

KD-Validated Anti-BubR1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI2337

Specification

Isotype

Gene Name

KD-Validated Anti-BubR1 Rabbit Monoclonal Antibody - Product Information

Application WB, FC, ICC
Primary Accession
Reactivity Human
Clonality Monoclonal

Calculated MW Predicted, 120 kDa; Observed, 120 kDa

KDa BUB1B

Rabbit IgG

Aliases BUB1 Mitotic Checkpoint Serine/Threonine

Kinase B; BUBR1; MAD3L; SSK1; Bub1A;

Mitotic Checkpoint

Serine/Threonine-Protein Kinase BUB1
Beta: MAD3/BUB1-Related Protein Kinase:

Mitotic Checkpoint Kinase MAD3L; HBUBR1; Budding Uninhibited By

Benzimidazoles 1 (Yeast Homolog), Beta; Budding Uninhibited By Benzimidazoles 1

Homolog Beta (Yeast); Budding

Uninhibited By Benzimidazoles 1 Homolog

Beta; BUB1B, Mitotic Checkpoint

Serine/Threonine Kinase; Protein SSK1; EC

2.7.11.1; BUB1beta; MVA1

Immunogen A synthesized peptide derived from human

BubR1

KD-Validated Anti-BubR1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 701

Other Names

Mitotic checkpoint serine/threonine-protein kinase BUB1 beta, 2.7.11.1, MAD3/BUB1-related protein kinase, hBUBR1, Mitotic checkpoint kinase MAD3L, Protein SSK1, BUB1B, BUBR1, MAD3L, SSK1

KD-Validated Anti-BubR1 Rabbit Monoclonal Antibody - Protein Information

Name BUB1B

Synonyms BUBR1, MAD3L, SSK1

Function

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.

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

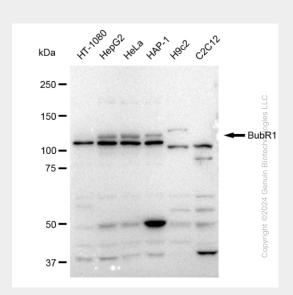
Highly expressed in thymus followed by spleen. Preferentially expressed in tissues with a high mitotic index

KD-Validated Anti-BubR1 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

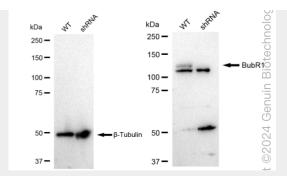
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-BubR1 Rabbit Monoclonal Antibody - Images

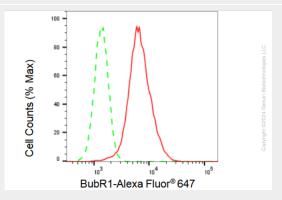


Western blotting analysis using anti-BubR1 antibody (Cat#AGI2337). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-BCL11 transcription factor B antibody (Cat#AGI2337, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

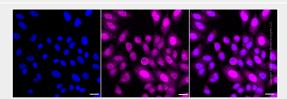




Western blotting analysis using anti-BubR1 antibody (Cat#AGI2337). BubR1 expression in wild type (WT) and BubR1 shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-BubR1 antibody (Cat#AGI2337, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of BubR1 expression in HepG2 cells using BubR1 antibody (Cat#AGI2337, 1:2,000). Green, isotype control; red, BubR1.



Immunocytochemical staining of HepG2 cells with BubR1 antibody (Cat#AGI2337, 1:1,000). Nuclei were stained blue with DAPI; BubR1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: $20~\mu m$.