

Rabbit SEPT2 Polyclonal Antibody | anti-SEPT2 antibody

SEPT2 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA325108	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

PRODUCT SYNONYMS

SEPT2; Polyclonal Antibody; SEPT2 Antibody; DIFF6; hNEDD5; KIAA0158; NEDD 5; NEDD5; Neural precursor cell expressed developmentally down regulated 5; Neural precursor cell expressed developmentally down regulated protein 5; Pnutl3; Protein NEDD5; septin 2; anti-SEPT2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	SEPT2 antibody detects endogenous levels of total 41519
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	361
Applicable Applications for anti-SEPT2 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide
Subcellular Location	Cytoplasm. Cytoplasm; Cytoskeleton. Cytoplasm; Cytoskeleton; Spindle. Chromosome; Centromere; Kinetochore. Cleavage Furrow. Midbody. Cytoplasm; Cell Cortex. Cell Projection; Cilium Membrane.
Tissue Specificity	Widely expressed. Up-regulated in liver cancer.
Predicted Cross Reactivity	Pig, Zebrafish, Bovine, Horse, Sheep, Rabbit, Dog, Chicken, Xenopus
Similarity	Pig (100%), Zebrafish (92%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (92%), Xenopus (92%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

AAA325108 staining Hela cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.



WB (Western Blot)

Western blot analysis of SEPT2 expression in Rat brain lysate



WB (Western Blot)

Western blot analysis of extracts from Jurkat cells using SEPT2 antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-SEPT2 antibody

Function: Filament-forming cytoskeletal GTPase. Forms a filamentous structure with SEPT12, SEPT6, SEPT2 and probably SEPT4 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.

Subunit Structure: Septins polymerize into heterooligomeric protein complexes that form filaments, and associate with cellular membranes, actin filaments and microtubules (PubMed:17637674, PubMed:25588830, Ref. 36). GTPase activity is required for filament formation. Filaments are assembled from asymmetrical heterotrimers, composed of SEPT2, SEPT6 and SEPT7 that associate head-to-head to form a hexameric unit (PubMed:16093351, PubMed:16914550). Interaction between SEPT2 and SEPT7 seems indirect. Interacts with SEPT5 (By similarity). Interaction with SEPT4 not detected (By similarity). Interacts with SEPT9 (PubMed:19145258). Component of a septin core octomeric complex consisting of SEPT12, SEPT7, SEPT6 and SEPT2 or SEPT4 in the order 12-7-6-2-2-6-7-12 or 12-7-6-4-4-6-7-12 and located in the sperm annulus (PubMed:16093351, PubMed:16914550). Interacts with MAP4. Interacts with DZIP1L (PubMed:28530676).

Similarity: Belongs to the TRAFAC class TrmE-Era-EngA-EngB-Septin-like GTPase superfamily. Septin GTPase family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	56549636
NCBI GeneID	4735
NCBI Accession #	NP_001008491.1
NCBI GenBank Nucleotide #	NM_001008491.2
UniProt Accession #	Q15019; Q14132; Q53QU3; Q8IUUK9; Q96CB0; B4DGE8
Molecular Weight	Observed: 41 kD Predicted: 42 kDa
NCBI Official Full Name	septin-2 isoform a

NCBI Official Synonym Full Names	septin 2
NCBI Official Symbol	SEPT2
NCBI Official Synonym Symbols	DIFF6; NEDD5; NEDD-5; Pnutl3; hNedd5
NCBI Protein Information	septin-2
UniProt Protein Name	Septin-2
UniProt Gene Name	SEPT2
UniProt Synonym Gene Names	DIFF6; KIAA0158; NEDD5; NEDD-5

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/polyclonal/sept2-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/325108>