

## Product datasheet for PH311473

### Septin 2 (SEPT2) (NM\_006155) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	SEPT2 MS Standard C13 and N15-labeled recombinant protein (NP_006146)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC211473
Predicted MW:	41.5 kDa
Protein Sequence:	>RC211473 protein sequence Red=Cloning site Green=Tags(s)
	MSKQQPTQFINPETPGYVGFANLPNQVHRKSVKKGFEFTLMVVGESGLGKSTLINSFLTDLYPERVISG AAEKIERTVQIEASTVEIEERGVLRLTVVDTPGYGDAINCRDCFKTIISYIDEQFERYLHDESGLNRRH IIDNRVHCCFYFISPFHGHLKPLDVAFMKAIHNKVNIVPVIKADTLTLKERERLKKRILDEIEEHNIKI YHLPDAESDEDEDFKEQTRLLKASIPFSVVGSNQLIEAKGKKVRGRLYPWGVVEVENPEHNDFLKLRTML ITHMQDLQEVTDLHYENFRSERLKRGRKVENEDMNKDQILLEKEAELRRMQEMIARMQAQMOMQGG DGDGGALGHHV
	TRTRPLEQKLI SEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>4</sub> ]-L-Arginine and [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>2</sub> ]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<u>NP_006146</u>
RefSeq Size:	3625
RefSeq ORF:	1083
Synonyms:	DIFF6; hNedd5; NEDD-5; NEDD5; Pnutl3; SEPT2
Locus ID:	4735



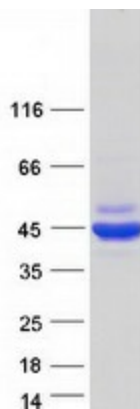
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UniProt ID: [Q15019](#)

Cytogenetics: 2q37.3

**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 spindle 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# [TP311473]). The protein was produced from HEK293T cells transfected with SEPTIN2 cDNA clone (Cat# [RC211473]) using MegaTran 2.0 (Cat# [TT210002]).