

Rabbit Anti-CENPT antibody

SL6901R

Product Name:	CENPT
Chinese Name:	着丝粒蛋白T抗体
Alias:	C16orf56; CENP T; CENP-T; Cenpt; CENPT_HUMAN; Centromere protein T; Chromosome 16 open reading frame 56; ICEN22; Interphase centromere complex protein 22.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	62kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CENPT:63-72/561
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. 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.
PubMed:	<u>PubMed</u>
Product Detail:	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]

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

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.

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.

Post-translational modifications:

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

Similarity:

Belongs to the CENPT family.

SWISS:

96BT3

Gene ID:

80152

Database links:

Entrez Gene: 80152Human

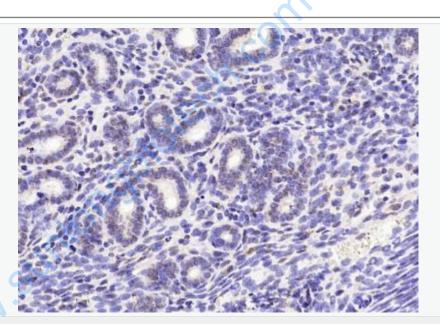
Omim: 611510Human

SwissProt: Q96BT3Human

Unigene: 288382Human

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

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 (SL6901R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.