

Anti-CENPA (pS7) Antibody

Catalog # AP54111

Product Information

Application	WB, IF
Primary Accession	P49450
Reactivity	Human, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	15991

Additional Information

Gene ID	1058
Other Names	Histone H3-like centromeric protein A; Centromere autoantigen A; Centromere protein A; CENP-A
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human CENPA with a site at pS7. The exact sequence is proprietary.
Dilution	WB~~1:1000 IF~~1:50~200
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C. Stable for 12 months from date of receipt

Protein Information

Name	CENPA
Function	Histone H3-like nucleosomal protein that is specifically found in centromeric nucleosomes (PubMed: 11756469 , PubMed: 14667408 , PubMed: 15282608 , PubMed: 15475964 , PubMed: 15702419 , PubMed: 17651496 , PubMed: 19114591 , PubMed: 20739937 , PubMed: 27499292 , PubMed: 7962047 , PubMed: 9024683). Replaces conventional H3 in the nucleosome core of centromeric chromatin that serves as an assembly site for the inner kinetochore (PubMed: 18072184). The presence of CENPA subtly modifies the nucleosome structure and the way DNA is wrapped around the nucleosome and gives rise to protruding DNA ends that are less well- ordered and rigid compared to nucleosomes containing histone H3 (PubMed: 26878239 , PubMed: 27499292). May serve as an epigenetic mark that propagates centromere identity through replication and cell division (PubMed: 15282608 , PubMed: 15475964 , PubMed: 20739937 , PubMed: 21478274 , PubMed: 26878239). Required for recruitment and assembly of kinetochore

proteins, and as a consequence required for progress through mitosis, chromosome segregation and cytokinesis (PubMed:[11756469](#), PubMed:[14667408](#), PubMed:[18072184](#), PubMed:[23818633](#), PubMed:[25556658](#), PubMed:[27499292](#)).

Cellular Location

Nucleus. Chromosome, centromere. Note=Localizes exclusively to sites of kinetochore assembly in centromeres. Occupies a compact domain at the inner kinetochore plate stretching across 2 thirds of the length of the constriction but encompassing only one third of the constriction width and height (PubMed:19114591) Phosphorylation at Ser-68 during early mitosis abolishes association with chromatin and centromeres and results in dispersed nuclear location (PubMed:25556658).

Background

Rabbit polyclonal antibody to CENPA (pS7)

Images

Image not found : 202102/CPA6354_WB.jpg

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