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KNTC1 Rabbit pAb

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Catalog # AP58759

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P50748
Reactivity	Mouse
Predicted	Human, Rat, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	250749
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human KNTC1/Kinetochore 1881-1980/2209
Epitope Specificity	
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, 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 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, ROD {ECO:0000303|PubMed:28441529}

Target/Specificity	High expression in testis.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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.

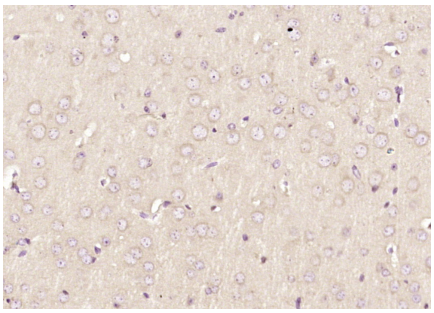
Protein Information

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: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.

Background

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.

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) instructionsand DAB staining.