

Summary

Production Name	Hec1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IF, WB, ELISA
Reactivity	Human, Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	NDC80
Alternative Names	NDC80; HEC; HEC1; KNTC2; Kinetochore protein NDC80 homolog; Highly expressed in cancer protein; Kinetochore protein Hec1; HsHec1; Kinetochore-associated protein 2; Retinoblastoma-associated protein HEC
Gene ID	10403.0
SwissProt ID	O14777. The antiserum was produced against synthesized peptide derived from human KNTC2. AA range: 351-400

Application

Dilution Ratio	WB 1:500 - 1:2000. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other applications.
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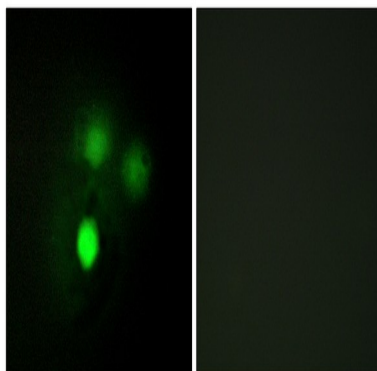
Molecular Weight 73kD

Background

This gene encodes a component of the NDC80 kinetochore complex. The encoded protein consists of an N-terminal microtubule binding domain and a C-terminal coiled-coiled domain that interacts with other components of the complex. This protein functions to organize and stabilize microtubule-kinetochore interactions and is required for proper chromosome segregation. [provided by RefSeq, Oct 2011],developmental stage:Expression peaks in mitosis.,function:Acts as a component of the essential kinetochore-associated NDC80 complex, which is required for chromosome segregation and spindle checkpoint activity. Required for kinetochore integrity and the organization of stable microtubule binding sites in the outer plate of the kinetochore.,PTM:Phosphorylation begins in S phase of the cell cycle and peaks in mitosis. Phosphorylated by NEK2. May also be phosphorylated by AURKA and AURKB.,similarity:Belongs to the NDC80/HEC1 family.,subcellular location:Localizes to kinetochores from late prophase to anaphase. Localizes specifically to the outer plate of the kinetochore.,subunit:Component of the NDC80 complex, which consists of NDC80/HEC1, CDCA1, SPBC24 and SPBC25. The NDC80 complex is formed by two subcomplexes composed of NDC80/HEC1-CDCA1 and SPBC24-SPBC25. Each subcomplex is formed by parallel interactions through the coiled-coil domains of individual subunits. Formation of a tetrameric complex is mediated by interactions between the C-terminal regions of both subunits of the NDC80/HEC1-CDCA1 subcomplex and the N-terminal regions of both subunits of the SPBC24-SPBC25 complex. The tetrameric NDC80 complex has an elongated rod-like structure with globular domains at either end. Interacts with NEK2 and ZWINT specifically during mitosis. Interacts with CENPH and MIS12. May interact with AURKB, PSMC2, PSMC5 and SMC1A. May interact with RB1 during G2 phase and mitosis.,

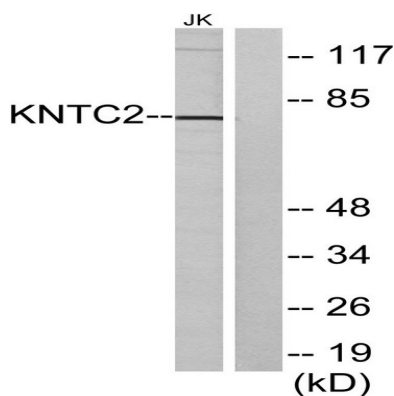
Research Area

Image Data

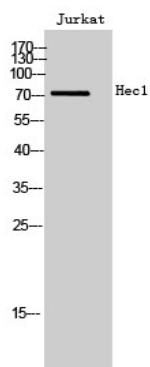


Immunofluorescence analysis of HUVEC cells, using KNTC2 Antibody. The picture on the right is blocked with the synthesized peptide.

Product Name: Hec1 Rabbit Polyclonal Antibody
Catalog #: APRab11962



Western blot analysis of lysates from Jurkat cells, using KNTC2 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of Jurkat cells using Hec1 Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA) .

Note

For research use only.