



ARK-2 Monoclonal Antibody

Catalog No	YP-Ab-14121
Isotype	IgG
Reactivity	Human
Applications	WB;ELISA
Gene Name	AURKB
Protein Name	Aurora kinase B,Aurora B
Immunogen	Purified recombinant fragment of ARK-2 expressed in E. Coli.
Specificity	ARK-2 Monoclonal Antibody detects endogenous levels of ARK-2 protein.
Formulation	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	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
Observed Band	
Cell Pathway	Nucleus . Chromosome . Chromosome, centromere . Chromosome, centromere, kinetochore . Cytoplasm, cytoskeleton, spindle . Midbody . Localizes on chromosome arms and inner centromeres from prophase through metaphase and then transferring to the spindle midzone and midbody from anaphase through cytokinesis (PubMed:20929775). Colocalized with gamma tubulin in the midbody (PubMed:17726514). Proper localization of the active, Thr-232-phosphorylated form during metaphase may be dependent upon interaction with SPDYC (PubMed:20605920). Colocalized with SIRT2 during cytokinesis with the midbody (PubMed:17726514). Localization (and probably targeting of the CPC) to the inner centromere occurs predominantly in regions with overlapping mitosis-specific histone phosphorylations H3pT3 and H2ApT12 (PubMed)
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. ; [Isoform 3]: Not expressed in normal liver, high expression in metastatic liver.
Function	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.,s

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],

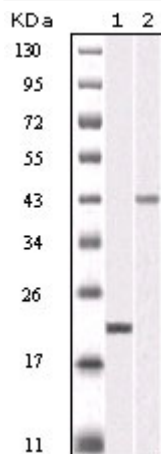
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis using ARK-2 Monoclonal Antibody against truncated AURKB recombinant protein (1) and SKN-SH cell lysate(2).