abcam

Product datasheet

Anti-Aurora B antibody [mAbcam 3609] ab3609

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Overview

Product name Anti-Aurora B antibody [mAbcam 3609]

Description Mouse monoclonal [mAbcam 3609] to Aurora B

Host species Mouse

Specificity Based on the immunogen sequence, we do not expect the antibody to cross-react with AURKA or

AURKC. No cross-reactivity testing has been performed.

Tested applications Suitable for: WB, IHC-P

Unsuitable for: ICC/IF

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control Hela whole cell lysate

General notes

This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or

conjugation for your experiments, please contact orders@abcam.com.

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.

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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

Storage buffer Preservative: 0.05% Sodium azide

Constituent: PBS

Purity Protein G purified

Clonality Monoclonal

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Clone number mAbcam 3609

Light chain type lgG1 kappa

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab3609 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
WB	★★★★★ (1)	Use a concentration of 1 µg/ml. Detects a band of approximately 39 kDa (predicted molecular weight: 39 kDa). Block with 1% BSA for 1 hour.
IHC-P		Use at an assay dependent concentration.

Application notes

Is unsuitable for ICC/IF.

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Function

May be directly involved in regulating the cleavage of polar spindle microtubules and is a key regulator for the onset of cytokinesis during mitosis. Component of the chromosomal passenger complex (CPC), a complex that acts as a key regulator of mitosis. The CPC complex has essential functions at the centromere in ensuring correct chromosome alignment and segregation and is required for chromatin-induced microtubule stabilization and spindle assembly. Phosphorylates 'Ser-10' and 'Ser-28' of histone H3 during mitosis. Required for kinetochore localization of BUB1 and SGOL1. Interacts with INCENP.

Tissue specificity

High level expression seen in the thymus. It is also expressed in the spleen, lung, testis, colon, placenta and fetal liver. Expressed during S and G2/M phase and expression is up-regulated in cancer cells during M phase.

Involvement in disease

Note=Disruptive regulation of expression is a possibile mechanism of the perturbation of chromosomal integrity in cancer cells through its dominant-negative effect on cytokinesis.

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

Sequence similarities

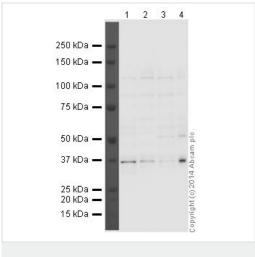
Contains 1 protein kinase domain.

Post-translational modifications

Ubiquitinated by different BCR (BTB-CUL3-RBX1) E3 ubiquitin ligase complexes. Ubiquitinated by the BCR(KLHL9-KLHL13) E3 ubiquitin ligase complex, ubiquitination leads to removal from mitotic chromosomes and is required for cytokinesis. During anaphase, the BCR(KLHL21) E3 ubiquitin ligase complex recruits the CPC complex from chromosomes to the spindle midzone and mediates the ubiquitination of AURKB. Ubiquitination of AURKB by BCR(KLHL21) E3 ubiquitin ligase complex may not lead to its degradation by the proteasome.

Cellular localization

Nucleus. Chromosome. Chromosome > centromere. Cytoplasm > cytoskeleton > spindle. Localizes on chromosome arms and inner centromeres from prophase through metaphase and then transferring to the spindle midzone and midbody from anaphase through cytokinesis. Colocalized with gamma tubulin in the mid-body.



Western blot - Anti-Aurora B antibody [mAbcam 3609] (ab3609)

All lanes : Anti-Aurora B antibody [mAbcam 3609] (ab3609) at 1

µg/ml

Lane 1 : Hek293 Whole Cell Lysate
Lane 2 : Jurkat Whole Cell Lysate
Lane 3 : HeLa Whole Cell Lysate

Lane 4: HeLa Whole Cell Lysate- Nocodozole Stimulated

Lysates/proteins at 20 µg per lane.

Secondary

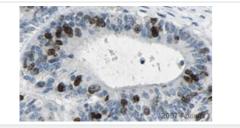
All lanes : Goat polyclonal to Mouse IgG - H&L - Pre-Absorbed (HRP) at 1/3000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 39 kDa **Observed band size:** 37 kDa

Exposure time: 3 minutes



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Aurora B antibody
[mAbcam 3609] (ab3609)

Image courtesy of Human Protein Atlas

Image courtesy of **Human Protein Atlas**

Paraffin embedded human liver tumor tissue was incubated with ab3609 (1/35 dilution) for 30 mins at room temperature. Antigen retrieval was performed by heat induction in citrate buffer pH 6. ab3609 was tested in a tissue microarray (TMA) containing a wide range of normal and cancer tissues as well as a cell microarray consisting of a range of commonly used, well characterised human cell lines. Further images can be found at www.proteinatlas.org

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