

Product datasheet for **AR09655PU-L**

Septin-2 (1-361, His-tag) Human Protein

Product data:

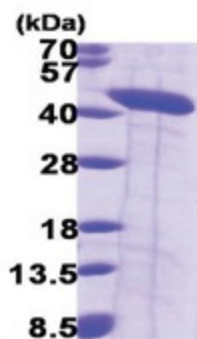
Product Type:	Recombinant Proteins
Description:	Septin-2 (1-361, His-tag) human recombinant protein, 0.25 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	<u>MGSSHHHHHH SSSLVPRGSH</u> MSKQQPTQFI NPETPGYVGF ANLPNQVHRK SVKKGFEFTL MVVGESGLGK STLINSLFLT DLYPERVISG AAEKIERTVQ IEASTVEIEE RGVKLRRLTVV DTPGYGDAIN CRDCFKTIIS YIDEQFERYL HDESGLNRRH IIDNRVHCCF YFISPFHGHL KPLDVAFMKA IHNKVNIVPV IAKADTLTLK ERERLKKRIL DEIEEHNIKI YHLPDAESDE DEDFKEQTRL LKASIPFSV GSNQLIEAKG KKVRGRLYPW GWVEVENPEH NDFLKLRTML ITHMQDLQEV TQDLHYENFR SERLKRGGRK VENEDMNKDQ ILLEKEAELR RMQEMIARMQ AQMQMQMQGG DGDGGALGHH V
Tag:	His-tag
Predicted MW:	43.6 kDa
Concentration:	lot specific
Purity:	>90% by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 20% glycerol, 0.1M NaCl, 1 mM DTT
Preparation:	Liquid purified protein
Protein Description:	Recombinant human Septin2 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	<u>NP_001008491</u>
Locus ID:	4735
UniProt ID:	<u>Q15019</u>
Cytogenetics:	2q37.3
Synonyms:	DIFF6; hNedd5; NEDD-5; NEDD5; Pnut13; SEPT2



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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:

15% SDS-PAGE (3ug)