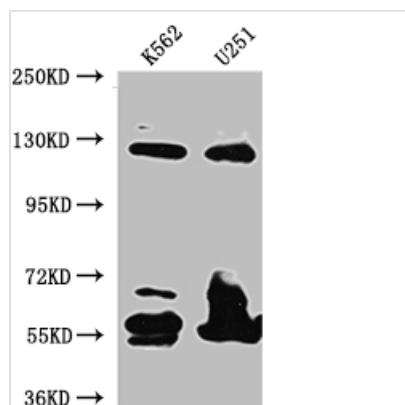




BUB1B Recombinant Monoclonal Antibody

Product Code	CSB-RA263021A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	O60566
Immunogen	A synthesized peptide derived from human BubR1
Species Reactivity	Human
Tested Applications	ELISA, WB, FC; Recommended dilution: WB:1:500-1:5000, FC:1:20-1:200
Relevance	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.
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	Epigenetics and Nuclear Signaling; Cancer; Cell biology
Gene Names	BUB1B
Clone No.	7H4
Image	



Western Blot

Positive WB detected in: K562 whole cell lysate, U-251 whole cell lysate

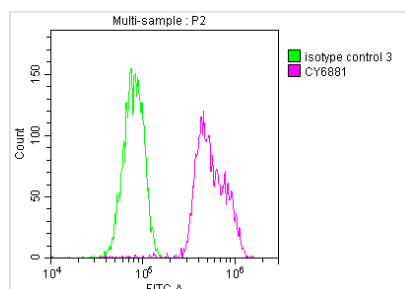
All lanes: BubR1 antibody at 1:1000

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 120, 106, 122 kDa

Observed band size: 125 kDa



Overlay histogram showing HeLa cells stained with CSB-RA263021A0HU (red line) at 1:50. The cells were fixed with 70% Ethylalcohol (18h) and then incubated in 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody ($1\mu\text{g}/1*10^6$ cells) for 1 h at 4?. The secondary antibody used was FITC-conjugated goat anti-rabbit IgG (H+L) at 1/200 dilution for 30min at 4?. Control antibody (green line) was Rabbit IgG ($1\mu\text{g}/1*10^6$ cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

The BUB1B recombinant monoclonal antibody is designed for the detection of human BUB1B protein in ELISA, WB, and FC applications and is produced using recombinant DNA technology. The BUB1B monoclonal antibody's gene is synthesized after sequencing the cDNA of the BUB1B antibody-producing hybridomas, which are produced by fusing myeloma cells with B cells that are isolated from an animal that was immunized with a synthesized peptide derived from human BUB1B. The synthesized gene is cloned into a vector, which is transfected into cells for cultivation. The resulting BUB1B recombinant monoclonal antibody is purified using affinity chromatography from the cell culture supernatant.

The BUB1B protein, also known as BUBR1, plays a crucial role in ensuring the accurate separation of chromosomes during cell division (mitosis). It is a key component of the spindle checkpoint, a surveillance mechanism that monitors the attachment of chromosomes to spindle microtubules and ensures that each chromosome is pulled apart correctly during mitosis. Additionally, BUB1B has been shown to have roles in other cellular processes such as DNA damage response and regulation of gene expression.