

Rabbit anti-Mouse, Rat Bub1 Polyclonal Antibody | anti-Bub1 antibody

Anti-Bub1 Antibody

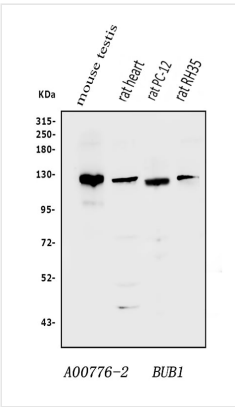
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125571	Rabbit	Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Western Blot

PRODUCT SYNONYMS

Bub1; Polyclonal Antibody; Anti-Bub1 Antibody; Mitotic checkpoint serine/threonine-protein kinase BUB1; mBUB1; BUB1A; BUB1; mitotic checkpoint serine/threonine kinase; anti-Bub1 antibody

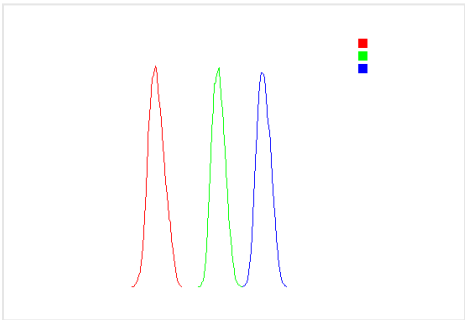
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for Bub1 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.01mg NaN ₃ .
Applicable Applications for anti-Bub1 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	E Coli-derived mouse Bub1 recombinant protein (Position: D40-K257).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



WB (Western Blot)

Figure 1. Western blot analysis of Bub1 using anti-Bub1 antibody (AAA125571). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: mouse testis tissue lysates Lane 2: rat heart tissue lysates Lane 3: rat PC-12 whole cell lysates Lane 4: rat RH35 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Bub1 antigen affinity purified polyclonal antibody (Catalog # AAA125571) at 0.25 μg/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Bub1 at approximately 122KD. The expected band size for Bub1 is at 122KD.



FCM/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of HEPA1-6 cells using anti-Bub1 antibody (AAA125571). Overlay histogram showing HEPA1-6 cells stained with AAA125571 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Bub1 Antibody (AAA125571, 1 μg/1x10⁶ cells) for 30 min at 20 degree C. DyLight[®]488 conjugated goat anti-rabbit IgG (5-10 μg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1 μg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

ADDITIONAL INFORMATION

Related Product Information for anti-Bub1 antibody	BUB1, also known as mitotic checkpoint serine/threonine kinase, is an enzyme that in humans is encoded by the BUB1 gene. It is mapped to 2q13. BUB1 is first identified in genetic screens of Saccharomyces cerevisiae. The protein is bound to kinetochores and plays a key role in the establishment of the mitotic spindle checkpoint and chromosome congression. The mitotic checkpoint kinase is evolutionary conserved in organisms as diverse as Saccharomyces cerevisiae and humans. Loss-of-function mutations or absence of BUB1 has been reported to result in aneuploidy, chromosomal instability (CIN) and premature senescence. The protein kinase BUB1 possesses versatile and distinct functions during the cell cycle, mainly in the SAC and chromosome alignment during metaphase.
References	1. "Entrez Gene: BUB1 BUB1 budding uninhibited by benzimidazoles 1 homolog (yeast)" 2. Cahill DP, Lengauer C, Yu J, Riggins GJ, Willson JK, Markowitz SD, Kinzler KW, Vogelstein B (March 1998). "Mutations of mitotic checkpoint genes in human cancers". Nature 392 (6673): 300-3. 3. Roberts BT, Farr KA, Hoyt MA (December 1994). "The Saccharomyces cerevisiae checkpoint gene BUB1 encodes a novel protein kinase". Mol. Cell. Biol. 14 (12): 8282-91.

NCBI AND UNIPROT INFORMATION

NCBI GI #	163937845
NCBI GeneID	12235
NCBI Accession #	NP_001106650.1
NCBI GenBank Nucleotide #	NM_001113179.1
UniProt Accession #	O08901; O09007
Molecular Weight	119,563 Da
NCBI Official Full Name	mitotic checkpoint serine/threonine-protein kinase BUB1 isoform 1
NCBI Official Synonym Full Names	budding uninhibited by benzimidazoles 1 homolog (S. cerevisiae)

NCBI Official Symbol	Bub1
NCBI Official Synonym Symbols	Bub1a; C80208; D2Xrf87; AL022991
NCBI Protein Information	mitotic checkpoint serine/threonine-protein kinase BUB1
UniProt Protein Name	Mitotic checkpoint serine/threonine-protein kinase BUB1
UniProt Gene Name	Bub1
UniProt Synonym Gene Names	mBUB1
UniProt Entry Name	BUB1_MOUSE

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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/bub1-antibody-direct-elisa-flow-cytometry-western-blot-elisa/125571>