

CENPT Rabbit pAb

CENPT Rabbit pAb Catalog # AP58545

Product Information

Application IHC-P, IHC-F, IF

Primary Accession

Reactivity

Mouse

Predicted

Human

Host

Clonality

Calculated MW

Physical State

Q96BT3

Mouse

Human

Rabbit

Polyclonal

60423

Liquid

Immunogen KLH conjugated synthetic peptide derived from human CENPT

Epitope Specificity 63-72/561 **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 Nucleus. Chromosome, centromere, kinetochore. Note=Constitutively

localizes to centromeres throughout the cell cycle, and to kinetochores during mitosis. Localizes to the inner kinetochore, and may connect it to the outer

kinetochore via its N-terminus.

SIMILARITY Belongs to the CENPT family.

SUBUNIT Component of the CENPA-NAC complex, at least composed of CENPA, CENPC,

CENPH, CENPM, CENPN, CENPT and MLF1IP/CENPU. The CENPA-NAC complex interacts with the CENPA-CAD complex, composed of CENPI, CENPK, CENPL, CENPO, CENPP, CENPQ, CENPR and CENPS. Part of a centromere complex consisting of CENPA, CENPT and CENPW. Part of a centromere complex consisting of histone H3, CENPT and CENPW. Interacts (via N-terminus) with

the NDC80 complex (Probable). Component of a heterotetrameric

CENP-T-W-S-X complex composed of APITD1/CENPS, STRA13/CENPX, CENPT

and CENPW. Interacts directly with CENPW. Binds DNA.

Post-translational Dynamically phosphorylated at Ser-47 and probably also other sites during

OMIM, Mar 2008]

modifications the cell cycle. Phosphorylated at Ser-47 during G2 phase, metaphase and

anaphase, but not during telophase or G1 phase. Phosphorylated upon DNA

damage, probably by ATM or ATR.

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

human, therapeutic or diagnostic applications.

Background Descriptions The centromere is a specialized chromatin domain, present throughout the

cell cycle, that acts as a platform on which the transient assembly of the kinetochore occurs during mitosis. All active centromeres are characterized by the presence of long arrays of nucleosomes in which CENPA (MIM 117139) replaces histone H3 (see MIM 601128). CENPT is an additional factor required for centromere assembly (Foltz et al., 2006 [PubMed 16622419]).[supplied by

Additional Information

Gene ID 80152

Other Names Centromere protein T, CENP-T, Interphase centromere complex protein 22,

CENPT, C16orf56, ICEN22

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 CENPT

Synonyms C16orf56, ICEN22

Function Component of the CENPA-NAC (nucleosome-associated) complex, a complex

that plays a central role in assembly of kinetochore proteins, mitotic

progression and chromosome segregation. The CENPA-NAC complex recruits

the CENPA-CAD (nucleosome distal) complex and may be involved in incorporation of newly synthesized CENPA into centromeres. Part of a nucleosome-associated complex that binds specifically to histone H3-containing nucleosomes at the centromere, as opposed to nucleosomes containing CENPA. Component of the heterotetrameric CENP-T-W-S-X complex that binds and supercoils DNA, and plays an important role in kinetochore assembly. CENPT has a fundamental role in kinetochore

assembly and function. It is one of the inner kinetochore proteins, with most further proteins binding downstream. Required for normal chromosome

organization and normal progress through mitosis.

Cellular Location Nucleus. Chromosome, centromere. Chromosome, centromere, kinetochore.

Note=Constitutively localizes to centromeres throughout the cell cycle, and to kinetochores during mitosis. Localizes to the inner kinetochore, and may

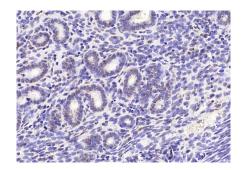
connect it to the outer kinetochore via its N-terminus.

Background

The centromere is a specialized chromatin domain, present throughout the cell cycle, that acts as a platform on which the transient assembly of the kinetochore occurs during mitosis. All active centromeres are characterized by the presence of long arrays of nucleosomes in which CENPA (MIM 117139) replaces histone H3 (see MIM 601128). CENPT is an additional factor required for centromere assembly (Foltz et al., 2006 [PubMed 16622419]).[supplied by OMIM, Mar 2008]

Images

Paraformaldehyde-fixed, paraffin embedded (Mouse uterus); 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 (CENPT) Polyclonal Antibody, Unconjugated (AP58545) 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'.