

Summary

Production Name	ARK-2 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IF, WB, ELISA
Reactivity	Human, Mouse, Rat, Monkey

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	AURKB
Alternative Names	AURKB; AIK2; AIM1; AIRK2; ARK2; STK1; STK12; STK5; Aurora kinase B; Aurora 1; Aurora- and IPL1-like midbody-associated protein 1; AIM-1; Aurora/IPL1-related kinase 2; ARK-2; Aurora-related kinase 2; STK-1; Serine/threonine-protein kinase 12
Gene ID	9212.0
SwissProt ID	Q96GD4. The antiserum was produced against synthesized peptide derived from human AurB. AA range: 198-247

Application

Dilution Ratio	WB 1:500 - 1:2000. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.
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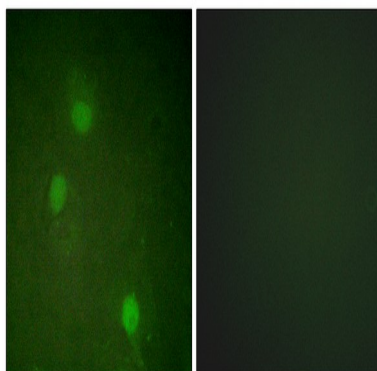
Molecular Weight 39kD

Background

This gene encodes a member of the aurora kinase subfamily of serine/threonine kinases. The genes encoding the other two members of this subfamily are located on chromosomes 19 and 20. These kinases participate in the regulation of alignment and segregation of chromosomes during mitosis and meiosis through association with microtubules. A pseudogene of this gene is located on chromosome 8. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Sep 2015],catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Magnesium.,disease:Disruptive regulation of expression is a possible mechanism of the perturbation of chromosomal integrity in cancer cells through its dominant-negative effect on cytokinesis.,function:May be directly involved in regulating the cleavage of polar spindle microtubules and is a key regulator for the onset of cytokinesis during mitosis. Component of the chromosomal passenger complex (CPC), a complex that acts as a key regulator of mitosis. The CPC complex has essential functions at the centromere in ensuring correct chromosome alignment and segregation and is required for chromatin-induced microtubule stabilization and spindle assembly. Phosphorylates 'Ser-10' and 'Ser-28' of histone H3 during mitosis.,similarity:Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. Aurora subfamily.,similarity:Contains 1 protein kinase domain.,subcellular location:Localizes on chromosome arms and inner centromeres from prophase through metaphase and then transferring to the spindle midzone and midbody from anaphase through cytokinesis. Colocalized with gamma tubulin in the mid-body.,subunit:Interacts with TACC1. Associates with RACGAP1 during M phase. Component of the CPC at least composed of BIRC5/survivin CDCA8/borealin, INCENP and AURKB/Aurora-B. Interacts with CDCA1 and NDC80. Interacts with EVI5.,tissue specificity:High level expression seen in the thymus. It is also expressed in the spleen, lung, testis, colon, placenta and fetal liver. Expressed during S and G2/M phase and expression is up-regulated in cancer cells during M phase.,

Research Area

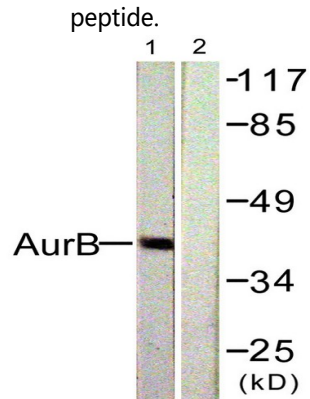
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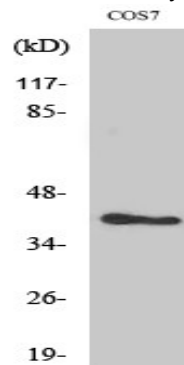
Product Name: ARK-2 Rabbit Polyclonal Antibody
Catalog #: APRab07139



Immunofluorescence analysis of HeLa cells, using AurB Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from COS7 cells, treated with Nocodazole 1ug/ml 16h, using AurB Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using ARK-2 Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA) .

Note

For research use only.