10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

NUF2 Rabbit pAb

Catalog # AP98098

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9BZD4
Other Accession	Q9BZD4
Reactivity	Human, Mouse
Predicted	Rat, Pig, Rabbit, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54304
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human NUF2
Epitope Specificity	201-300/464
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the NUF2 family.
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. May interact with AURKB/Aurora-B. Directly interacts with CENPE; this interaction determines CENPE kinetochore localization.
Post-translational modifications	Can be phosphorylated by AURKA and AURKB.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a protein that is highly similar to yeast Nuf2, a component of a conserved protein complex associated with the centromere. Yeast Nuf2 disappears from the centromere during meiotic prophase when centromeres lose their connection to the spindle pole body, and plays a regulatory role in chromosome segregation. The encoded protein is found to be associated with centromeres of mitotic HeLa cells, which suggests that this protein is a functional homolog of yeast Nuf2. Alternatively spliced transcript variants that encode the same protein have been described. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	83540

Other Names	CDCA1; CT106; NUF2R; NUF2_HUMAN; NUF2; hNuf2; hNuf2R; hsNuf2; Cell division cycle-associated protein 1; NUF2 component of NDC80 kinetochore complex; cell division cycle associated 1; NUF2, NDC80 kinetochore complex component, homolog (S. cerevisiae); NDC80 kinetochore complex component NUF2; cancer/testis antigen 106
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,Flow-Cyt=1ug/Test
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	NUF2
Synonyms	CDCA1, NUF2R
Function	Acts as a component of the essential kinetochore-associated NDC80 complex, which is required for chromosome segregation and spindle checkpoint activity (PubMed:12438418, PubMed:14654001, PubMed:15062103, PubMed:15235793, PubMed:15239953, PubMed:15548592, PubMed:17535814). 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).
Cellular Location	Nucleus. Chromosome, centromere, kinetochore. Note=Localizes to kinetochores from late prophase to anaphase Localizes specifically to the outer plate of the kinetochore. NDC80 is required for efficient kinetochore localization

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.