

Product datasheet

Anti-CENPA (phospho S7) antibody ab62242

★★★★★ [1 Abreviews](#) [1 References](#) [2 Images](#)

Overview

Product name	Anti-CENPA (phospho S7) antibody
Description	Rabbit polyclonal to CENPA (phospho S7)
Host species	Rabbit
Tested applications	Suitable for: ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide corresponding to Human CENPA aa 1-100 (phospho S7). Database link: P49450
Positive control	HeLa cells.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride
	Without Mg ²⁺ and Ca ²⁺
Purity	Immunogen affinity purified
Purification notes	ab62242 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab62242 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF	★★★★★ (1)	1/500 - 1/1000.

Target

Function

Histone H3-like variant which exclusively replaces conventional H3 in the nucleosome core of centromeric chromatin at the inner plate of the kinetochore. Required for recruitment and assembly of kinetochore proteins, mitotic progression and chromosome segregation. May serve as an epigenetic mark that propagates centromere identity through replication and cell division.

Sequence similarities

Belongs to the histone H3 family.

Domain

The CATD (CENPA targeting domain) region is responsible for the more compact structure of nucleosomes containing CENPA and is necessary and sufficient to mediate the localization into centromeres.

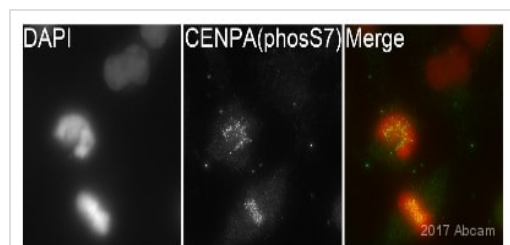
Post-translational modifications

Ubiquitinated (Probable). Interaction with herpes virus HSV-1 ICP0 protein, leads to its degradation by the proteasome pathway.
Phosphorylation of Ser-7 by Aurora-A/STK6 and Aurora-B/STK12 during prophase is required for localization of Aurora-A/STK6 and Aurora-B/STK12 at inner centromere and is essential for kinetochore function. Initial phosphorylation during prophase is mediated by Aurora-A/STK6 and is maintained by Aurora-B/STK12.

Cellular localization

Nucleus. Chromosome > centromere > kinetochore. Localizes exclusively in the kinetochore domain of 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.

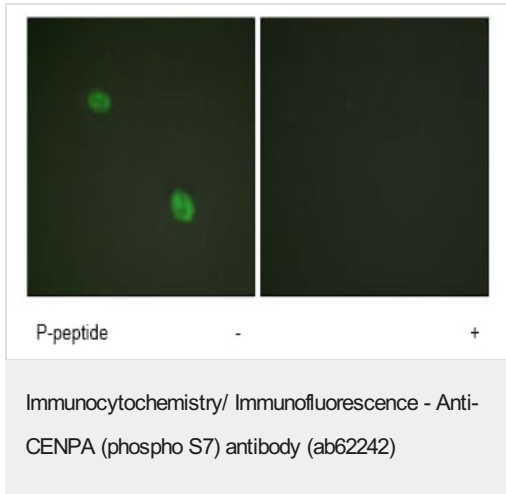
Images



ab62242 staining CENPA (phospho S7) in the HeLa cell line from Human cervix by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with Methanol. Samples were incubated with primary antibody (1/400 in PBS) for 1 hour at 22°C. Undiluted **ab150081** was used as the secondary antibody.

Immunocytochemistry/ Immunofluorescence - Anti-CENPA (phospho S7) antibody (ab62242)

This image is courtesy of an abreview by Kirk Mcmanus



ab62242 at 1/500 - 1/1000 dilution staining CENPA in HeLa cells by Immunofluorescence, in the absence or presence of the immunising peptide.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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