

BUB1B Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP8059b**Specification****BUB1B Antibody (Center) Blocking Peptide -
Product Information**Primary Accession [O60566](#)**BUB1B Antibody (Center) 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 [AP8059b](/products/AP8059b) was selected from the Center 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.

**BUB1B Antibody (Center) Blocking Peptide -
Protein Information****BUB1B Antibody (Center) 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 mitotin, 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.

**BUB1B Antibody (Center) 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).

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

**BUB1B Antibody (Center) Blocking Peptide
- Protocols**

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

- [Blocking Peptides](#)