

Rabbit SEPT4 Polyclonal Antibody | anti-SEPT4 antibody

SEPT4 Antibody

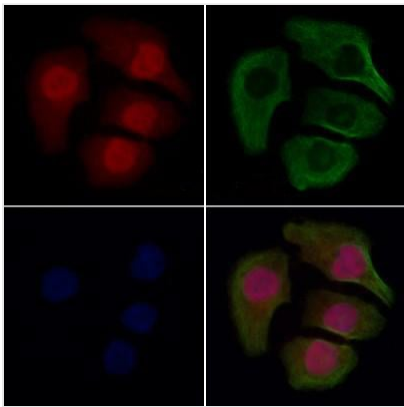
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA31211	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig(100%), Horse(100%), Sheep(100%), Rabbit(100%)	ELISA

PRODUCT SYNONYMS

SEPT4; Polyclonal Antibody; SEPT4 Antibody; Apoptosis-related protein in the TGF-beta signaling pathway; ARTS; Bradeion; Bradeion beta; Brain protein H5; CE5B3; CE5B3 beta; Cell division control-related protein 2; Cerebral protein 7; H5; hCDCREL-2; hucep-7; MART; Peanut-like protein 2; PNUTL2; SEP 4; SEPA; Sept4; SEPT4_HUMAN; Septin M; Septin-4; anti-SEPT4 antibody

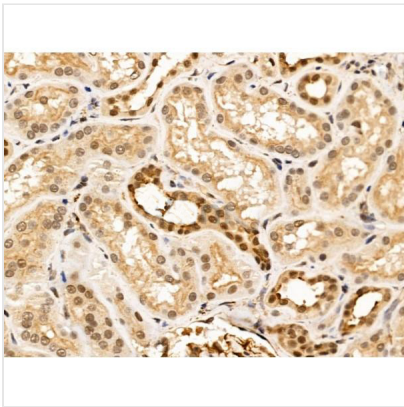
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig(100%), Horse(100%), Sheep(100%), Rabbit(100%)
Clonality	Polyclonal
Isotype	IgG
Specificity	SEPT4 Antibody detects endogenous levels of total SEPT4.
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin (Thermo Fisher Scientific).
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol
Concentration	1mg/ml (varies by lot)
Sequence Length	274
Applicable Applications for anti-SEPT4 antibody	ELISA
Application Notes	WB: 1:500-1:2000 IF: 1:100-1:500 ICC: 1:100-1:500 IHC: 1:50-1:200 ELISA(peptide): 1:20,000-1:40,000
Immunogen	A synthesized peptide derived from human SEPT4, corresponding to a region within the internal amino acids.
Fragment	Fab fragment
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



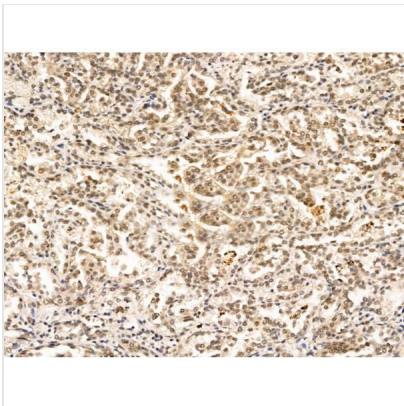
IF (Immunofluorescence)

AAA31211 staining Hela cells by IF/ICC. The samples were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25°C. Samples were then incubated with primary Ab(AAA31211 1:200) and mouse anti-beta tubulin Ab(T0023 1:200) for 1 hour at 37°C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody. The nuclear counter stain is DAPI(blue).



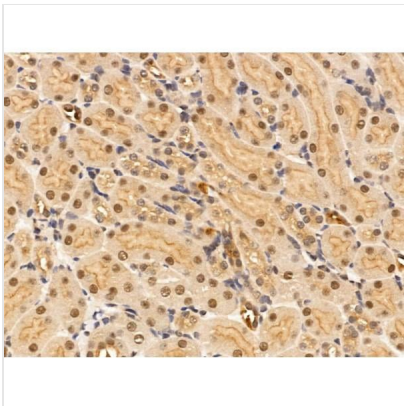
IHC (Immunohistochemistry-Paraffin)

AAA31211 at 1/100 staining Human kidney cancer and adjacent normal tissues by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



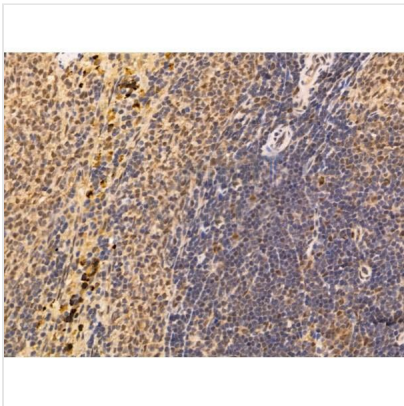
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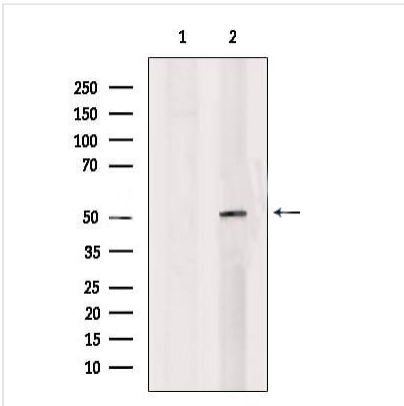
IHC (Immunohistochemistry-Paraffin)

AAA31211 at 1/100 staining Mouse kidney tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry-Paraffin)

AAA31211 at 1/100 staining Rat spleen tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



WB (Western Blot)

Western blot analysis of extracts from Rat brain, using SEPT4 Antibody. The lane on the left was treated with blocking peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-SEPT4 antibody	Function: Filament-forming cytoskeletal GTPase (By similarity). May play a role in cytokinesis (Potential). 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). May play a role in platelet secretion. Isoform ARTS, but not the other isoforms, is required for the induction of cell death mediated by TGF-beta and by other apoptotic stimuli. Subcellular Location: Cytoplasm. Cytoplasm>Cytoskeleton. Cell projection>Cilium>Flagellum. Note: In platelets, found in areas surrounding alpha-granules. Found in the sperm annulus (PubMed:25588830).Mitochondrion. Nucleus. Note: While predominantly localized in the mitochondria under resting conditions, isoform ARTS translocates into the nucleus after TGF-beta treatment and apoptosis induction. Tissue Specificity: Widely expressed in adult and fetal tissues with highest expression in adult brain (at protein level), heart, liver and adrenal gland and fetal heart, kidney, liver and lung. Also expressed in colorectal cancers and malignant melanomas. Expressed in platelets. Subunit Structure: Septins polymerize into heterooligomeric protein complexes that form filaments, and can associate with cellular membranes, actin filaments and microtubules. GTPase activity is required for filament formation (By similarity). Interacts with SEPTIN8. In a mesenchymal cell line, interacts with SEPTIN9 isoform 2 variants HNA Trp-106 and Phe-111, but not the wild type SEPTIN9. Component of a septin core octomeric complex consisting of SEPTIN12, SEPTIN7, SEPTIN6 and SEPTIN2 or SEPTIN4 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. Isoform ARTS, but no other isoforms, interacts with XIAP after the induction of apoptosis. Similarity: Belongs to the TRAFAC class TrmE-Era-EngA-EngB-Septin-like GTPase superfamily. Septin GTPase family.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	12024871
NCBI GeneID	5414
UniProt Accession #	O43236; Q8NEP4
Molecular Weight	Observed Molecular Weight: (Observed)55kD. Predicted Molecular Weight: (Calculated)55kDa.
NCBI Official Full Name	mitochondrial ARTS protein
NCBI Official Synonym Full Names	septin 4
NCBI Official Symbol	SEPTIN4
NCBI Official Synonym Symbols	H5; ARTS; MART; SEP4; CE5B3; SEPT4; PNUTL2; hucep-7; BRADEION; C17orf47; hCDCREL-2
NCBI Protein Information	septin-4
UniProt Protein Name	Septin-4
UniProt Gene Name	SEPT4
UniProt Synonym Gene Names	ARTS; PNUTL2; SEP4; ARTS; hCDCREL-2
UniProt Entry Name	SEPT4_HUMAN

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.