

Bub1 (NT) antibody (pAb)

Rabbit Anti-Human/Mouse Bub1 (NT)

Instruction Manual

Catalog Number	PK-AB718-4229
Synonyms	Bub1 Antibody: Budding uninhibited by benzimidazoles 1
Description	Bub1 was initially identified as the mammalian homolog to the yeast protein through a cDNA screen. Bub1 encodes a kinase involved in the formation of the spindle checkpoint, an important mechanism that ensures high fidelity mitotic chromosome segregation. It is thought to be required for assembly of a functional inner centromere, sister chromatid cohesion via targeting of the Shugoshim protein and metaphase congression. Bub1 functions by phosphorylating cdc20, a member of the mitotic checkpoint complex and activating the spindle checkpoint. A related protein kinase Bub3 interacts with Bub1 and targets it to kinetochores prior to chromosome alignment. Mutations in bub1 have been associated with aneuploidy and several forms of cancer.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	Bub1 antibody was raised in rabbits against a 19 amino acid peptide from near the amino terminus of human Bub1.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Applications	E, WB, ICC, IF INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. Bub1 antibody can be used for detection of bub1 by Western blot at 2 - 4 µg/mL. Antibody can also be used for immunocytochemistry starting at 10 µg/mL. For immunofluorescence start at 20 µg/mL.
Images	Available upon request.
References	Pangilinan F, Li Q, Weaver T, et al. Mammalian BUB1 protein kinases: map positions and in vivo expression. <i>Genomics</i> 1997; 46:379-88. Williams GL, Roberts TM and Gjoerup OV. Bub1: Escapades in a cellular world. <i>Cell Cycle</i> 2007; 6:1699-704. Meraldi P and Sorger PK. A dual role for Bub1 in the spindle checkpoint and chromosome congression. <i>EMBO J.</i> 2005; 24:1621-33. Tang Z, Shu H, Oncel D, et al. Phosphorylation of cdc20 by bub1 provides a catalytic mechanism for APC/C inhibition by the spindle checkpoint. <i>Mol. Cell</i> 2004; 16:387-97.
Images	Available upon request.
Related Products	Cat.No. PK-AB718-4229P; Bub1 Peptide Cat.No. PK-AB718-1288; A-20 Cell Lysate

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