

BubR1 antibody (mAb)

Catalog Nos: 39747, 39748

RRID: AB_2793329

Clone: 8G1

Isotype: IgG

Application(s): ICC, IF

Reactivity: Human, Mouse, Wide Range Predicted

Quantities: 100 µg, 10 µg

Purification: Protein G Chromatography

Host: Mouse

Concentration: 1 µg/µl

Molecular Weight: 130 kDa

Background: BubR1 (also known as BUB1B, MAD3L and SSK1) is an essential component of the mitotic spindle integrity checkpoint and is required for the normal progression of mitosis, and thus can act as a tumor suppressor. It encodes a serine / threonine kinase localized to the kinetochore and is involved in spindle checkpoint function. BubR1 plays a role in the inhibition of the anaphase-promoting complex (APC), delaying the onset of anaphase and ensuring proper chromosome segregation. The mitotic checkpoint delays anaphase until all chromosomes are properly attached to the mitotic spindle and the chromosomes are aligned on the metaphase plate. Another function involves the monitoring of kinetochore activities that depend on the kinetochore motor CENP-E. It is also implicated in triggering apoptosis in polyploid cells that exit aberrantly from mitotic arrest. BubR1 is autophosphorylated, and BubR1 kinase activity is stimulated by association with the centromere protein CENP-E. Phosphorylation at Ser670 and Ser1043 occurs at kinetochores upon mitotic entry with dephosphorylation occurring at the onset of anaphase. Impaired spindle checkpoint function has been found in many forms of cancer. Defects in BubR1 are involved in mosaic variegated aneuploidy syndrome (MVA) and premature chromatid separation trait (PCS). BubR1 interacts with CENP-E, CENP-F, mitosin, PLK1, CASC5, BUB3 and the anaphase-promoting complex (APC). It is part of a complex containing BUB3 and CDC2.

Immunogen: This BubR1 antibody was raised against recombinant protein corresponding to amino acids 1-350 of human BubR1.

Buffer: Purified IgG in 70 mM Tris (pH 8), 105 mM NaCl, 31 mM glycine, 0.07 mM EDTA, 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

Application Notes:

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.