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Product datasheet for MC209021

Sept2 (NM_001159717) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
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:	>MC209021 representing NM_001159717 Red=Cloning site Blue=ORF Orange=Stop codon TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGTCTAAGCAACAACCAACTCAGTTTATAAATCCAGAAACTCCTGGCTATGTTGGATTTGCAAATCTTC CCAATCAAGTTCACCGAAAATCAGTGAAGAAGGGGTTCGAGTTCACTCTGATGGTGGTTGGTGAATCTGG TCTAGGAAAATCAACTCTCATAAACAGCTTATTCCTGACTGATCTCTACCCAGAAAGAATTATTCCTGGA GCTGCAGAGAAAATTGAAAGAACTGTCCAGATAGAGGCTTCGACTGTTGAGATTGAAGAGCGGGGTGTGA AGCTGCGGCTTACAGTAGTGGACACTCCCGGCTACGGGGATGCCATCAACTGCAGGGATTGTTTCAAGAC AATTATCTCCTACATTGATGAGCAGTTTGAACGCTACCTACATGATGAGAGTGGACTGAACAGGCGTCAC ATCATTGATAACAGGGTACATTGTTGCTTCTACTTCATTTCACCTTTTGGACATGGACTGAAGCCCTTAG ATGTTGCATTTATGAAAGCGATACACAATAAGGTGAATATTGTGCCTGTCATTGCGAAAGCTGACACTCT CACTCTGAAGGAGCGTGAGCGGCTTAAGAAAAGGATTTTGGATGAAATTGAAGAGCATAGCATTAAAATC TATCACTTACCTGATGCAGAGTCAGATGAAGATGAAGACTTTAAGGAGCAGACTAGACTCCTCAAGGCCA GTATCCCATTCTCTGTGGTTGGCTCCAACCAGTTGATTGAAGCCAAAGGCAAGAAGGTTAGAGGCCGTCT CTACCCATGGGGTGTTGTAGAGGTGGAGAACCCAGAACACAATGACTTTCTGAAGCTGAGAACGATGCTC ATCACCCACATGCAGGACCTACAGGAAGTGACCCAAGACCTTCACTATGAAAACTTCCGTTCTGAGAGGC TGAAGAGAGGCGGCAGGAAAGTAGAGAATGAGGACATGAATAAAGACCAGATCTTGCTTGAAAAGGAGGC TGAGCTCCGCCGCATGCAAGAGATGATTGCAAGAATGCAAGCGCAGATGCAGATGCAGATGCAGGGTGGT GACAGTGACAGCGGGGCTCTCGGGCAGCATGTGTGA ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA
Restriction Sites:	SgfI-MluI

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ACCN:	NM_001159717
Insert Size:	1086 bp
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery. 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
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_001159717.1, NP_001153189.1
RefSeq Size:	3219 bp
RefSeq ORF:	1086 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 (3) differs in the 5' UTR compared to variant 1. Variants 1, 2, and 3 all encode the same isoform (a). 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.