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Aurora-C Antibody (N-term G11)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7000F

Specification

Aurora-C Antibody (N-term G11) - Product Information

Application	**WB,E**
Primary Accession	Q9UQB9
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**1-30**

Aurora-C Antibody (N-term G11) - 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 1-30 amino acids from the N-terminal region of human Aurora-C.

Dilution
WB~~1:1000

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 (N-term G11) is for research use only and not for use in diagnostic or therapeutic procedures.

Aurora-C Antibody (N-term G11) - 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.

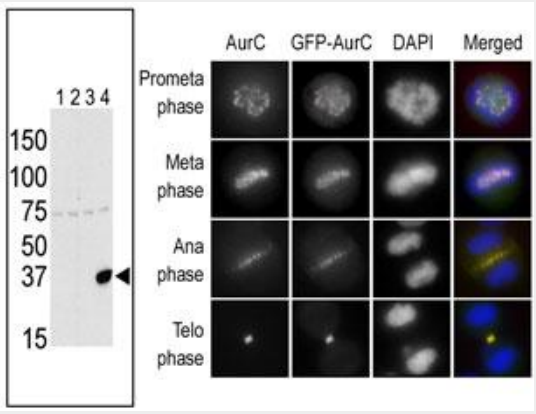
Tissue Location
Isoform 1 and isoform 2 are expressed in testis. Elevated expression levels were seen only in a subset of cancer cell lines such as Hep-G2, Huh-7 and HeLa. Expression is maximum at M phase

Aurora-C Antibody (N-term G11) - Protocols

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

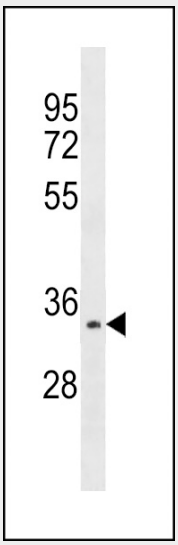
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Aurora-C Antibody (N-term G11) - Images



The anti-Aurora C Pab (Cat. #AP7000f) 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) or Flag-tagged Aurora C (lane 4). In the immunofluorescence experiment, staining of HeLa cells expressing GFP-Aurora C is performed at different cellular mitotic stages with the anti-Aurora C Pab as primary antibody (column A), GFP fluorescence (column B), DAPI nuclear staining (column C), and anti-Aurora C merged to DAPI staining (column D). Data is kindly provided by Drs. K. Sasai and S. Sen from the University of Texas MD Anderson Cancer Center (Houston, TX).

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Aurora-C Antibody (C-term) (Cat. #AP7000f) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the Aurora-C antibody detected the Aurora-C protein (arrow).

Aurora-C Antibody (N-term G11) - 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 Antibody (N-term G11) - 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).