10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Aurora-C Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7000G

Product Information

Application	WB, E
Primary Accession	Q9UQB9
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	35591
Antigen Region	115-145

Additional Information

Gene ID	6795
Other Names	Aurora kinase C, Aurora 3, Aurora/IPL1-related kinase 3, ARK-3, Aurora-related kinase 3, Aurora/IPL1/Eg2 protein 2, Serine/threonine-protein kinase 13, Serine/threonine-protein kinase aurora-C, AURKC, AIE2, AIK3, AIRK3, ARK3, STK13
Target/Specificity	This Aurora-C antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 115-145 amino acids from the Central region of human Aurora-C.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Aurora-C Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	AURKC
Synonyms	AIE2, AIK3, AIRK3, ARK3, STK13

Function	Serine/threonine-protein kinase 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. Also plays a role in meiosis and more particularly in spermatogenesis. Has redundant cellular functions with AURKB and can rescue an AURKB knockdown. Like AURKB, AURKC phosphorylates histone H3 at 'Ser-10' and 'Ser-28'. AURKC phosphorylates the CPC complex subunits BIRC5/survivin and INCENP leading to increased AURKC activity. Phosphorylates TACC1, another protein involved in cell division, at 'Ser-228'.
Cellular Location	Nucleus. Chromosome. Chromosome, centromere. Cytoplasm, cytoskeleton, spindle. Note=Distributes in the condensed chromosomes during prophase to metaphase. After entering anaphase, there is a dissociation from separated chromosomes and a redistribution to midzone microtubules, and finally remains in the midbody during cytokinesis.
Tissue Location	Isoform 1 and isoform 2 are expressed in testis. Elevated expression levels were seen only in a subset of cancer cell lines such as Hep-G2, Huh-7 and HeLa. Expression is maximum at M phase

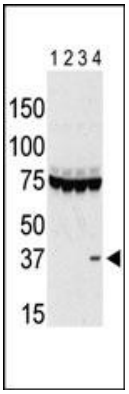
Background

Chromosomal segregation during mitosis as well as meiosis is regulated by kinases and phosphatases. The Aurora kinases, members of the Ser/Thr protein kinase family, associate with microtubules during chromosome movement and segregation. Aurora kinase C may play a part in organizing microtubules in relation to the function of the centrosome/spindle pole during mitosis. This protein is localized to centrosome from anaphase to cytokinesis. Expression is limited to testis in normal cells. Elevated expression levels are seen only in a subset of cancer cells such as HepG2, HuH7 and HeLa cells. Aurora-C expression is maximum at M phase.

References

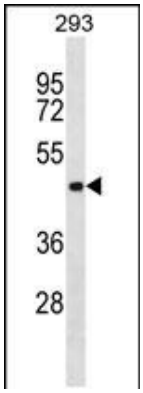
Kimura, M., et al., J. Biol. Chem. 274(11):7334-7340 (1999).
Tseng, T.C., et al., DNA Cell Biol. 17(10):823-833 (1998).
Bernard, M., et al., Genomics 53(3):406-409 (1998).

Images



The anti-Aurora C Pab (Cat. #AP7000g) is used in Western blot to detect Aurora C in lysates of 293 cells expressing Flag tag (lane 1), Flag-tagged Aurora A (lane 2), Flag-tagged Aurora B (lane 3), and Flag-tagged Aurora C (lane 4). Data is kindly provided by Drs. K. Sasai and S. Sen from the University of Texas MD Anderson Cancer Center (Houston, TX).

Aurora-C Antibody (Ctr) (Cat. #AP7000g) western blot analysis in 293 cell line lysates (35ug/lane).This demonstrates the Aurora-C antibody detected the



Aurora-C protein (arrow).

Citations

- Spindle proteins are differentially expressed in the various histological subtypes of testicular germ cell tumors.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.