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BubR1 Antibody

Rabbit mAb
Catalog # AP91311

Product Information

Application	WB, IHC, FC, IP
Primary Accession	O60566
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	hBUBR1; Mitotic checkpoint kinase MAD3L Protein SSK1; BUB1B; BUBR1; MAD3L; SSK1;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	119545

Additional Information

Dilution	WB 1:1000~1:5000 IHC 1:50~1:200 IP 1:30 FC 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human BubR1
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	BUB1B (HGNC:1149)
Function	Kinase which is a component of the mitotic checkpoint complex (MCC), which inhibits APC/C and delays chromosome segregation until all chromosomes are properly attached to the mitotic spindle (PubMed:27509861, PubMed:31201382). The MCC, which consists of CDC20, MAD2L1/MAD2, BUB1B/BUBR1 and BUB3, is a key player of the spindle assembly checkpoint (PubMed:11702782, PubMed:14706340, PubMed:15020684, PubMed:27509861, PubMed:31201382). The MCC-bound APC/C complex is inactive and this delays the metaphase/anaphase transition (PubMed:10477750, PubMed:27509861). When the spindle assembly checkpoint is silenced, the MCC-APC/C complex recruits the E2 enzyme UBCH10 and triggers the auto-ubiquitination of CDC20 in the MCC, thereby

reactivating APC/C for transition into anaphase (PubMed:27509861). MCC also monitors kinetochore activities that depend on the kinetochore motor CENPE (PubMed:15020684). Required for kinetochore localization of CENPE (PubMed:15020684). Negatively regulates PLK1 activity in interphase cells and suppresses centrosome amplification (PubMed:19503101). May play a role for tumor suppression (By similarity).

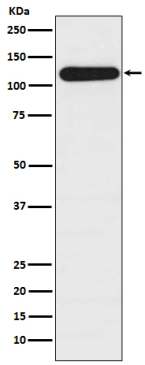
Cellular Location

Cytoplasm. Nucleus. Chromosome, centromere, kinetochore. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome Note=Cytoplasmic in interphase cells. Associates with the kinetochores in early prophase. Kinetochore localization requires BUB1, PLK1 and KNL1.

Tissue Location

Highly expressed in thymus followed by spleen. Preferentially expressed in tissues with a high mitotic index

Images



Western blot analysis of BubR1 expression in HepG2 cell lysate.

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