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NDC80 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51659

Product Information

Application WB Primary Accession O14777

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW73913

Additional Information

Gene ID 10403

Other Names Kinetochore protein NDC80 homolog, Highly expressed in cancer protein,

Kinetochore protein Hec1, HsHec1, Kinetochore-associated protein 2, Retinoblastoma-associated protein HEC, NDC80, HEC, HEC1, KNTC2

Target/Specificity KLH-conjugated synthetic peptide encompassing a sequence within the center

region of human NDC80. The exact sequence is proprietary.

Dilution WB~~1:1000

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage Store at -20 °C.Stable for 12 months from date of receipt

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:<u>12351790</u>, PubMed:<u>14654001</u>, PubMed:<u>14699129</u>, PubMed:<u>15062103</u>, PubMed:<u>15235793</u>, PubMed:<u>15239953</u>, PubMed:<u>15548592</u>, PubMed:<u>16732327</u>,

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. Required for kinetochore integrity and the organization of stable microtubule binding sites in the outer plate of the kinetochore.

References

Chen Y.,et al.Mol. Cell. Biol. 17:6049-6056(1997). Chen Y.,et al.J. Biol. Chem. 272:24081-24087(1997). Zheng L.,et al.Mol. Cell. Biol. 19:5417-5428(1999). Zheng L.,et al.Mol. Cell. Biol. 20:3529-3537(2000). Chen Y.,et al.J. Biol. Chem. 277:49408-49416(2002).

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