

Hec1 Polyclonal Antibody

Catalog # AP70304

Product Information

Application	WB, IF
Primary Accession	Q14777
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	73913

Additional Information

Gene ID	10403
Other 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
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications. IF~~1:50~200
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

Name	NDC80
Synonyms	HEC, HEC1, KNTC2
Function	Acts as a component of the essential kinetochore-associated NDC80 complex, which is required for chromosome segregation and spindle checkpoint activity (PubMed: 12351790 , PubMed: 14654001 , PubMed: 14699129 , PubMed: 15062103 , PubMed: 15235793 , PubMed: 15239953 , PubMed: 15548592 , PubMed: 16732327 , PubMed: 30409912 , PubMed: 9315664). Required for kinetochore integrity and the organization of stable microtubule binding sites in the outer plate of the kinetochore (PubMed: 15548592 , PubMed: 30409912). The NDC80 complex synergistically enhances the affinity of the SKA1 complex for microtubules and may allow the NDC80 complex to track depolymerizing microtubules (PubMed: 23085020). Plays a role in chromosome congression and is essential for the end-on attachment of the kinetochores to spindle microtubules (PubMed: 23891108 , PubMed: 25743205).

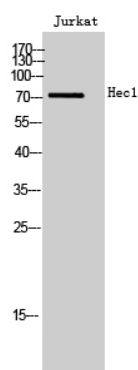
Cellular Location

Nucleus. Chromosome, centromere, kinetochore. Note=Localizes to kinetochores from late prophase to anaphase (PubMed:14699129) Localizes specifically to the outer plate of the kinetochore (PubMed:14699129).

Background

Acts as a component of the essential kinetochore- associated NDC80 complex, which is required for chromosome segregation and spindle checkpoint activity (PubMed:[9315664](#), PubMed:[12351790](#), PubMed:[14654001](#), PubMed:[14699129](#), PubMed:[15062103](#), PubMed:[15235793](#), PubMed:[15239953](#), PubMed:[15548592](#), PubMed:[16732327](#)). Required for kinetochore integrity and the organization of stable microtubule binding sites in the outer plate of the kinetochore (PubMed:[15548592](#)). The NDC80 complex synergistically enhances the affinity of the SKA1 complex for microtubules and may allow the NDC80 complex to track depolymerizing microtubules (PubMed:[23085020](#)). Plays a role in chromosome congression and is essential for the end-on attachment of the kinetochores to spindle microtubules (PubMed:[25743205](#), PubMed:[23891108](#)).

Images



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

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