



KNTC1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58759

Specification

KNTC1 Polyclonal Antibody - Product Information

Application Primary Accession

Reactivity Host Clonality Calculated MW Physical State

Immunogen

Epitope Specificity

Isotype **Purity**

affinity purified by Protein A

Buffer

SUBCELLULAR LOCATION

SUBUNIT

Important Note

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

P50748

Rat, Dog, Bovine

Rabbit Polyclonal 251 KDa Liquid

KLH conjugated synthetic peptide derived

from human KNTC1/Kinetochore

1881-1980/2209

IqG

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

Proclin300 and 50% Glycerol.

Cytoplasm. Nucleus. Chromosome, centromere, kinetochore. Cytoplasm, cytoskeleton, spindle. Note=Dynamic patternof localization during the cell cycle.

At interphase, uniformlydistributed

throughout the cytoplasm and nucleus. By

prophase anduntil late stages of

prometaphase, a fraction of the total pool

isconcentrated at kinetochores. By metaphase, detected atkinetochores, along spindle fibers and most prominently at thepoles. By late anaphase until the end of telophase, no longerdetectable on

stillpresent at the spindle poles.

Interacts with ZW10. This interaction is required forstable association with the

kinetochores or along spindle fibers, but

kinetochore. Component of the

RZZcomplex composed of KNTC1/ROD,

ZW10 and ZWILCH.

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

therapeutic or diagnostic applications.

Background Descriptions

The kinetochore is the protein structure in eukaryotes which assembles on the centromere and links the chromosome to microtubule polymers from the mitotic spindle during mitosis and meiosis. The kinetochore contains two regions: an inner kinetochore, which is tightly associated with the centromere DNA; and an outer kinetochore, which interacts with microtubules. Even the simplest kinetochores consist of more than 45 different proteins, many of which are conserved



throughout eukaryote species.

KNTC1 Polyclonal Antibody - Additional Information

Gene ID 9735

Other Names

Kinetochore-associated protein 1, Rough deal homolog, HsROD, Rod, hRod, KNTC1, KIAA0166

Target/Specificity

High expression in testis.

Dilution

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<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_E">E~~N/A</span>
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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.

KNTC1 Polyclonal Antibody - Protein Information

Name KNTC1

Synonyms KIAA0166, ROD {ECO:0000303|PubMed:284415

Function

Essential component of the mitotic checkpoint, which prevents cells from prematurely exiting mitosis. Required for the assembly of the dynein-dynactin and MAD1-MAD2 complexes onto kinetochores (PubMed:11146660, PubMed:11590237, PubMed:15824131). Its function related to the spindle assembly machinery is proposed to depend on its association in the mitotic RZZ complex.

Cellular Location

Cytoplasm. Nucleus. Chromosome, centromere, kinetochore. Cytoplasm, cytoskeleton, spindle. Note=Dynamic pattern of localization during the cell cycle. At interphase, uniformly distributed throughout the cytoplasm and nucleus. By prophase and until late stages of prometaphase, a fraction of the total pool is concentrated at kinetochores. By metaphase, detected at kinetochores, along spindle fibers and most prominently at the poles. By late anaphase until the end of telophase, no longer detectable on kinetochores or along spindle fibers, but still present at the spindle poles

Tissue Location

High expression in testis.

KNTC1 Polyclonal Antibody - Protocols

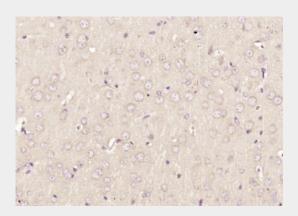




Provided below are standard protocols that you may find useful for product applications.

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

KNTC1 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 (KNTC1) Polyclonal Antibody, Unconjugated (bs-7808R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.