

Rabbit anti-Human Aurora A/AURKA Polyclonal Antibody | anti-AURKA antibody

Anti-Aurora A/AURKA Antibody Picoband

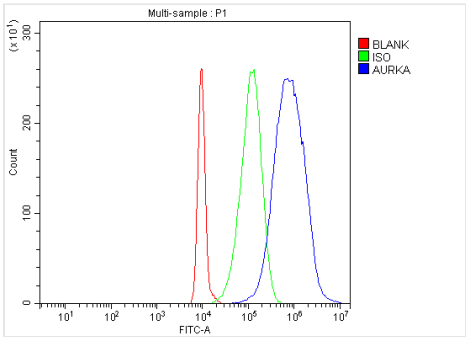
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125991	Rabbit	Human	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

Aurora A/AURKA; Polyclonal Antibody; Anti-Aurora A/AURKA Antibody Picoband; anti-AURKA antibody

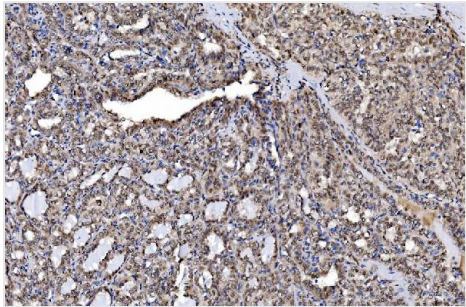
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-AURKA antibody	ELISA, FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Immunogen	E Coli-derived human Aurora A/AURKA recombinant protein (Position: M1-K97).
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.



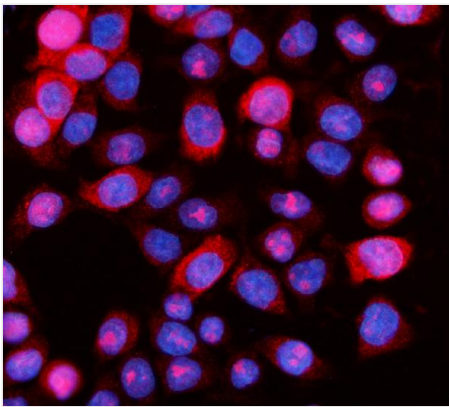
FCM/FACS (Flow Cytometry)

Figure 5. Flow Cytometry analysis of HL-60 cells using anti-Aurora A/AURKA antibody (AAA125991). Overlay histogram showing HL-60 cells stained with AAA125991 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Aurora A/AURKA Antibody (AAA125991, 1 ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



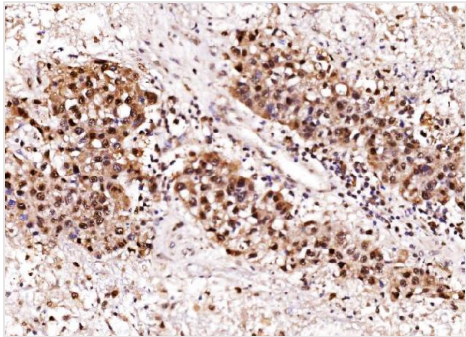
IHC (Immunohistochemistry)

Figure 3. IHC analysis of Aurora A/AURKA using anti-Aurora A/AURKA antibody (AAA125991). Aurora A/AURKA was detected in a paraffin-embedded section of human Hashimoto thyroiditis tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Aurora A/AURKA Antibody (AAA125991) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



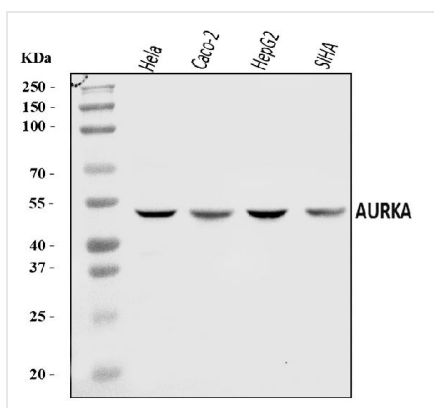
IF (Immunofluorescence)

Figure 4. IF analysis of Aurora A/AURKA using anti-Aurora A/AURKA antibody (AAA125991). Aurora A/AURKA was detected in an immunocytochemical section of Caco-2 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-Aurora A/AURKA Antibody (AAA125991) overnight at 4 degree C. DyLight594 Conjugated Goat Anti-Rabbit IgG (BA1142) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of Aurora A/AURKA using anti-Aurora A/AURKA antibody (AAA125991). Aurora A/AURKA was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Aurora A/AURKA Antibody (AAA125991) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of Aurora A/AURKA using anti-Aurora A/AURKA antibody (AAA125991). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human HeLa whole cell lysates, Lane 2: human Caco-2 whole cell lysates, Lane 3: human HepG2 whole cell lysates, Lane 4: human SiHa whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Aurora A/AURKA antigen affinity purified polyclonal antibody (#AAA125991) at 0.25 ug/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Aurora A/AURKA at approximately 50 kDa. The expected band size for Aurora A/AURKA is at 50 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-AURKA antibody

AURKA (aurora kinase A), also called ARK1, AurA, AIK, AURORA2, BTAK, PPP1R47, STK7, STK15, STK6, is a mitotic centrosomal protein kinase. The main role of AURKA in tumor development is in controlling chromosome segregation during mitosis. Aurora A is a member of a family of mitotic serine/threonine kinases. Cell cycle and Northern blot analyses showed that peak expression of AURKA occurs during the G2/M phase and then decreases. By fluorescence in situ hybridization, AURKA gene is represented by 2 signals in chromosome bands 20q13.2-q13.3 and 1q41-q42. The AURKA gene is overexpressed in many human cancers. Ectopic overexpression of Aurora kinase A in mammalian cells induces centrosome amplification, chromosome instability, and oncogenic transformation, a phenotype characteristic of loss-of-function mutations of p53. Depletion of Ajuba prevented activation of AURKA at centrosomes in late G2 phase and inhibited mitotic entry. Activation of AURKA was independently sufficient to induce rapid ciliary resorption, and AURKA acted in this process through phosphorylation of HDAC6, leading to HDAC6-dependent tubulin deacetylation and destabilization of the ciliary axoneme. Small molecule inhibitors of AURKA and HDAC6 reduced regulated disassembly of cilia.

Product Categories/Family for anti-AURKA antibody

[Primary Antibodies](#), [Rabbit Polyclonal Antibodies](#)

NCBI AND UNIPROT INFORMATION

NCBI GI #	38327562
NCBI GeneID	6790
NCBI Accession #	NP_003591.2
NCBI GenBank Nucleotide #	NM_003600.2
UniProt Accession #	O14965 ; O60445 ; O75873 ; Q9BQD6 ; Q9UPG5 ; E1P5F9
Molecular Weight	45,809 Da
NCBI Official Full Name	aurora kinase A
NCBI Official Synonym Full Names	aurora kinase A

NCBI Official Symbol	AURKA
NCBI Official Synonym Symbols	AIK; ARK1; AURA; BTAK; STK6; STK7; STK15; AURORA2; PPP1R47
NCBI Protein Information	aurora kinase A; ARK-1; hARK1; aurora 2; Aurora-A kinase; IPL1-related kinase; aurora-related kinase 1; aurora/IPL1-like kinase; serine/threonine kinase 6; aurora/IPL1-related kinase 1; breast tumor-amplified kinase; breast-tumor-amplified kinase; serine/
UniProt Protein Name	Aurora kinase A
UniProt Gene Name	AURKA
UniProt Synonym Gene Names	AIK; AIRK1; ARK1; AURA; AYK1; BTAK; IAK1; STK15; STK6; ARK-1; Aurora-related kinase 1; hARK1
UniProt Entry Name	AURKA_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/aurora-a-aurka-antibody-flow-cytometry-immunofluorescence-immunocytochemistry-immunohistochemistry-western-blot-elisa/125991>