

Rabbit Anti-Aurora A antibody

SLM-52018R

Product Name Aurora A

Chinese Name 有丝分裂激酶 A 与 Recombinant rabbit monoclonal anti

Alias

AIK; ARK-1; ARK1; AURA; AURKA; Aurora 2; Aurora Family Kinase 1; aurora kinase A; Aurora Like Kinase; Aurora/IPL1 Related Kinase 1; Aurora/IPL1-related kinase 1; AURORA2; AYK1; tumor-amplified kinase; BTAK; hARK1; IAK; IPL1 Aurora Related Kinase 1; IPL1 Related Kinase 1; OTTHUMP00000031341; OTTHUMP00000031342; OTTHUMP00000031343; OTTHUMP00000031344; OTTHUMP00000166071; OTTHUMP00000166072; PPP1R47; Protein phosphatase 1, regulatory subunit 1B; Serine/threonine kinase 6; Serine/threonine kinase; Serine/threonine-protein kinase 15; Serine/threonine-protein kinase aurora-A; STK15; STK6; STK6_HUMAN; STK7.

Research Area

Tumour Cell biology Cyclin Kinases and Phosphatases

Immunogen Species

Rabbit

Clonality

Monoclonal

Clone NO.

1A7

React Species

Human Mouse Rat

Applications

IHC-P=1:50-200,IHC-F=1:50-200,ICC/IF=1:50-200,IF=1:50-200 (Paraffin sections need antigen retrieval)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight

48kDa

Cellular localization

cytoplasmic

Form

Liquid

Concentration 1mg/ml

immunogen

Recombinant human Aurora A protein, around C-terminal 250aa

Lsotype

IgG

Purification

affinity purified by Protein A

Buffer Solution

Human,Mouse,Rat1M TBS(pH7.4) with 1% BSA, Human,Mouse,Rat3% Proclin300 and 50% C



Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or d
PubMed	PubMed The protein encoded by this gene is a cell cycle-regulated kinase that appears to be involved in m during chromosome segregation. The encoded protein is found at the centrosome in interphase c role in tumor development and progression. A processed pseudogene of this gene has been found found on chromosome 10. Multiple transcript variants encoding the same protein have been four
	Function: Contributes to the regulation of cell cycle progression. Required for normal mitosis. Associates v mitosis and functions in centrosome maturation, spindle assembly, maintenance of spindle bipol Phosphorylates numerous target proteins, including ARHGEF2, BRCA1, KIF2A, NDEL1, PAR depolymerase activity. Required for normal axon formation. Plays a role in microtubule remodel formation and/or stabilization.
	Subunit: Interacts with FBXL7. Interacts with CPEB1, JTB, TACC1, TPX2, PPP2CA, as well as with the PPP1CB and PPP1CC. Interacts also with its substrates ARHGEF2, BORA, BRCA1, KIF2A, P phosphorylation of PLK1. Interacts with PIFO. Interacts with GADD45A, competing with its ol C-terminus). Identified in a complex with AUNIP and NIN. Interacts with FRY; this interaction
Product Detail	Subcellular Location: Cytoplasm.
	Tissue Specificity: Highly expressed in testis and weakly in skeletal muscle, thymus and spleen. Also highly expres cervical cancer cell lines.
	Post-translational modifications: Activated by phosphorylation at Thr-288; this brings about a change in the conformation of the a the cell cycle and is highest during M phase. Autophosphorylated at Thr-288 upon TPX2 binding ATR. Ubiquitinated by CHFR, leading to its degradation by the proteasome. Ubiquitinated by th degradation by the proteasome.
	Similarity: Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. Aurora subfamily. Contains 1 protein kinase domain.
	SWISS: O14965
	Gene ID: 6790

Database links:

[Entrez Gene: 6790](#) Human

[Entrez Gene: 20878](#) Mouse

[Omim: 603072](#) Human

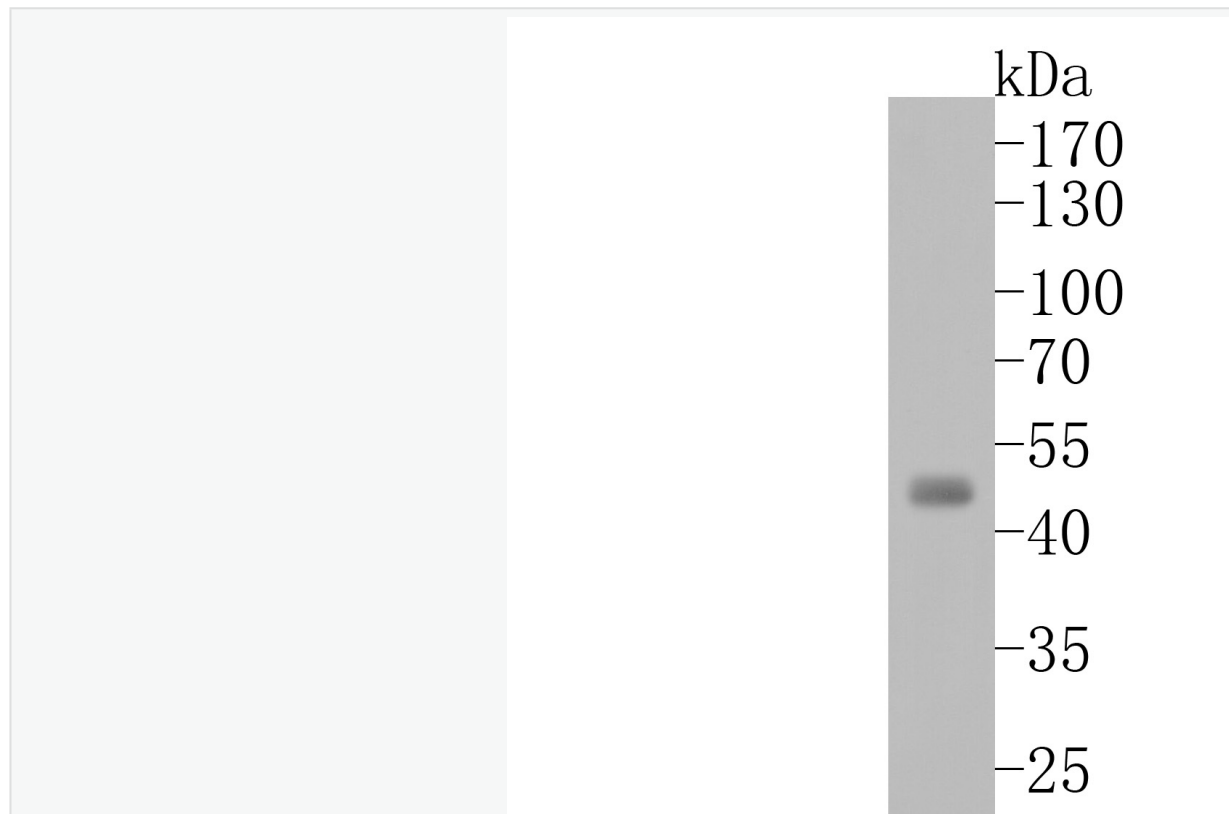
[SwissProt: O14965](#) Human

[SwissProt: P97477](#) Mouse

[Unigene: 250822](#) Human

[Unigene: 249363](#) Mouse

**Product
Picture**



Sample:

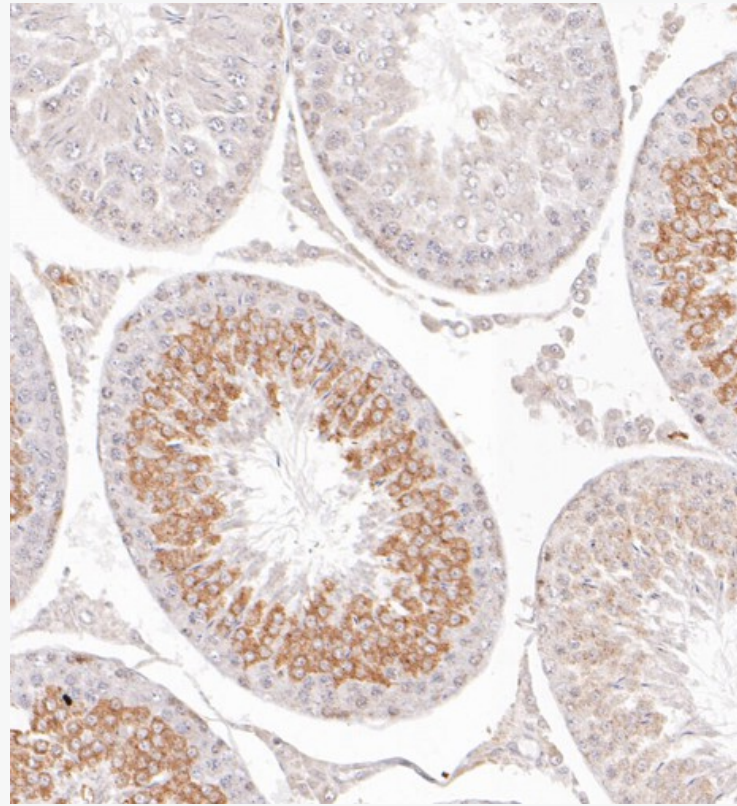
Lane 1: K562 (Human) Cell Lysate at 30 ug

Primary: Anti-Aurora A (SLM-52018R) at 1/500 dilution

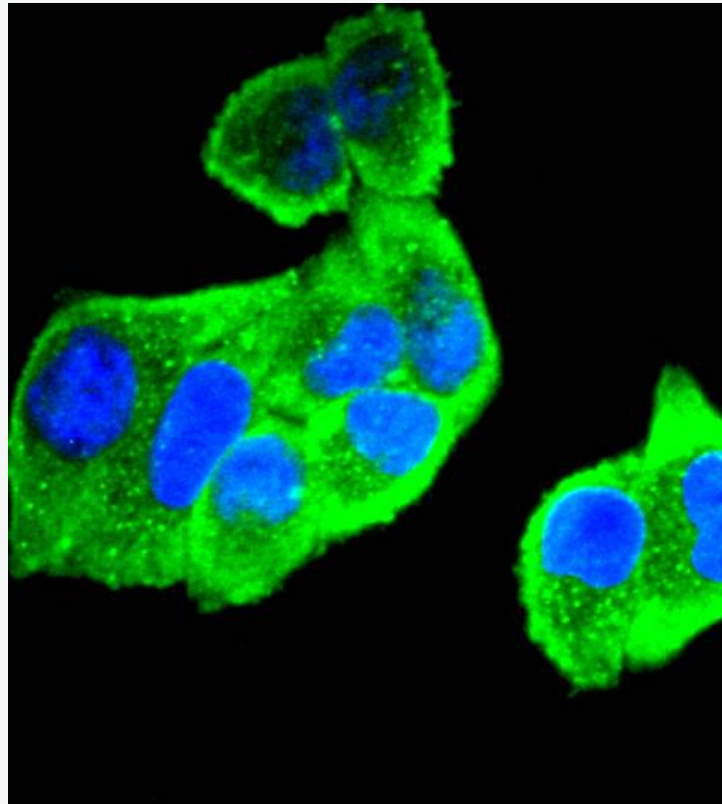
Secondary: Goat Anti-Rabbit IgG - HRP at 1/40000 dilution

Predicted band size: 48 kD

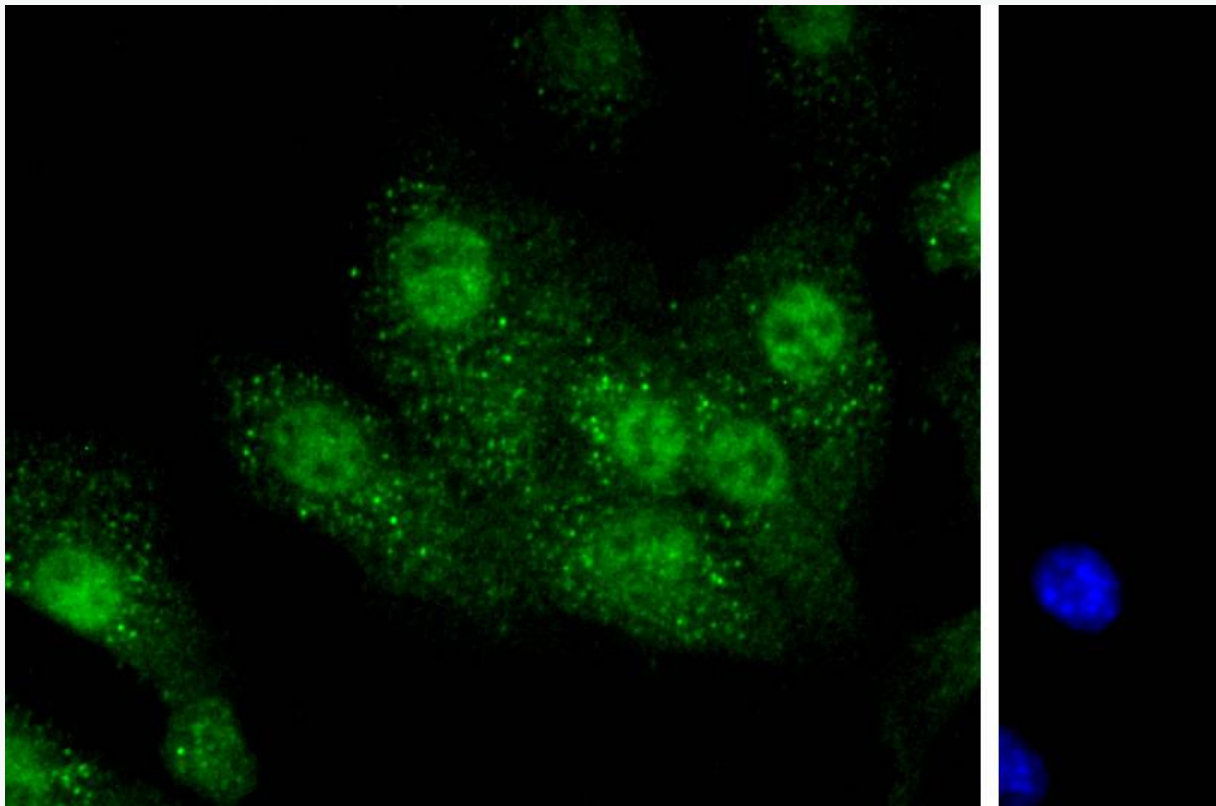
Observed band size: 46 kD



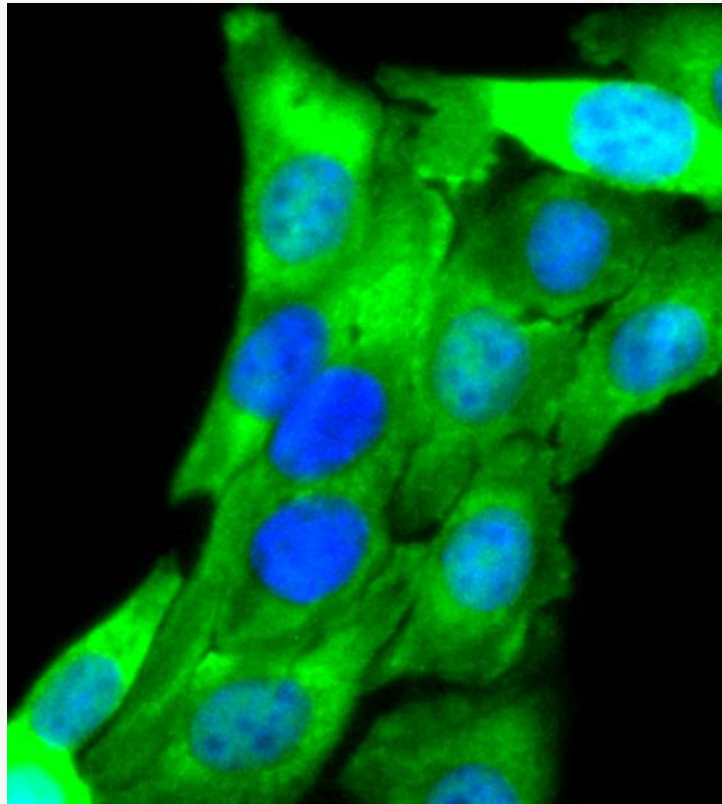
Paraformaldehyde-fixed, paraffin embedded (rat testis); Antigen retrieval by boiling in sodium peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at Monoclonal Antibody, Unconjugated (SLM-52018R) at 1:50 overnight at 4°C, followed by op instructions and DAB staining.



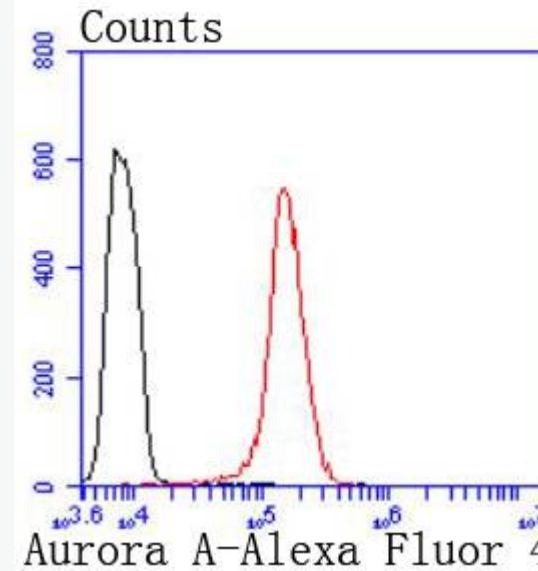
Hela cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking
Antibody incubation with (Aurora A) monoclonal Antibody, Unconjugated (SLM-52018R) 1:
Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain t



NIH/3T3 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Block solution at room temperature for 1 h; Antibody incubation with (Aurora A) monoclonal Antibody, Unconjugated (SLM-52018F) at 37°C for 1 h; Secondary antibody incubation with Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the nuclei.



SKOV-3 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blo
min; Antibody incubation with (Aurora A) monoclonal Antibody, Unconjugated (SLM-52018F
Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain t



Blank control: HeLa.

Primary Antibody (green line): Rabbit Anti-Aurora A antibody (SLM-52018R)

Dilution: 1:50;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-AF488

Dilution: 1:1000.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 0.1% Triton X-100 for 10 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature. The primary antibody was used for 1 hour at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition and analysis were performed using a flow cytometer.