

## Product datasheet for RC224864L1V

## OriGene Technologies, Inc.

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## Septin 2 (SEPT2) (NM 001008491) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

**Product Name:** Septin 2 (SEPT2) (NM\_001008491) Human Tagged ORF Clone Lentiviral Particle

Symbol: Septin 2

Synonyms: DIFF6; hNedd5; NEDD-5; NEDD5; Pnutl3; SEPT2

Mammalian Cell

Selection:

None

**Vector:** pLenti-C-Myc-DDK (PS100064)

Tag: Myc-DDK

**ACCN:** NM\_001008491

ORF Size: 1083 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC224864).

Sequence:

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.

RefSeq: <u>NM 001008491.1</u>

 RefSeq Size:
 3598 bp

 RefSeq ORF:
 1086 bp

 Locus ID:
 4735

UniProt ID: Q15019
Cytogenetics: 2q37.3

MW: 41.3 kDa





## **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 (PubMed:25588830). 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. 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. May play a role in the internalization of 2 intracellular microbial pathogens, Listeria monocytogenes and Shigella flexneri. [UniProtKB/Swiss-Prot Function]