

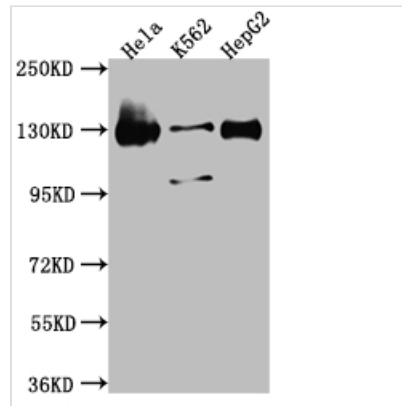


BUB1 Antibody

Product Code	CSB-RA281837A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	O43683
Immunogen	A synthesized peptide derived from human Bub1
Species Reactivity	Human
Tested Applications	ELISA, WB; Recommended dilution: WB:1:500-1:5000
Relevance	<p>Serine/threonine-protein kinase that performs 2 crucial functions during mitosis: it is essential for spindle-assembly checkpoint signaling and for correct chromosome alignment. Has a key role in the assembly of checkpoint proteins at the kinetochore, being required for the subsequent localization of CENPF, BUB1B, CENPE and MAD2L1. Required for the kinetochore localization of PLK1. Required for centromeric enrichment of AUKRB in prometaphase. Plays an important role in defining SGO1 localization and thereby affects sister chromatid cohesion. Acts as a substrate for anaphase-promoting complex or cyclosome (APC/C) in complex with its activator CDH1 (APC/C-Cdh1). Necessary for ensuring proper chromosome segregation and binding to BUB3 is essential for this function. Can regulate chromosome segregation in a kinetochore-independent manner. Can phosphorylate BUB3. The BUB1-BUB3 complex plays a role in the inhibition of APC/C when spindle-assembly checkpoint is activated and inhibits the ubiquitin ligase activity of APC/C by phosphorylating its activator CDC20. This complex can also phosphorylate MAD1L1. Kinase activity is essential for inhibition of APC/CCDC20 and for chromosome alignment but does not play a major role in the spindle-assembly checkpoint activity. Mediates cell death in response to chromosome missegregation and acts to suppress spontaneous tumorigenesis.</p>
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cancer; Cell biology
Gene Names	BUB1
Accession NO.	9C11



Image



Western Blot

Positive WB detected in: HeLa whole cell lysate, K562 whole cell lysate, HepG2 whole cell lysate

All lanes: Bub1 antibody at 1:1000

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 123, 116, 120 kDa

Observed band size: 130 kDa

Description

BUB1 is a conserved Serine/Threonine Kinase that is required for the spindle assembly checkpoint (SAC) during mitosis. BUB1 supports chromosomal alignment and contributes to the regulation of mitotic length in addition to its role in SAC signaling. BUB1 is required for checkpoint regulation and proper chromosomal progression. BUB1 deficiency causes the buildup of misaligned chromatids, in which both sister kinetochores are abnormally connected to microtubules, a phenotype that is distinct from Mad and Bub deficiency.

The first step in the preparation of recombinant BUB1 antibody is to obtain the BUB1 antibody gene. The heavy and light chain genes of the antibody were constructed into a plasma vector and then transfected into suspended mammalian cells transiently. After expression verification, cell supernatant was collected in expanded culture and purified recombinant BUB1 antibody was obtained using Affinity-chromatography. This recombinant BUB1 antibody has been validated for the detection of BUB1 protein from Human in the ELISA, WB.