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AURKA
Rabbit Anti-Human Aurora Kinase A Clone Poly6033 Affinity Purified pAb

Catalog No.	CSI12003 CSI12004	**Quantity:**	50 µl 200 µl

Alternate Names: Aurora 2, Aurora- and IPll-like kinase (AIK), Serine/threonine kinase 15, serine/threonine kinase 6

Description: Aurora A (also known as Aurora 2) is a serine/threonine kinase with a molecular weight of approximately 46 kD. This kinase is highly expressed in the thymus and some tumors and is also expressed in other tissues including the lung, testis, colon, placenta, and fetal liver. Aurora A localizes in the midzone or central spindle in late anaphase and is concentrated in the midbody in telophase and during cytokinesis. This kinase is believed to act in cell cycle regulation during anaphase and/or telophase at centrosome/spindle pole during chromosome segregation. Aurora A has been shown to regulate cleavage of polar spindle microtubules at the onset of cytokinesis during mitosis. Defects in Aurora A cause numerous centrosome aberrations including aneuploidy (genetic variant with amino acid substitution F31I). Aurora A expression is cell cycle regulated, low in G1/S, and accumulating in G2/M. Expression is upregulated in cancer cells during M phase. Phosphorylation by PKA has been shown to regulate function. Aurora A phosphorylation has been reported on Thr 288. This kinase associates with the centrosome and mitotic spindles, NM23-H1, protein phosphatase type I, and co-localizes with γ-tubulin. The Phe 31 variant has been shown to interact with the E2 ubiquitin-conjugating enzyme, UBE2N. The Poly6033 antibody recognizes the N-terminal region of Aurora A. The Poly6033 antibody has been shown to be useful for Western blotting of human and mouse Aurora A protein and for immunoprecipitation of human Aurora A (mouse not tested).

Modification: Phosphorylation (Thr 288)

Gene ID: 6790

Regulation: Cell cycle regulated, low in G1/S, accumulates in G2/M. Expression is upregulated in cancer cells during M phase. Phosphorylation by PKA regulates function.

Distribution: High expression in thymus and some tumors. Also expressed in lung, testis, colon, placenta, and fetal liver. Localized in the midzone or central spindle in late anaphase; concentrated in the midbody in telophase and during cytokinesis.

Host: Rabbit

Immunogen: Recombinant (partial), N-terminal

Isotype: Rabbit IgG

Clone: Poly6033

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Structure: Serine/threonine kinase, Aurora subfamily, molecular weight approximately 46 kD.

Formulation: This antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 50% glycerol. **Precaution:** Sodium azide is a poisonous and hazardous substance which should be handled by trained staff only.

Purification: The antibody was purified by antigen-affinity chromatography.

Function: Cell cycle regulation during anaphase and/or telophase at centrosome/spindle pole during chromosome segregation. Defects in Aurora A cause numerous centrosome aberrations including aneuploidy (genetic variant with amino acid substitution F31I).

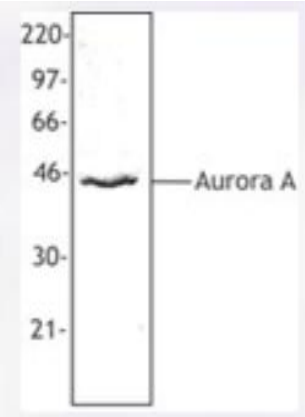
Reactivity: Mouse, Human

Applications: WB, IF

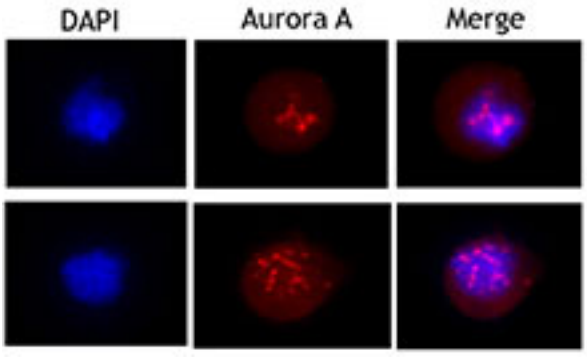
Recommended Usage: Each lot of this antibody is quality control tested by Western blotting. Western blotting, suggested working dilution(s): Use 10 µl per 5 ml antibody dilution buffer for each mini-gel. It is recommended that the reagent be titrated for optimal performance for each application.

Storage & Stability: Upon receipt, store frozen at -20° C. **Avoid repeated freeze-thaw cycles.**

Hela cell nuclear extract was resolved by electrophoresis, transferred to nitrocellulose, and probed with rabbit anti-Aurora A antibody. Proteins were visualized using a donkey anti-rabbit secondary conjugated to HRP and a chemiluminescence detection system.



Overnight nocodazole treated Hela cells stained with purified rabbit polyclonal antibody against Aurora A, followed by Rhodamine Red-X conjugated goat anti-rabbit IgG and DAPI.



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