

Rabbit anti-Human, Mouse BUB1B Polyclonal Antibody | anti-BUB1B antibody

BUB1B Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA323745	Rabbit	Human, Mouse	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

PRODUCT SYNONYMS

BUB1B; Polyclonal Antibody; BUB1B Antibody; Beta homolog of S. cerevisiae BUB 1; Beta homolog of S. cerevisiae budding uninhibited by benzimidazoles; BUB 1B; BUB1 budding uninhibited by benzimidazoles 1 homolog beta; Bub1A; BUB1B_HUMAN; BUB1beta; BUBR1; Budding Uninhibited by Benzimidazoles 1 beta; Budding uninhibited by benzimidazoles 1 homolog beta (yeast); hBUBR1; MAD3/BUB1 related protein kinase; MAD3/BUB1-related protein kinase; MAD3L; Mitotic checkpoint gene BUB1B; Mitotic checkpoint kinase MAD3L; Mitotic checkpoint serine/threonine protein kinase BUB1 beta; Mitotic checkpoint serine/threonine-protein kinase BUB1 beta; MVA1; OTTHUMP00000160319; Protein SSK1; SSK 1; SSK1; anti-BUB1B antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	IgG
Specificity	BUB1B antibody detects endogenous levels of total BUB1B
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	1050
Applicable Applications for anti-BUB1B antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide
Subcellular Location	Cytoplasm. Nucleus. Chromosome > Centromere > Kinetochore. Cytoplasm > Cytoskeleton > Centrosome. Cytoplasmic in interphase cells. Associates with the kinetochores in early prophase. Kinetochore localization requires BUB1, PLK1 and CASC5.
Tissue Specificity	Highly expressed in thymus followed by spleen. Preferentially expressed in tissues with a high mitotic index.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)

Western blot analysis of extracts from HeLa cells using BUB1B antibody.



IF (Immunofluorescence)

AAA323745 staining HeLa cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-BUB1B antibody

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.

Subunit Structure: Interacts with CENPE, CENPF, mitotin, PLK1 and BUB3. Part of a complex containing BUB3, CDC20 and BUB1B. Interacts with anaphase-promoting complex/cyclosome (APC/C). Interacts with KNL1.

Post-translational Modifications: Proteolytically cleaved by caspase-3 in a cell cycle specific manner. The cleavage might be involved in the durability of the cell cycle delay. Caspase-3 cleavage is associated with abrogation of the mitotic checkpoint. The major site of cleavage is at Asp-610. Acetylation at Lys-250 regulates its degradation and timing in anaphase entry. Ubiquitinated. Degraded by the proteasome. Sumoylated with SUMO2 and SUMO3. The sumoylation mediates the association with CENPE at the kinetochore. Autophosphorylated in vitro. Intramolecular autophosphorylation is stimulated by CENPE. Phosphorylated during mitosis and hyperphosphorylated in mitotically arrested cells. Phosphorylation at Ser-670 and Ser-1043 occurs at kinetochores upon mitotic entry with dephosphorylation at the onset of anaphase.

Similarity: The D-box targets the protein for rapid degradation by ubiquitin-dependent proteolysis during the transition from mitosis to interphase. The BUB1 N-terminal domain directs kinetochore localization and binding to BUB3. Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. BUB1 subfamily.

NCBI AND UNIPROT INFORMATION

NCBI GI #	59814247
NCBI GeneID	701
NCBI Accession #	NP_001202.4
NCBI GenBank Nucleotide #	NM_001211.5
UniProt Accession #	O60566; O60501; O60627; O60758; O75389; Q59HH6; Q8WV50; Q96KM4; B2R6U0; B4DL09; B4DLG3
Molecular Weight	Observed: 130 kD Predicted: 120 kDa
NCBI Official Full Name	mitotic checkpoint serine/threonine-protein kinase BUB1 beta
NCBI Official Synonym Full Names	BUB1 mitotic checkpoint serine/threonine kinase B
NCBI Official Symbol	BUB1B
NCBI Official Synonym Symbols	MVA1; SSK1; BUBR1; Bub1A; MAD3L; hBUBR1; BUB1beta
NCBI Protein Information	mitotic checkpoint serine/threonine-protein kinase BUB1 beta
UniProt Protein Name	Mitotic checkpoint serine/threonine-protein kinase BUB1 beta
UniProt Gene Name	BUB1B

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/polyclonal/bub1b-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/323745>