

## **SPAG16 Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54520

## **Specification**

## **SPAG16 Polyclonal Antibody - Product Information**

Application WB, IHC-P, IHC-F, IF, ICC, E

Primary Accession <u>Q8N0X2</u>

Reactivity Rat, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 71 KDa
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived

from human SPAG16

Epitope Specificity 439-485/631

Isotype Purity

affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

laG

SUBCELLULAR LOCATION Cytoplasm, cytoskeleton,

flagellum axoneme. Cytoplasm, cytoskeleton, cilium axoneme.

Note=Detected on the sperm flagellum axoneme. Detected in the central apparatus of the axoneme. Colocalizes

with SPAG6 on microtubules.

SIMILARITY Contains 7 WD repeats.

SUBUNIT Interacts with SPAG6 and STK36

Post-translational modifications Phosphorylated by TSSK2

Important Note

This product as supplied is intended for research use only, not for use in human,

therapeutic or diagnostic applications.

## **Background Descriptions**

Cilia and flagella are comprised of a microtubular backbone, the axoneme, which is organized by the basal body and surrounded by plasma membrane. SPAG16 encodes 2 major proteins that associate with the axoneme of sperm tail and the nucleus of postmeiotic germ cells, respectively (Zhang et al., 2007 [PubMed 17699735]).[supplied by OMIM, Jul 2008]

# **SPAG16 Polyclonal Antibody - Additional Information**

**Gene ID** 79582

**Other Names** 

Sperm-associated antigen 16 protein, Pf20 protein homolog, SPAG16, PF20

Target/Specificity



Isoform 1 is detected in testis. Isoform 4 is detected in testis and brain, and at lower levels in kidney, heart, pancreas, thyroid, ovary, adrenal gland, spinal cord, trachea and liver.

#### **Dilution**

<span class ="dilution\_WB">WB~~1:1000</span><br \><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\_ICC">ICC~~N/A</span><br \><span class ="dilution\_ICC">ICC~~N/A</span><br \><span class ="dilution\_ICC">ICC~~N/A</span>

## **Storage**

Store at -20  $^{\circ}$ 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  $^{\circ}$ C.

## **SPAG16 Polyclonal Antibody - Protein Information**

Name SPAG16

Synonyms PF20

#### **Function**

Necessary for sperm flagellar function. Plays a role in motile ciliogenesis. May help to recruit STK36 to the cilium or apical surface of the cell to initiate subsequent steps of construction of the central pair apparatus of motile cilia (By similarity).

## **Cellular Location**

Cytoplasm {ECO:0000250|UniProtKB:Q8K450}. Cytoplasm, cytoskeleton, flagellum axoneme {ECO:0000250|UniProtKB:Q8K450}. Cytoplasm, cytoskeleton, cilium axoneme {ECO:0000250|UniProtKB:Q8K450}. Cell projection, cilium, flagellum {ECO:0000250|UniProtKB:Q8K450}. Note=Detected on the sperm flagellum axoneme. Detected in the central apparatus of the axoneme. Colocalizes with SPAG6 on microtubules (By similarity) {ECO:0000250|UniProtKB:Q8K450}

#### **Tissue Location**

Isoform 1 is detected in testis. Isoform 4 is detected in testis and brain, and at lower levels in kidney, heart, pancreas, thyroid, ovary, adrenal gland, spinal cord, trachea and liver.

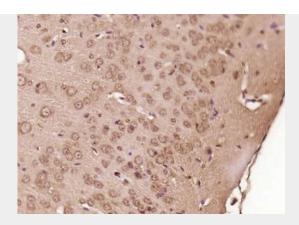
#### **SPAG16 Polyclonal Antibody - Protocols**

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

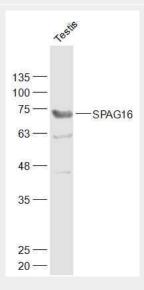
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# SPAG16 Polyclonal Antibody - Images





Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SPAG16) Polyclonal Antibody, Unconjugated (bs-11485R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



# Sample:

Testis (Rat) Lysate at 40 ug

Primary: Anti-SPAG16 (bs-11485R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 71 kD Observed band size: 71 kD