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BubR1 Rabbit mAb

Catalog # AP76413

Product Information

Application	WB, IHC-P, FC, IP
Primary Accession	O60566
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	119545

Additional Information

Gene ID	701
Other Names	BUB1B
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A FC~~1:50-1:100 IP~~1:20-1:50
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

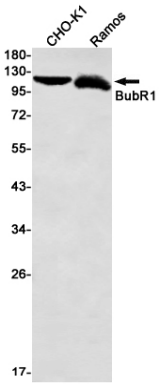
Name	BUB1B (HGNC:1149)
Function	Kinase which is a component of the mitotic checkpoint complex (MCC), which inhibits APC/C and delays chromosome segregation until all chromosomes are properly attached to the mitotic spindle (PubMed:27509861, PubMed:31201382). The MCC, which consists of CDC20, MAD2L1/MAD2, 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

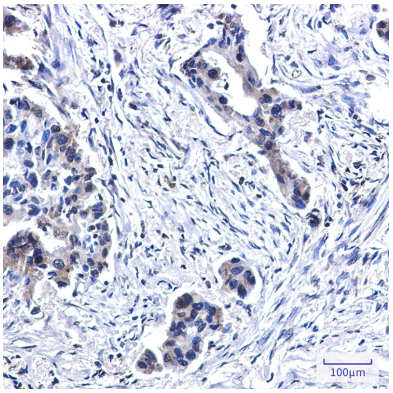
Background

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.

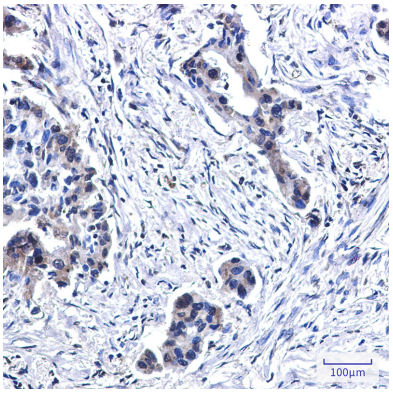
Images

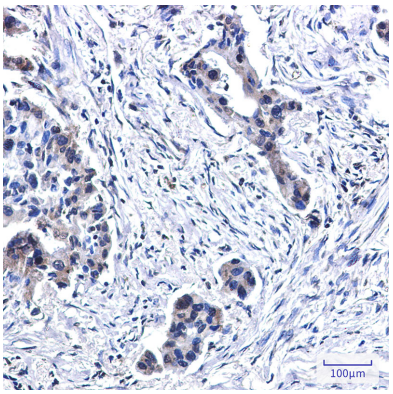


Western blot analysis of BubR1 in CHO-K1, Ramos lysates using BUBR1 antibody.



Immunohistochemistry analysis of paraffin-embedded Human lung cancer using BubR1 antibody.High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.





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