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Aurora C Recombinant Rabbit mAb

Catalog # AP98708

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q9UQB9
Other Accession	Q9UQB9
Reactivity	Human
Host	Rabbit
Clonality	Recombinant
Calculated MW	35591
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. Aurora subfamily. Contains 1 protein kinase domain.
SUBUNIT	Component of the chromosomal passenger complex (CPC) composed of at least BIRC5/survivin, CDCA8/borealin, INCENP, AURKB and AURKC. Interacts directly with BIRC5/survivin and INCENP. Interacts with TACC1.
DISEASE	Spermatogenic failure 5 (SPGF5) [MIM:243060]: An infertility disorder caused by spermatogenesis defects. Semen from affected men show close to 100% morphologically abnormal multiflagellar spermatozoa with low motility, oversized irregular heads, and abnormal midpiece and acrosome. Note=The disease is caused by mutations affecting the gene represented in this entry.
Background Descriptions	This gene encodes a member of the Aurora subfamily of serine/threonine protein kinases. The encoded protein is a chromosomal passenger protein that forms complexes with Aurora-B and inner centromere proteins and may play a role in organizing microtubules in relation to centrosome/spindle function during mitosis. This gene is overexpressed in several cancer cell lines, suggesting an involvement in oncogenic signal transduction. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	6795
Other Names	AIE2; AIK3; ARK3; AurC; HEL-S-90; SPGF5; STK13; aurora-C; AURKC_HUMAN; AURKC; 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; 2.7.11.1; AIRK3; aurora kinase C; serine/threonine kinase 13 (aurora/IPL1-like); Serine/threonine-protein kinase 13/Aurora kinase C; AIE2, AIK3, AIRK3, ARK3, STK13, Aurora kinase C, Aurora 3, Aurora/IPL1 related kinase 3, ARK 3, Aurora related kinase 3, Serine/threonine protein kinase 13, Aurora/IPL1related kinase 3, Aurorarelated kinase 3, Serine/threonineprotein kinase 13, Serine/threonineprotein kinase auroraC,

Dilution	IHC-P=1:50-200,IHC-F=1:50-200,WB=1:500-2000,IF=1:50-200,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

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

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