


## Product datasheet

### Anti-Aurora A (phospho S342) antibody ab111410

1 Image

#### Overview

<b>Product name</b>	Anti-Aurora A (phospho S342) antibody
<b>Description</b>	Rabbit polyclonal to Aurora A (phospho S342)
<b>Host species</b>	Rabbit
<b>Specificity</b>	Detects endogenous levels of AurA only when phosphorylated at serine342.
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
<b>Immunogen</b>	Synthetic peptide corresponding to Human Aurora A (phospho S342).
<b>Positive control</b>	Human colon carcinoma.
<b>General notes</b>	<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&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Storage buffer</b>	<p>pH: 7.40</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.88% Sodium chloride</p> <p>PBS without calcium and magnesium</p>
<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	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.

<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab111410 in the following tested applications.

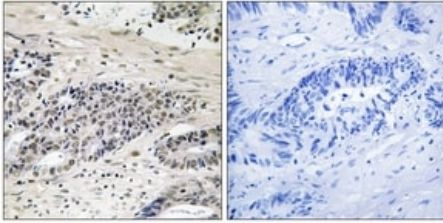
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

## Target

<b>Function</b>	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.
<b>Tissue specificity</b>	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.
<b>Sequence similarities</b>	Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. Aurora subfamily. Contains 1 protein kinase domain.
<b>Post-translational modifications</b>	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.
<b>Cellular localization</b>	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



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma, using 1/50 ab111410. The picture on the right is treated with the phospho peptide.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Aurora A (phospho S342) antibody (ab111410)

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

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