

Rabbit ARK-1 Polyclonal Antibody | anti-ARK-1 antibody

ARK-1 Polyclonal Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA294299	Rabbit	Human, Mouse, Rat, Monkey	Immunofluorescence, Immunohistochemistry, Western Blot

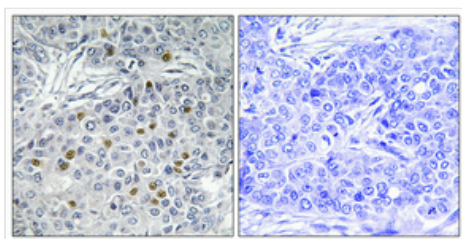
PRODUCT SYNONYMS

ARK-1; Polyclonal Antibody; ARK-1 Polyclonal Antibody; AURKA; AIK; AIRK1; ARK1; AURA; AYK1; BTAK; IAK1; STK15; STK6; Aurora kinase A; Aurora 2; Aurora/IPL1-related kinase 1; Aurora-related kinase 1; hARK1; Breast tumor-amplified kinase; Serine/threonine-protein kinase 15; Serine/threonin; anti-ARK-1 antibody

PRODUCT SPECIFICATIONS

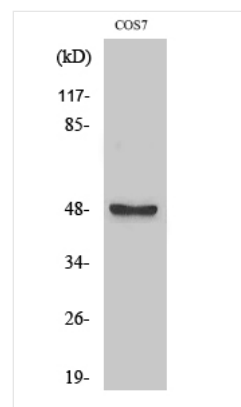
Host	Rabbit
Reactivity	Human, Mouse, Rat, Monkey
Clonality	Polyclonal
Form/Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Applicable Applications for anti-ARK-1 antibody	IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Cellular Location	Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle pole. Cytoplasm, cytoskeleton, cilium basal body. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole. Cell projection, neuron projection. Note=Detected at the neurite hillock in developing neurons (By similarity). Localizes at the centrosome in mitotic cells from early prophase until telophase, but also localizes to the spindle pole MTs from prophase to anaphase (PubMed:9606188, PubMed:17229885, PubMed:21225229). Colocalized with SIRT2 at centrosome (PubMed:22014574). Moves to the midbody during both telophase and cytokinesis (PubMed:17726514). Associates with both the pericentriolar material (PCM) and centrioles (PubMed:22014574). The localization to the spindle poles is regulated by AAAS
Tissue Location	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
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



IHC (Immunohistochemistry)

Dilution: Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300.
Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications.



WB (Western Blot)

Dilution: Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300.
Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications.

ADDITIONAL INFORMATION

Related Product Information for anti-ARK-1 antibody	Mitotic serine/threonine kinase that contributes to the regulation of cell cycle progression (PubMed:26246606, PubMed:12390251, PubMed:18615013, PubMed:11039908, PubMed:17125279, PubMed:17360485). Associates with the centrosome and the spindle microtubules during mitosis and plays a critical role in various mitotic events including the establishment of mitotic spindle, centrosome duplication, centrosome separation as well as maturation, chromosomal alignment, spindle assembly checkpoint, and cytokinesis (PubMed:26246606, PubMed:14523000). Required for normal spindle positioning during mitosis and for the localization of NUMA1 and DCTN1 to the cell cortex during metaphase (PubMed:27335426). Required for initial activation of CDK1 at centrosomes (PubMed:13678582, PubMed:15128871). Phosphorylates numerous target proteins, including ARHGEF2, BORA, BRCA1, CDC25B, DLGP5, HDAC6, KIF2A, LATS2, NDEL1, PARD3, PPP1R2, PLK1, RASSF1, TACC3, p53/TP53 and TPX2 (PubMed:18056443, PubMed:15128871, PubMed:14702041, PubMed:11551964, PubMed:15147269, PubMed:15987997, PubMed:17604723, PubMed:18615013). Regulates KIF2A tubulin depolymerase activity (PubMed:19351716). Important for microtubule formation and/or stabilization (PubMed:18056443). Required for normal axon formation (PubMed:19812038). Plays a role in microtubule remodeling during neurite extension (PubMed:19668197). Also acts as a key regulatory component of the p53/TP53 pathway, and particularly the checkpoint- response pathways critical for oncogenic transformation of cells, by phosphorylating and destabilizing p53/TP53 (PubMed:14702041). Phosphorylates its own inhibitors, the protein phosphatase type 1 (PP1) isoforms, to inhibit their activity (PubMed:11551964). Necessary for proper cilia disassembly prior to mitosis (PubMed:17604723, PubMed:20643351). Regulates protein levels of the anti-apoptosis protein BIRC5 by suppressing the expression of the SCF(FBXL7) E3 ubiquitin-protein ligase substrate adapter FBXL7 through the phosphorylation of the transcription factor FOXP1 (PubMed:28218735).
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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.