

KNTC1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58759

Product Information

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

Primary Accession P50748

Reactivity Rat, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 250749
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human KNTC1/Kinetochore

Epitope Specificity 1881-1980/2209

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. Nucleus. Chromosome, centromere,kinetochore. Cytoplasm, cytoskeleton, spindle. Note=Dynamic patternof 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 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 kinetochores or

along spindle fibers, but stillpresent at the spindle poles.

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

kinetochore. Component of the RZZcomplex composed of KNTC1/ROD, ZW10

and ZWILCH.

Important Note 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.

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 WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000

-10000

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

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:<u>11146660</u>, PubMed:<u>11590237</u>, PubMed:<u>15824131</u>). 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,

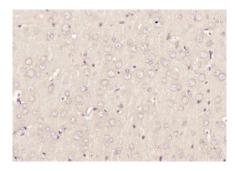
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kinetochores, along spindle fibers and most prominently at the poles. By late anaphase until the end of telophase, no longer detectable on kinetochores or

along spindle fibers, but still present at the spindle poles

Tissue Location High expression in testis.

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 (AP58759) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

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