

MAP126 Polyclonal Antibody Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54205

## Specification

# MAP126 Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW IHC-P, IHC-F, IF, ICC, E <u>O96R06</u> Rat, Pig, Dog, Bovine Rabbit Polyclonal 134422

## **MAP126 Polyclonal Antibody - Additional Information**

Gene ID 10615

Other Names

Sperm-associated antigen 5, Astrin, Deepest, Mitotic spindle-associated protein p126, MAP126, SPAG5

Dilution <span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class ="dilution\_IHC-F">IHC-F~~N/A</span><br \><span class ="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_ICC">ICC~~N/A</span><br \><span class ="dilution\_E">E~~N/A</span>

Format 0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**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.

## **MAP126** Polyclonal Antibody - Protein Information

Name SPAG5

#### Function

Essential component of the mitotic spindle required for normal chromosome segregation and progression into anaphase (PubMed:<a href="http://www.uniprot.org/citations/11724960" target="\_blank">11724960</a>, PubMed:<a href="http://www.uniprot.org/citations/12356910" target="\_blank">12356910</a>, PubMed:<a href="http://www.uniprot.org/citations/27462074" target="\_blank">27462074</a>). Required for chromosome alignment, normal timing of sister chromatid segregation, and maintenance of spindle pole architecture (PubMed:<a href="http://www.uniprot.org/citations/17664331" target="\_blank">17664331</a>, PubMed:<a href="http://www.uniprot.org/citations/27462074" target="\_blank">27462074</a>). Required for chromosome alignment, normal timing of sister chromatid segregation, and maintenance of spindle pole architecture (PubMed:<a href="http://www.uniprot.org/citations/17664331" target="\_blank">27462074</a>). 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:<a href="http://www.uniprot.org/citations/18361916" target="\_blank">18361916</a>, PubMed:<a href="http://www.uniprot.org/citations/21402792" target="\_blank">21402792</a>). Involved in centriole duplication. Required for CDK5RAP2, CEP152, WDR62 and CEP63 centrosomal localization and promotes the centrosomal localization of CDK2 (PubMed:<a

href="http://www.uniprot.org/citations/26297806" target="\_blank">26297806</a>). 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:<a href="http://www.uniprot.org/citations/23953116" target="\_blank">23953116</a>). May enhance GSK3B-mediated phosphorylation of other substrates, such as MAPT/TAU (PubMed:<a href="http://www.uniprot.org/citations/18055457" target="\_blank">18055457</a>).

### **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

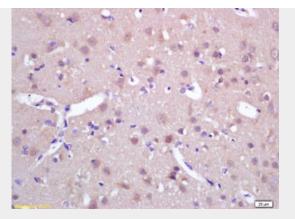
## **MAP126 Polyclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### MAP126 Polyclonal Antibody - Images

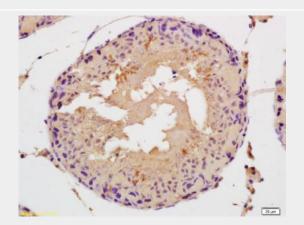




Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

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°C for 20 min;

Incubation: Anti-SPAG5/MAP126/Astrin Polyclonal Antibody, Unconjugated(bs-0717R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat testis 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°C for 20 min;

Incubation: Anti-SPAG5/MAP126/Astrin Polyclonal Antibody, Unconjugated(bs-0717R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining