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BUBR1 (BUB1B) Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8059a

Specification

BUBR1 (BUB1B) Antibody (N-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	O60566
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**3-33**

BUBR1 (BUB1B) Antibody (N-term) - Additional Information

Gene ID 701

Other Names
Mitotic checkpoint serine/threonine-protein kinase BUB1 beta, MAD3/BUB1-related protein kinase, hBUBR1, Mitotic checkpoint kinase MAD3L, Protein SSK1, BUB1B, BUBR1, MAD3L, SSK1

Target/Specificity
This BUBR1 (BUB1B) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 3-33 amino acids from the N-terminal region of human BUBR1 (BUB1B).

Dilution
WB~~1:1000
IHC-P~~1:50~100

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
BUBR1 (BUB1B) Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

BUBR1 (BUB1B) Antibody (N-term) - Protein Information

Name BUB1B

Synonyms BUBR1, MAD3L, SSK1

Function Essential component of the mitotic checkpoint. Required for normal mitosis progression. The mitotic checkpoint delays anaphase until all chromosomes are properly attached to the mitotic spindle. One of its checkpoint functions is to inhibit the activity of the anaphase- promoting complex/cyclosome (APC/C) by blocking the binding of CDC20 to APC/C, independently of its kinase activity. The other is to monitor kinetochore activities that depend on the kinetochore motor CENPE. Required for kinetochore localization of CENPE. Negatively regulates PLK1 activity in interphase cells and suppresses centrosome amplification. Also implicated in triggering apoptosis in polyploid cells that exit aberrantly from mitotic arrest. May play a role for tumor suppression.

Cellular Location
Cytoplasm. Nucleus. Chromosome, centromere, kinetochore. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Note=Cytoplasmic in interphase cells. Associates with the kinetochores in early prophase. Kinetochore localization requires BUB1, PLK1 and KNL1

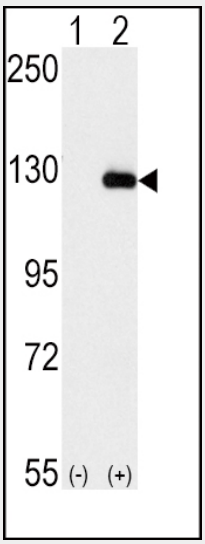
Tissue Location
Highly expressed in thymus followed by spleen. Preferentially expressed in tissues with a high mitotic index

BUBR1 (BUB1B) Antibody (N-term) - Protocols

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

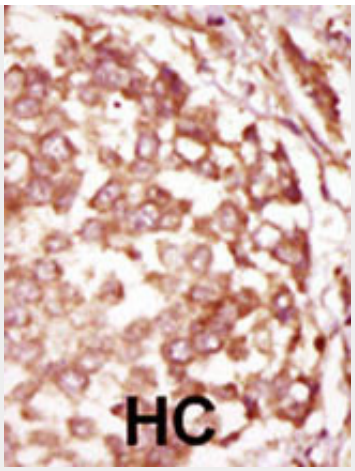
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

BUBR1 (BUB1B) Antibody (N-term) - Images



Western blot analysis of BUB1B (arrow) using rabbit polyclonal BUB1B Antibody (N-term) (Cat.#AP8059a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the BUB1B gene (Lane 2) (Origene Technologies).

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Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

BUBR1 (BUB1B) Antibody (N-term) - Background

BUB1B, a member of the Ser/Thr protein kinase family, is a probable component of the mitotic checkpoint that delays anaphase until all chromosomes are properly attached to the mitotic spindle. It can interact with BUB3, CENP-F, CENP-E and mitosin, and can be localized to nuclear kinetochores. This protein is highly expressed in thymus and spleen. The CD1 domain directs kinetochore localization and binding to BUB3. The protein possesses a cyclin destruction box sequence, which targets protein for rapid degradation by ubiquitin-dependent proteolysis during the transition from mitosis to interphase. Defects in BUB1B are associated with tumor formation.

BUBR1 (BUB1B) Antibody (N-term) - References

Cahill, D.P., et al., Genomics 58(2):181-187 (1999).
Davenport, J.W., et al., Genomics 55(1):113-117 (1999).
Chan, G.K., et al., J. Cell Biol. 143(1):49-63 (1998).
Cahill, D.P., et al., Nature 392(6673):300-303 (1998).
Taylor, S.S., et al., J. Cell Biol. 142(1):1-11 (1998).