCA
GACTAGACTCCTCAAGGCCAGTATCCCATTCTCTGTGGTTGGCTCCAACCAGTTGATTGAAGCCAAAGGC
AAGAAGGTTAGAGGCCGTCTCTACCCATGGGGTGTTGTAGAGGTGGAGAACCCAGAACACAATGACTTTC
TGAAGCTGAGAACGATGCTCATCACCCACATGCAGGACCTACAGGAAGTGACCCAAGACCTTCACTATGA
AAACTTCCGTTCTGAGAGGCTGAAGAGAGGCGGCAGGAAAGTAGAGAATGAGGACATGAATAAAGACCAG
ATCTTGCTTGAAAAGGAGGCTGAGCTCCGCCGCATGCAAGAGATGATTGCAAGAATGCAAGCGCAGATGC
AGATGCAGATGCAGGGTGGTGACAGTGACAGCGGGGCTCTCGGGCAGCATGTGTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	SgfI-MluI
ACCN:	NM_001159718

View online »

Insert Size:	966 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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_001159718.1, NP_001153190.1
RefSeq Size:	3192 bp
RefSeq ORF:	966 bp
Locus ID:	18000
UniProt ID:	P42208
Cytogenetics:	1 D

Gene Summary:

Filament-forming cytoskeletal GTPase. Forms a filamentous structure with SEPTIN12, SEPTIN6, SEPTIN2 and probably SEPTIN4 at the sperm annulus which is required for the structural integrity and motility of the sperm tail during postmeiotic differentiation (By similarity). Required for normal organization of the actin cytoskeleton. Plays a role in the biogenesis of polarized columnar-shaped epithelium by maintaining polyglutamylated microtubules, thus facilitating efficient vesicle transport, and by impeding MAP4 binding to tubulin. Required for the progression through mitosis. Forms a scaffold at the midplane of the mitotic splindle required to maintain CENPE localization at kinetochores and consequently chromosome congression. During anaphase, may be required for chromosome segregation and spindle elongation. Plays a role in ciliogenesis and collective cell movements (By similarity). In cilia, required for the integrity of the diffusion barrier at the base of the primary cilium that prevents diffusion of transmembrane proteins between the cilia and plasma membranes: probably acts by regulating the assembly of the tectonic-like complex (also named B9 complex) by localizing TMEM231 protein.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (4) differs in the 5' UTR, lacks a portion of the 5' coding region, and uses a downstream start codon, compared to variant 1. The resulting isoform (b) is shorter at the N-terminus, compared to isoform a. This variant lacks full-length transcript support in mouse, but it is supported by partial mouse ESTs and by the full-length orangutan mRNA, CR860673.1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.