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BUBR1 (BUB1B) Antibody (N-term) Blocking peptide

Synthetic peptide
Catalog # BP8059a

Specification

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

Primary Accession O60566

BUBR1 (BUB1B) Antibody (N-term) Blocking peptide - 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
The synthetic peptide sequence used to generate the antibody AP8059a was selected from the N-term region of human BUB1B . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

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

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

- Blocking Peptides

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

BUBR1 (BUB1B) Antibody (N-term) Blocking peptide - 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) Blocking peptide - 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).