

Aurora-C (AURKC) Antibody (C-term K255)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7000b

Specification

Aurora-C (AURKC) Antibody (C-term K255) - Product Information

Application IHC-P, WB,E
Primary Accession Q9UQB9
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG

Aurora-C (AURKC) Antibody (C-term K255) - 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 (AURKC) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide selected from the C-terminal region with lysine at position 255 of human AURKC.

Dilution

IHC-P~~1:50~100 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 (AURKC) Antibody (C-term K255) is for research use only and not for use in diagnostic or therapeutic procedures.

Aurora-C (AURKC) Antibody (C-term K255) - Protein Information

Name AURKC

Synonyms AIE2, AIK3, AIRK3, ARK3, STK13



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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

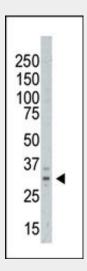
Isoform 1 and isoform 2 are expressed in testis. Elevated expression levels were seen only in a subset of cancer cell lines such as Hep-G2, Huh-7 and HeLa. Expression is maximum at M phase

Aurora-C (AURKC) Antibody (C-term K255) - Protocols

Provided below are standard protocols that you may find useful for product applications.

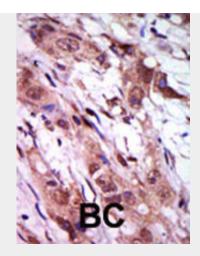
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Aurora-C (AURKC) Antibody (C-term K255) - Images



The anti-AURKC Pab (Cat. #AP7000b) is used in Western blot to detect AURKC in A375 cell lysate





Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

Aurora-C (AURKC) Antibody (C-term K255) - 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.

Aurora-C (AURKC) Antibody (C-term K255) - References

Li, X., et al., J. Biol. Chem. 279(45):47201-47211 (2004). Kimura, M., et al., J. Biol. Chem. 274(11):7334-7340 (1999). Bernard, M., et al., Genomics 53(3):406-409 (1998). Tseng, T.C., et al., DNA Cell Biol. 17(10):823-833 (1998).