

[KD Validated] Anti-BUB1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

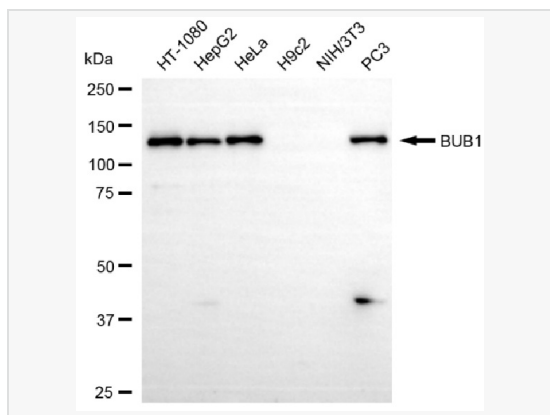
Catalog # R021448

Product Information

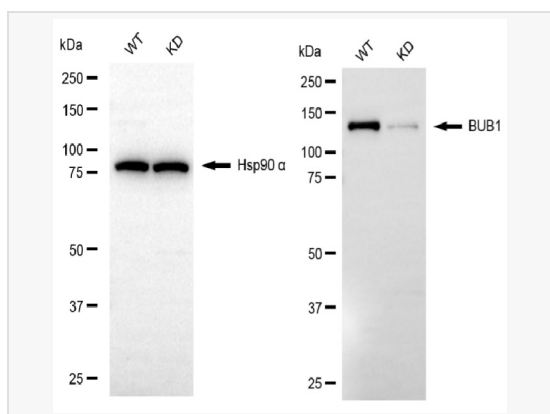
Application	WB, FC, IF (Cell)/ICC
Reactivity	Human
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	96B91K21
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Bub1
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-BUB1 Rabbit mAb [96B91K21] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

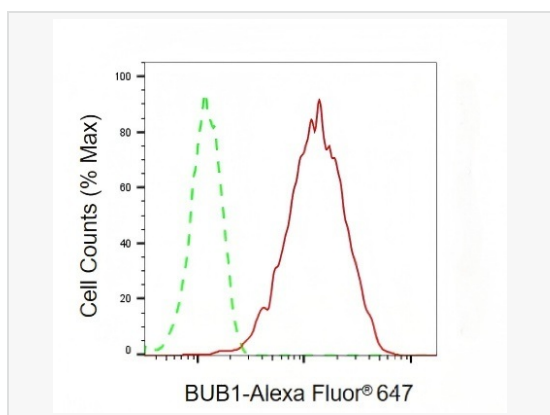
Synonyms	BUB1; BUB1 Mitotic Checkpoint Serine/Threonine Kinase; HBUB1; BUB1A; BUB1L; Mitotic Checkpoint Serine/Threonine-Protein Kinase BUB1; Budding Uninhibited By Benzimidazoles 1 (Yeast Homolog); Budding Uninhibited By Benzimidazoles 1 Homolog (Yeast); BUB1 Budding Uninhibited By Benzimidazoles 1 Homolog; Budding Uninhibited By Benzimidazoles 1 Homolog; Putative Serine/Threonine-Protein Kinase; Mitotic Spindle Checkpoint Kinase; EC 2.7.11.1; MCPH30.
Calculated MW	Calculated MW: 122 kDa, Observed MW: 130 kDa
Uniprot ID	O43683
Gene ID	699
Background	This gene encodes a serine/threonine-protein kinase that play a central role in mitosis. The encoded protein functions in part by phosphorylating members of the mitotic checkpoint complex and activating the spindle checkpoint. This protein also plays a role in inhibiting the activation of the anaphase promoting complex/cyclosome. This protein may also function in the DNA damage response. Mutations in this gene have been associated with aneuploidy and several forms of cancer. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Jul 2013].
Cellular Location	Nucleus. Chromosome > centromere > kinetochore. Nuclear in interphase cells. Accumulates gradually during G1 and S phase of the cell cycle, peaks at G2/M, and drops dramatically after mitosis. Localizes to the outer kinetochore. Kinetochore localization is required for normal mitotic timing and checkpoint response to spindle damage and occurs very early in prophase. AURKB, CASC5 and INCENP are required for kinetochore localization.



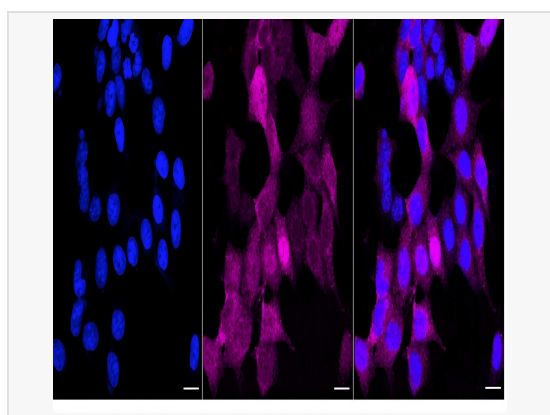
Western blotting analysis using BUB1 antibody (R021448). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with BUB1 antibody (R021448, 1:5,000) and HRP-conjugated goat anti rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using BUB1 antibody (R021448). BUB1 expression in wild type (WT) and BUB1 knockdown (KD) HSHC cells with 20 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with BUB1 antibody (R021448, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Flow cytometric analysis of BUB1 expression in HAP-1 cells using BUB1 antibody (R021448, 1:2,000). Green, isotype control; red, BUB1.



Immunocytochemical staining of HAP-1 cells with BUB1 antibody (R021448, 1:1,000). Nuclei were stained blue with DAPI; BUB1 was stained magenta with Alexa Fluor[®] 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 μ m.