

KATNAL1 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56548**Specification****KATNAL1 Polyclonal Antibody - Product Information**

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q9BW62
Reactivity	Rat, Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	55 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human KATNAL1
Epitope Specificity	151-250/490
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; cytoskeleton.
SIMILARITY	Belongs to the AAA ATPase family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

Microtubules are polymers of alpha and beta subunits that form the mitotic spindle and assist in the organization of membranous organelles during interphase. Katanin is a heterodimer complex that severs microtubules in an ATP-dependent manner. The severing of microtubules by the Katanin complex may promote reorganization of cellular microtubule arrays and release of microtubules from the centrosome following nucleation. The Katanin complex is composed of a 60 kDa subunit (Katanin p60 A1) and a 80 kDa accessory protein (Katanin p80 B1). Katanin p60 A1 is responsible for the severing and disassembly of microtubules, while Katanin p80 B1 targets the complex to the centrosome. Katanin p60 A1 and Katanin p80 B1 belong to the AAA ATPase family, which also includes the Katanin p60 A1-like proteins, Katanin p60 AL1 and Katanin p60 AL2.

KATNAL1 Polyclonal Antibody - Additional Information**Gene ID** 84056**Other Names**

Katanin p60 ATPase-containing subunit A-like 1 {ECO:0000255|HAMAP-Rule:MF_03024}, Katanin p60 subunit A-like 1 {ECO:0000255|HAMAP-Rule:MF_03024}, 5.6.1.1 {ECO:0000255|HAMAP-Rule:MF_03024}, p60 katanin-like 1 {ECO:0000255|HAMAP-Rule:MF_03024}, KATNAL1 {ECO:0000255|HAMAP-Rule:MF_03024}

Dilution

WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

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.

KATNAL1 Polyclonal Antibody - Protein Information

Name KATNAL1 {ECO:0000255|HAMAP-Rule:MF_03024}

Function

Regulates microtubule dynamics in Sertoli cells, a process that is essential for spermiogenesis and male fertility. Severs microtubules in an ATP-dependent manner, promoting rapid reorganization of cellular microtubule arrays (By similarity). Has microtubule- severing activity in vitro (PubMed:26929214).

Cellular Location

Cytoplasm, cytoskeleton {ECO:0000255|HAMAP- Rule:MF_03024, ECO:0000269|PubMed:22654668}. Cytoplasm. Cytoplasm, cytoskeleton, spindle pole. Cytoplasm, cytoskeleton, spindle. Note=Colocalizes with microtubules throughout the basal and adluminal compartments of Sertoli cells (By similarity). Localizes within the cytoplasm, partially overlapping with microtubules, in interphase and to the mitotic spindle and spindle poles during mitosis (PubMed:26929214). {ECO:0000250|UniProtKB:Q8K0T4, ECO:0000269|PubMed:26929214}

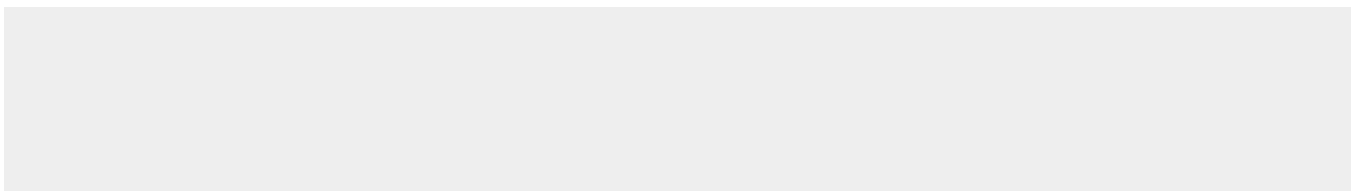
Tissue Location

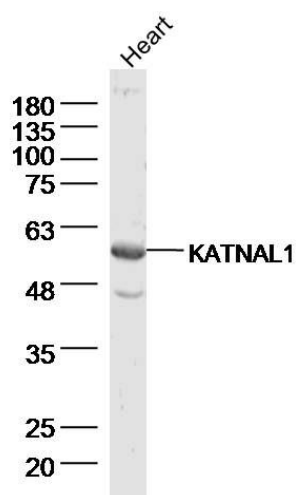
Expressed in testis, restricted to Sertoli cells (at protein level).

KATNAL1 Polyclonal Antibody - Protocols

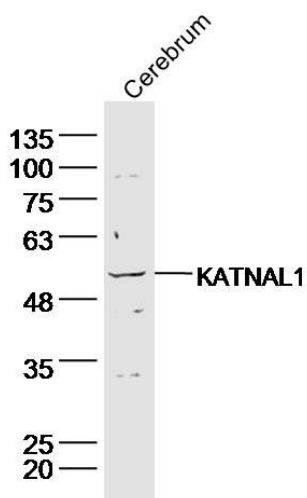
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

KATNAL1 Polyclonal Antibody - Images



Sample: Heart (Mouse) Lysate at 40 ug
Primary: Anti-KATNAL1 (bs-17080R) at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 55 kD
Observed band size: 55 kD



Sample: Cerebrum (Mouse) Lysate at 40 ug
Primary: Anti-KATNAL1 (bs-17080R) at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 55 kD
Observed band size: 55 kD