

# Aurora A (Phospho Ser342) Rabbit pAb

CatalogNo: YP1014

## Key Features

### Host Species

- Rabbit

### Reactivity

- Human, Mouse, Rat

### Applications

- IHC, IF, ELISA

### MW

- 46kD (Calculated)

### Isotype

- IgG

## Storage

**Storage\*** -15°C to -25°C/1 year (Do not lower than -25°C)

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

## Recommended Dilution Ratios

**IHC 1:100-1:300**

**ELISA 1:10000**

**IF 1:50-200**

## Basic Information

**Clonality** Polyclonal

## Immunogen Information

**Immunogen** The antiserum was produced against synthesized peptide derived from human AurA around the phosphorylation site of Ser342. AA range:311-360

**Specificity** Phospho-Aurora A (S342) Polyclonal Antibody detects endogenous levels of Aurora A protein only when phosphorylated at S342. The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):RISRV

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## | Target Information

**Gene name** AURKA

**Protein Name** Aurora kinase A

Organism	Gene ID	UniProt ID
Human	<a href="#">6790</a> ;	<a href="#">O14965</a> ;
Mouse	<a href="#">20878</a> ;	<a href="#">P97477</a> ;
Rat		<a href="#">P59241</a> ;

**Cellular Localization**

Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Cytoplasm, cytoskeleton, spindle pole . Cytoplasm, cytoskeleton, cilium basal body . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole . Cell projection, neuron projection . Detected at the neurite hillock in developing neurons (By similarity). Localizes at the centrosome in mitotic cells from early prophase until telophase, but also localizes to the spindle pole MTs from prophase to anaphase (PubMed:9606188, PubMed:17229885, PubMed:21225229). Colocalized with SIRT2 at centrosome (PubMed:22014574). Moves to the midbody during both telophase and cytokinesis (PubMed:17726514). Associates with both the pericentriolar material (PCM) and centrioles (PubMed:22014574). The localization to the spindle poles is regulated by AAAS (PubMed:26246606). .

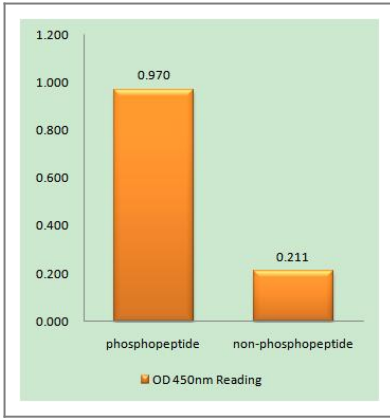
**Tissue specificity** Highly expressed in testis and weakly in skeletal muscle, thymus and spleen. Also highly expressed in colon, ovarian, prostate, neuroblastoma, breast and cervical cancer cell lines.

**Function**

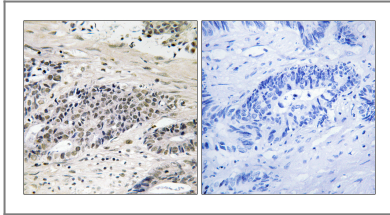
Catalytic activity:ATP + a protein = ADP + a phosphoprotein.,Caution:Although authors have considered STK6 and STK15 as two different proteins, it is clear that they are the same protein.,Disease:Defects in AURKA are responsible for numerical centrosome aberrations including aneuploidy.,Function:May play a role in cell cycle regulation during anaphase and/or telophase, in relation to the function of the centrosome/spindle pole region during chromosome segregation. May be involved in microtubule formation and/or stabilization. Phosphorylates ARHGEF2 and BORA.,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. Aurora subfamily.,similarity:Contains 1 protein kinase domain.,subcellular location:Localizes on centrosomes in interphase cells and at each spindle pole in mitosis.,subunit:Interacts with TACC1 and CPEB1. Interacts with its substrates BORA and ARHGEF2.,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. Expression is cell-cycle regulated, low in G1/S, accumulates during G2/M, and decreases rapidly after.,

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## | Validation Data



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using AurA (Phospho-Ser342) Antibody



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma, using AurA (Phospho-Ser342) Antibody. The picture on the right is blocked with the phospho peptide.

## Contact information

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Please scan the QR code to access additional product information:  
**Aurora A (Phospho Ser342) Rabbit pAb**

For Research Use Only. Not for Use in Diagnostic Procedures.

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