

# **Product datasheet for TP311650L**

#### OriGene Technologies, Inc.

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### Septin 2 (SEPT2) (NM\_001008492) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Purified recombinant protein of Homo sapiens septin 2 (SEPT2), transcript variant 3, 1 mg

Species: Human
Expression Host: HEK293T

Expression cDNA >RC211650 protein sequence
Clone or AA Red=Cloning site Green=Tags(s)
Sequence:

MSKQQPTQFINPETPGYVGFANLPNQVHRKSVKKGFEFTLMVVGESGLGKSTLINSLFLTDLYPERVISG AAEKIERTVQIEASTVEIEERGVKLRLTVVDTPGYGDAINCRDCFKTIISYIDEQFERYLHDESGLNRRH

IIDNRVHCCFYFISPFGHGLKPLDVAFMKAIHNKVNIVPVIAKADTLTLKERERLKKRILDEIEEHNIKI YHLPDAESDEDEDFKEQTRLLKASIPFSVVGSNQLIEAKGKKVRGRLYPWGVVEVENPEHNDFLKLRTML

ITHMQDLQEVTQDLHYENFRSERLKRGGRKVENEDMNKDQILLEKEAELRRMQEMIARMQAQMQMQMQGG

DGDGGALGHHV

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV** 

Tag: C-Myc/DDK

**Predicted MW:** 41.3 kDa

**Concentration:** >0.05 µg/µL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by conventional

chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience some

loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling

conditions. Avoid repeated freeze-thaw cycles.

**RefSeg:** NP 001008492

**Locus ID:** 4735





### Septin 2 (SEPT2) (NM\_001008492) Human Recombinant Protein - TP311650L

UniProt ID: Q15019

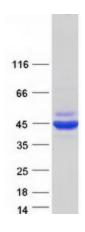
RefSeq Size: 3408 Cytogenetics: 2q37.3 RefSeq ORF: 1083

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

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]

## **Product images:**



Coomassie blue staining of purified SEPTIN2 protein (Cat# [TP311650]). The protein was produced from HEK293T cells transfected with SEPTIN2 cDNA clone (Cat# [RC211650]) using MegaTran 2.0 (Cat# [TT210002]).