
Aurora A Recombinant Rabbit mAb

Catalog Number: bsm-52018R

Target Protein: Aurora A

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Recombinant

Clone No.: 1A7

Isotype: IgG

Applications: WB (1:500-2000), IHC-P (1:100-400), IHC-F (1:100-400), Flow-Cyt (1:50), ICC/IF (1:50), IF (1:100-400)

Reactivity: Human, Mouse, Rat

Predicted MW: 48 kDa

Entrez Gene: 6790

Swiss Prot: O14965

Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

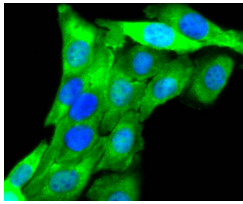
Background: Aurora A plays a role in cell cycle regulation during anaphase and/or telophase, in relation to the function of the centrosome/spindle pole region during chromosome segregation. Aurora A plays a key role during tumor development and progression and is overexpressed in many human cancers including breast, ovarian and colorectal. Aurora A is viewed as a potential target for anticancer drug treatment.

Aurora B is a mitotic protein kinase that phosphorylates histone H3 (probably on Serine 10), behaves as a chromosomal passenger protein, and may regulate several stages of mitosis such as centrosome separation, chromosome segregation and cytokinesis. It localizes to the inner centromere region from prophase to anaphase.

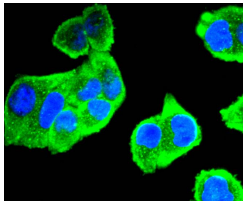
The Aurora kinases, members of the Ser/Thr protein kinase family, associate with microtubules during chromosome movement and segregation. Aurora kinase C may play a part in organizing microtubules in relation to the function of the centrosome/spindle pole during mitosis. This protein is localized to centrosome from anaphase to cytokinesis. Expression is limited to testis in normal cells. Elevated expression levels are seen only in a

subset of cancer cells such as HepG2, HuH7 and HeLa cells. Aurora-C expression is maximum at M phase.

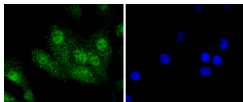
VALIDATION IMAGES



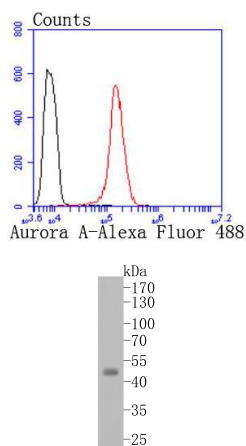
SKOV-3 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (Aurora A) monoclonal Antibody, Unconjugated (bsm-52018R) 1:50, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.



Hela cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (Aurora A) monoclonal Antibody, Unconjugated (bsm-52018R) 1:50, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.



NIH/3T3 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (Aurora A) monoclonal Antibody, Unconjugated (bsm-52018R) 1:50, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.



Blank control: Hela. Primary Antibody (green line): Rabbit Anti-Aurora A antibody (bsm-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% PBST for 20 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 .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

Sample: Lane 1: K562 (Human) Cell Lysate at 30 ug Primary: Anti-Aurora A (bsm-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

PRODUCT SPECIFIC PUBLICATIONS

[IF=2.426] Yuanyuan Wang. et al. Role of AURKA in the hypothalamus–pituitary–testicular axis in Tibetan sheep from Tianzhu. Gen Comp Endocr. 2021 Jan;300:113617 IF,IHC ; Sheep . 32950578