



Rabbit Anti-Aurora A antibody

SL2749R

Product Name:	Aurora A
Chinese Name:	有丝分裂激酶A抗体
Alias:	AIK; ARK-1; ARK1; AURA; AURKA; Aurora 2; Aurora Family Kinase 1; aurora kinase A; Aurora Related Kinase 1; Aurora-related kinase 1; Aurora/IPL1 Like Kinase; Aurora/IPL1 Related Kinase 1; Aurora/IPL1-related kinase 1; AURORA2; AYK1; BRAK; Breast Tumor Amplified Kinase; Breast tumor-amplified kinase; BTAK; hARK1; IAK; IPL1 Aurora Related Kinase 1; IPL1 Related Kinase; MGC34538; OTTHUMP00000031340; OTTHUMP00000031341; OTTHUMP00000031342; OTTHUMP00000031343; OTTHUMP00000031344; OTTHUMP00000031345; OTTHUMP00000166071; OTTHUMP00000166072; PPP1R47; Protein phosphatase 1, regulatory subunit 47; Serine/threonine kinase 15; Serine/threonine kinase 6; Serine/threonine kinase; Serine/threonine kinase; Serine/threonine-protein kinase 15; Serine/threonine-protein kinase 6; Serine/threonine-protein kinase aurora-A; STK15; STK6; STK6_HUMAN; STK7.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,Cow,Horse,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	48kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Auroa A:21-120/344
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized

	antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	<p>The protein encoded by this gene is a cell cycle-regulated kinase that appears to be involved in microtubule formation and/or stabilization at the spindle pole during chromosome segregation. The encoded protein is found at the centrosome in interphase cells and at the spindle poles in mitosis. This gene may play a role in tumor development and progression. A processed pseudogene of this gene has been found on chromosome 1, and an unprocessed pseudogene has been found on chromosome 10. Multiple transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2008]</p> <p>Function: Phosphorylates numerous target proteins, including ARHGEF2, BRCA1, KIF2A, NDEL1, PARD3, PLK1 and BORA. Regulates KIF2A tubulin depolymerase activity. Required for normal axon formation. Plays a role in microtubule remodeling during neurite extension. Important for microtubule formation and/or stabilization.</p> <p>Subunit: Interacts with FBXL7. Interacts with CPEB1, JTB, TACC1, TPX2, PPP2CA, as well as with the protein phosphatase type 1 (PP1) isoforms PPP1CA, PPP1CB and PPP1CC. Interacts also with its substrates ARHGEF2, BORA, BRCA1, KIF2A, PARD3, and p53/TP53. Interaction with BORA promotes phosphorylation of PLK1. Interacts with PIFO. Interacts with GADD45A, competing with its oligomerization. Interacts (via C-terminus) with AUNIP (via C-terminus). Identified in a complex with AUNIP and NIN. Interacts with FRY; this interaction facilitates AURKA-mediated PLK1 phosphorylation.</p> <p>Subcellular Location: Cytoplasm.</p> <p>Tissue Specificity: Highly expressed in testis and weakly in skeletal muscle, thymus and spleen. Also highly expressed in colon, ovarian, prostate, neuroblastoma, breast and cervical cancer cell lines.</p> <p>Post-translational modifications: Activated by phosphorylation at Thr-288; this brings about a change in the conformation of the activation segment. Phosphorylation at Thr-288 varies during the cell cycle and is highest during M phase. Autophosphorylated at Thr-288 upon TPX2 binding. Phosphorylated upon DNA damage, probably by ATM or ATR. Ubiquitinated by CHFR, leading to its degradation by the proteasome. Ubiquitinated by the anaphase-promoting complex (APC), leading to its degradation by the proteasome.</p> <p>Similarity:</p>

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

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

细胞的有丝分裂是生物体最基本的生命活动过程,能将复制的基因组精确地分配到下一代子细胞中,在长期的生物进化过程中,生物体形成了一整套完善的监测机制以确保遗传物质精确地分配到子细胞中。

Aurora激酶(极光激酶)是细胞有丝分裂调控网络中的一类重要的丝氨酸/苏氨酸激酶, Aurora酪氨酸激酶B也是丝氨酸/苏氨酸激酶家族成员之一,目前分为aurora A, B及C。