

Anti-CENPA (pS7) Antibody

Catalog # AP54111

Product Information

Application	WB, IF
Primary Accession	<u>P49450</u>
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	Recognizes endogenous levels of CENPA with a site at pS7 protein.
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: <u>11756469</u> , PubMed: <u>14667408</u> , PubMed: <u>15282608</u> , PubMed: <u>15475964</u> , PubMed: <u>15702419</u> , PubMed: <u>17651496</u> , PubMed: <u>19114591</u> , PubMed: <u>20739937</u> , PubMed: <u>27499292</u> , PubMed: <u>7962047</u> , PubMed: <u>9024683</u>). Replaces conventional H3 in the nucleosome core of centromeric chromatin that serves as an assembly site for the inner kinetochore (PubMed: <u>18072184</u>). 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: <u>26878239</u> , PubMed: <u>27499292</u>). May serve as an epigenetic mark that propagates centromere identity through replication and cell division (PubMed: <u>15282608</u> , PubMed: <u>15475964</u> , PubMed: <u>20739937</u> , PubMed: <u>21478274</u> , PubMed: <u>26878239</u>). Required for recruitment and assembly of kinetochore proteins, and as a consequence required for progress through mitosis, chromosome segregation and cytokinesis (PubMed: <u>11756469</u> ,

	PubMed: <u>14667408</u> , PubMed: <u>18072184</u> , PubMed: <u>23818633</u> , PubMed: <u>25556658</u> , PubMed: <u>27499292</u>).
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

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