

## BUB1B / BubR1 Antibody (clone 3F2)

Mouse Monoclonal Antibody Catalog # ALS13282

## **Specification**

## BUB1B / BubR1 Antibody (clone 3F2) - Product Information

Application WB, IHC
Primary Accession O60566
Reactivity Human
Host Mouse
Clonality Monoclonal
Calculated MW 120kDa KDa

## BUB1B / BubR1 Antibody (clone 3F2) - 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

# **Reconstitution & Storage**

Store at -20°C. Aliquot to avoid freeze/thaw cycles.

### **Precautions**

BUB1B / BubR1 Antibody (clone 3F2) is for research use only and not for use in diagnostic or therapeutic procedures.

### BUB1B / BubR1 Antibody (clone 3F2) - 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**

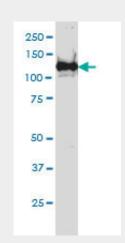
Highly expressed in thymus followed by spleen. Preferentially expressed in tissues with a high mitotic index

# BUB1B / BubR1 Antibody (clone 3F2) - Protocols

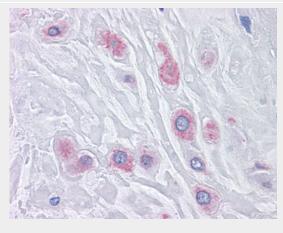
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# BUB1B / BubR1 Antibody (clone 3F2) - Images



BUB1B monoclonal antibody, clone 3F2 Western blot of BUB1B expression in HeLa NE.



Anti-BUB1B / BubR1 antibody IHC of human placenta.

BUB1B / BubR1 Antibody (clone 3F2) - 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. 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.

# BUB1B / BubR1 Antibody (clone 3F2) - References

Donadelli R.,et al.Biochem. Biophys. Res. Commun. 246:881-887(1998). Taylor S.S.,et al.J. Cell Biol. 142:1-11(1998). Chan G.K.T.,et al.J. Cell Biol. 143:49-63(1998). Cahill D.P.,et al.Nature 392:300-303(1998). Davenport J.W.,et al.Genomics 55:113-117(1999).