abcam

Product datasheet

Anti-Aurora A (phospho T288) antibody ab83968

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Overview

Product name Anti-Aurora A (phospho T288) antibody

Description Rabbit polyclonal to Aurora A (phospho T288)

Host species Rabbit

Tested applications Suitable for: ICC/IF

Species reactivity Reacts with: Human

Immunogen Synthetic peptide corresponding to Human Aurora A (phospho T288).

Database link: NP 003591.2

Positive control NBF fixed asynchronous HeLa cells.

General notesThe 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.

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

Properties

Form Liquid

Storage instructions Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer pH: 6.8

Preservative: 0.09% Sodium azide

Constituents: 0.1% BSA, Tris buffered saline

Purity Immunogen affinity purified

Purification notes Antibody was affinity purified using an epitope specific to Phospho Aurora A immobilized on a

solid support.

Clonality Polyclonal

Isotype IgG

Applications

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The Abpromise quarantee

Our **Abpromise guarantee** covers the use of ab83968 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) | 1/100 - 1/500. Formaldehyde fixed cells. Permeabilisation with Triton-X100 is recommended. |

Target

Function

Contributes to the regulation of cell cycle progression. Required for normal mitosis. Associates with the centrosome and the spindle microtubules during mitosis and functions in centrosome maturation, spindle assembly, maintenance of spindle bipolarity, centrosome separation and mitotic checkpoint control. Phosphorylates numerous target proteins, including ARHGEF2, BRCA1, KIF2A, NDEL1, PARD3, PLK1 and BORA. Regulates KIF2A tubulin depolymerase activity (By similarity). Required for normal axon formation. Plays a role in microtubule remodeling during neurite extension. Important for microtubule formation and/or stabilization.

Tissue specificity

Highly expressed in testis and weakly in skeletal muscle, thymus and spleen. Also highly expressed in colon, ovarian, prostate, neuroblastoma, breast and cervical cancer cell lines.

Sequence similarities

Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. Aurora subfamily.

Contains 1 protein kinase domain.

Post-translational modifications

Activated by phosphorylation at Thr-288; this brings about a change in the conformation of the activation segment. Phosphorylation at Thr-288 varies during the cell cycle and is highest during M phase. Autophosphorylated at Thr-288 upon TPX2 binding. Phosphorylated upon DNA

 $damage, probably \, by \, ATM \, or \, ATR.$

Ubiquitinated by CHFR, leading to its degradation by the proteasome (By similarity). Ubiquitinated by the anaphase-promoting complex (APC), leading to its degradation by the

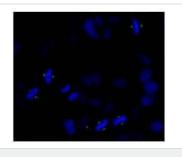
proteasome.

Cellular localization

Cytoplasm > cytoskeleton > centrosome. Cytoplasm > cytoskeleton > spindle pole. Detected at the neurite hillock in developing neurons (By similarity). Localizes on centrosomes in interphase

cells and at each spindle pole in mitosis.

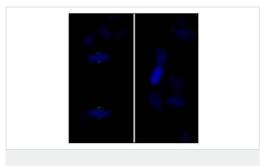
Images



Immunocytochemistry/ Immunofluorescence - Anti-Aurora A (phospho T288) antibody (ab83968) ab83968, at a dilution of 1/250, staining Aurora A in NBF fixed asynchronous HeLa cells by

Immunocytochemistry/Immunofluorescence.

Detection: Anti-rabbit lgG-FITC conjugated antibody used at a dilution of 1/100.



Immunocytochemistry/ Immunofluorescence - Anti-Aurora A (phospho T288) antibody (ab83968) ab83968, at a dilution of 1/250, staining Aurora A in NBF fixed asynchronous HeLa cells by Immunocytochemistry/Immunofluorescence.

Mock phosphatase treated section (left), or calf intestinal phosphatase treated section (right).

Detection: Anti-rabbit IgG-FITC conjugated antibody used at a

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dilution of 1/100.

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