

Datasheet for ABIN3043810
anti-CENPA antibody (AA 1-140)



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1 Image

Overview

Quantity:	100 µg
Target:	CENPA
Binding Specificity:	AA 1-140
Reactivity:	Human, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CENPA antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Purpose:	Anti-CENPA Antibody Picoband®
Immunogen:	E.coli-derived human CENPA recombinant protein (Position: M1-G140). Human CENPA shares 71.6% amino acid (aa) sequence identity with mouse CENPA.
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins
Characteristics:	Anti-CENPA Antibody Picoband® (ABIN3043810). Tested in WB applications. This antibody reacts with Human, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Purification:	Immunogen affinity purified.

Target Details

Target:	CENPA
Alternative Name:	CENPA (CENPA Products)
Background:	Synonyms: Histone H3-like centromeric protein A,Centromere autoantigen A,Centromere protein A,CENP-A,CENPA, Tissue Specificity: Ubiquitous. Background: Centromeres are the differentiated chromosomal domains that specify the mitotic behavior of chromosomes. CENPA encodes a centromere protein which contains a histone H3 related histone fold domain that is required for targeting to the centromere. And CENPA is proposed to be a component of a modified nucleosome or nucleosome-like structure in which it replaces 1 or both copies of conventional histone H3 in the (H3-H4)₂ tetrameric core of the nucleosome particle. Alternative splicing results in multiple transcript variants encoding distinct isoforms. In higher eukaryotes, the recruitment of CENP-A nucleosomes to existing centromeres is an epigenetic process, independent of the underlying DNA sequence. In <i>S.pombe</i>, de novo recruitment of the CENP-A to the centromere is believed to be controlled by "centromeric" heterochromatin surrounding the centromere, and by an RNAi mechanism. The RNAi is cut to form siRNA, this complexes with the protein Chp1, which then binds the centromeric heterochromatin. This helps recruit other proteins, ultimately resulting in a protein complex that forms cohesin between two sister chromatids at the centromeric heterochromatin. This cohesin is believed to be essential in replacing the centromere H3 with CENP-A. CENP-A is one of the epigenetic changes that is believed to distinguish centromeric DNA from other DNA. Once the CENP-A has been added, the centromere becomes self-propagating, and the surrounding heterochromatin/RNAi mechanism is no longer necessary. Sequence Similarities: Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. CDC2/CDKX subfamily.
Molecular Weight:	16 kDa
Gene ID:	1058
UniProt:	P49450
Pathways:	Chromatin Binding , Maintenance of Protein Location

Application Details

Application Notes:	Western blot, 0.1-0.5 µg/mL, Human, Rat 1. Chueh AC, Wong LH, Wong N, Choo KH (January 2005). "Variable and hierarchical size distribution of L1-retroelement-enriched CENP-A clusters within a functional human
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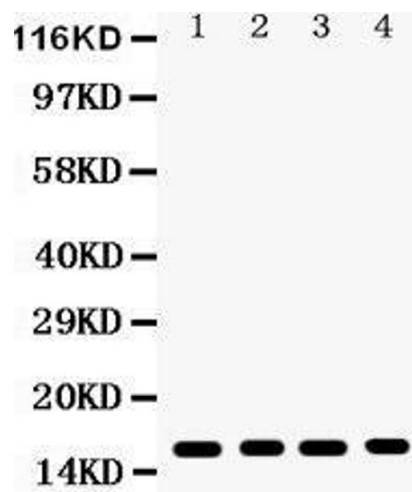
Application Details

	neocentromere". Hum. Mol. Genet. 14 (1): 85-93. 2. Folco HD, Pidoux AL, Urano T, Allshire RC (January 2008). "Heterochromatin and RNAi are required to establish CENP-A chromatin at centromeres". Science 319 (5859): 94-7.
Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

Images



Western Blotting

Image 1.