10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MAP126 Rabbit pAb

MAP126 Rabbit pAb
Catalog # AP54205

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q96R06
Reactivity	Rat, Human
Predicted	Pig, Dog, Mouse, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	134422
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SPAG5
Epitope Specificity	1101-1193/1193
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Cytoplasm, cytoskeleton, spindle. Cytoplasm, cytoskeleton, spindle pole. Chromosome, centromere, kinetochore. Note=In a punctate pattern in interphase cells. During mitosis, detected at spindle poles during prophase, throughout the spindle in metaphase and anaphase, and at midzone microtubules in anaphase and telophase. Detected on kinetochores of chromosomes that have congressed. The astrin (SPAG5)-kinastrin (SKAP) complex localizes to the microtubule plus ends.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	A novel gene product, hMAP126, interacts with p29 in the yeast two-hybrid assay. The subcellular distribution of hMAP126 was localized to the mitotic spindle and is phosphorylated by p34(cdc2) kinase. Human MAP126 is likely involved in the functional and dynamic regulation of mitotic spindles.

Additional Information

Gene ID	10615
Other Names	Sperm-associated antigen 5, Astrin, Deepest, Mitotic spindle-associated protein p126, MAP126, SPAG5
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=1ug/Test
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

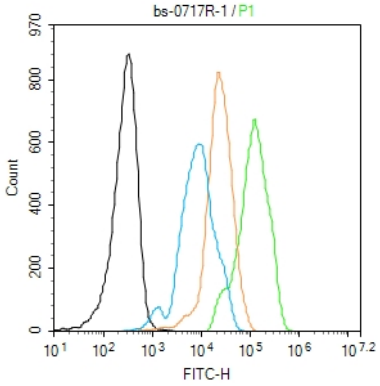
Name	SPAG5
Function	Essential component of the mitotic spindle required for normal chromosome segregation and progression into anaphase (PubMed:11724960, PubMed:12356910, PubMed:27462074). Required for chromosome alignment, normal timing of sister chromatid segregation, and maintenance of spindle pole architecture (PubMed:17664331, PubMed:27462074). In complex with SKAP, promotes stable microtubule- kinetochore attachments. May contribute to the regulation of separase activity. May regulate AURKA localization to mitotic spindle, but not to centrosomes and CCNB1 localization to both mitotic spindle and centrosomes (PubMed:18361916, PubMed:21402792). Involved in centriole duplication. Required for CDK5RAP2, CEP152, WDR62 and CEP63 centrosomal localization and promotes the centrosomal localization of CDK2 (PubMed:26297806). In non-mitotic cells, upon stress induction, inhibits mammalian target of rapamycin complex 1 (mTORC1) association and recruits the mTORC1 component RPTOR to stress granules (SGs), thereby preventing mTORC1 hyperactivation-induced apoptosis (PubMed:23953116). May enhance GSK3B-mediated phosphorylation of other substrates, such as MAPT/TAU (PubMed:18055457).
Cellular Location	Cytoplasm. Cytoplasm, cytoskeleton. Cytoplasm, cytoskeleton, spindle. Cytoplasm, cytoskeleton, spindle pole. Chromosome, centromere, kinetochore. Midbody Cytoplasm, cytoskeleton, microtubule organizing center, centrosome Cytoplasmic granule. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriolar satellite Note=Colocalizes with PCM1 at centriolar satellites throughout the cell cycle (PubMed:26297806). In a punctate pattern in interphase cells During mitosis, detected at spindle poles during prophase, throughout the spindle in metaphase and anaphase, and at midzone microtubules in anaphase and telophase (PubMed:27462074). Efficient targeting to the mitotic spindle may depend upon phosphorylation by GSK3B. Detected on kinetochores of chromosomes that have congressed. The astrin (SPAG5)- kinastrin (SKAP) complex localizes to the microtubule plus ends (By similarity). In non-mitotic non-stressed cells, shows a microtubuli pattern. In arsenite-stressed cells, accumulates in stress granules {ECO:0000250, ECO:0000269|PubMed:26297806, ECO:0000269|PubMed:27462074}
Tissue Location	Highly expressed in testis. Detected at low levels in placenta, liver, pancreas, thymus and colon

Background

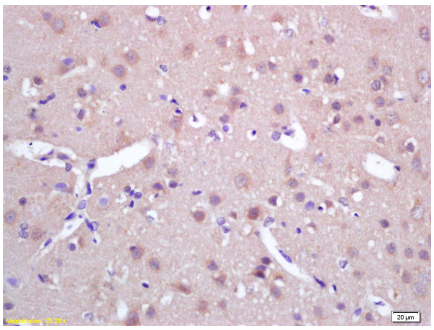
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Images

Blank control(black line):Hela.
Primary Antibody (green line): Rabbit Anti-MAP126 antibody (AP54205)
Dilution:1ug/Test;
Secondary Antibody(white blue line): Goat anti-rabbit IgG-FITC
Dilution: 0.5ug/Test.
Isotype control(orange line): Normal Rabbit IgG



Protocol
The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20℃, The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-SPAG5/MAP126/Astrin Polyclonal Antibody, Unconjugated(AP54205) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.