

# CENPA Rabbit mAb

Catalog # AP74853

# **Product Information**

| Application       | WB                  |
|-------------------|---------------------|
| Primary Accession | <u>P49450</u>       |
| Reactivity        | Human               |
| Host              | Rabbit              |
| Clonality         | Monoclonal Antibody |
| Calculated MW     | 15991               |

## **Additional Information**

| Gene ID     | 1058             |
|-------------|------------------|
| Other Names | CENPA            |
| Dilution    | WB~~1/500-1/1000 |
| Format      | Liquid           |

#### **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).

### Images



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