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Aurora C Rabbit pAb

Catalog # AP96911

Product Information

Application	WB
Primary Accession	Q9UQB9
Other Accession	Q9UQB9
Reactivity	Human, Mouse
Predicted	Rat, Pig, Rabbit, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	35591
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Aurora C
Epitope Specificity	51-150/344
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.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
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)

Dilution	WB=1:500-2000
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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