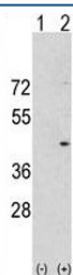


Aurora-A Antibody (F50015)

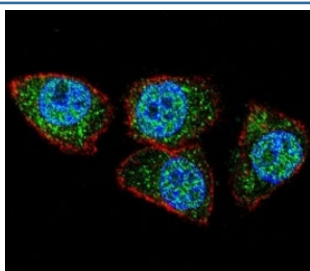
Catalog No.	Formulation	Size
F50015-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F50015-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

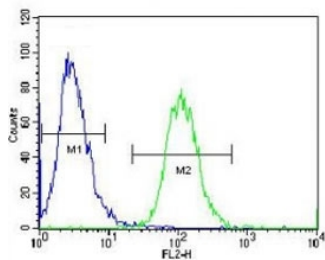
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	O14965
Localization	Cytoplasmic, nuclear
Applications	Western Blot : 1:1000 Immunofluorescence : 1:10-1:50 Flow Cytometry : 1:10-1:50
Limitations	This Aurora-A antibody is available for research use only.



Western blot analysis of Aurora-A antibody and 293 cell lysate either nontransfected (Lane 1) or transiently transfected with the Aurora-A gene (2). Predicted molecular weight ~45 kDa.



Confocal immunofluorescent analysis of Aurora-A antibody with HeLa cells followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Actin filaments have been labeled with Alexa Fluor 555 Phalloidin (red). DAPI was used as a nuclear counterstain (blue).



Aurora-A antibody flow cytometric analysis of HeLa cells (green) compared to a [negative control](#) (blue). FITC-conjugated goat-anti-rabbit secondary Ab was used for the analysis.

Description

Chromosomal segregation during mitosis as well as meiosis is regulated by kinases and phosphatases. The Aurora kinases, members of the Ser/Thr protein kinase family, associate with microtubules during chromosome movement and segregation. Aurora kinase A 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. It may be involved in microtubule formation and/or stabilization. This protein has also been postulated to play a key role during tumor development and progression. Aurora kinase A localizes on centrosomes in interphase cells and at each spindle pole in mitosis. It is highly expressed in testis, weakly in skeletal muscle, thymus and spleen, and 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 afterward. Defects in Aurora kinase A are responsible for numerical centrosome aberrations including aneuploidy.

Application Notes

Titration of the Aurora-A antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 364-392 from the human protein was used as the immunogen for this Aurora-A antibody.

Storage

Aliquot the Aurora-A antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles.