有丝分裂检验点蛋白 BubR1 抗体

产品货号： mlR5726

英文名称： BubR1

中文名称： 有丝分裂检验点蛋白 BubR1 抗体

别　　名： Beta homolg of S. cerevisiae BUB 1; Beta homolg of S. cerevisiae budding uninhibited by benzimidazoles; BUB 1B; BUB1 budding uninhibited by benzimidazoles 1 homolog beta; Bub1A; BUB1B; BUB1B_HUMAN; BUB1beta; BUBR1; Budding Uninhibited by Benzimidazoles 1 beta; hBUBR1; MAD3/BUB1 related protein kinase; MAD3/BUB1-related protein kinase; MAD3L; Mitotic checkpoint gene BUB1B; Mitotic checkpoint kinase MAD3L; Mitotic checkpoint serine/threonine protein kinase BUB1 beta; Mitotic checkpoint serine/threonine-protein kinase BUB1 beta; Protein SSK1; SSK 1; SSK1.

研究领域： 肿瘤　细胞生物　免疫学　染色质和核信号　细胞周期蛋白　激酶和磷酸酶

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应： Human, Mouse, Cow, Rabbit,

产品应用： WB=1:500-2000 ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 IF=1:100-500 （石蜡切片需

做抗原修复）

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

分 子 量： 120kDa

细胞定位： **细胞核 细胞浆**

性　　状： Lyophilized or Liquid

浓　　度： 1mg/ml

免 疫 原： KLH conjugated synthetic peptide derived from human BubR1:751-850/1050

亚　　型： IgG

纯化方法： affinity purified by Protein A

储 存 液： 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件： Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed : **PubMed**

产品介绍 **:** This gene encodes a kinase involved in spindle checkpoint function. The protein has been localized to the kinetochore and plays a role in the inhibition of the anaphase-promoting complex/cyclosome (APC/C), delaying the onset of anaphase and ensuring proper chromosome segregation. Impaired spindle checkpoint function has been found in many forms of cancer. [provided by RefSeq, Jul 2008]

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.

Subunit:

Interacts with CENPE, CENPF, mitosin, PLK1 and BUB3. Part of a complex containing BUB3, CDC20 and BUB1B. Interacts with anaphase-promoting complex/cyclosome (APC/C). Interacts with CASC5.

Subcellular Location:

Cytoplasm. Nucleus. Chromosome, centromere, kinetochore. Cytoplasm, cytoskeleton, centrosome.

Tissue Specificity:

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

Post-translational modifications:

Proteolytically cleaved by caspase-3 in a cell cycle specific manner. The cleavage might be involved in the durability of the cell cycle delay. Caspase-3 cleavage is associated with abrogation of the mitotic checkpoint. The major site of cleavage is at Asp-610.

Acetylation at Lys-250 regulates its degradation and timing in anaphase entry.

Ubiquitinated. Degraded by the proteasome.

Sumoylated with SUMO2 and SUMO3. The sumoylation mediates the association with CENPE at the kinetochore.

Autophosphorylated in vitro. Intramolecular autophosphorylation is stimulated by CENPE. Phosphorylated during mitosis and hyperphosphorylated in mitotically arrested cells. Phosphorylation at Ser-670 and Ser-1043 occurs at kinetochores upon mitotic entry with dephosphorylation at the onset of anaphase.

DISEASE:

Note=Defects in BUB1B are associated with tumor formation.

Premature chromatid separation trait (PCS) [MIM:176430]:Consists of separate and splayed chromatids with discerniblecentromeres and involves all or most chromosomes of a metaphase. Itis found in up to 2% of metaphases in cultured lymphocytes fromapproximately 40% of normal individuals. When PCS is present in 5%or more of cells, it is known as the heterozygous PCS trait and hasno obvious phenotypic effect, although some have reported decreasedfertility. Inheritance is autosomal dominant. Note=The disease iscaused by mutations affecting the gene represented in this entry.

Mosaic variegated aneuploidy syndrome 1 (MVA1)[MIM:257300]: A severe developmental disorder characterized bymosaic aneuploidies, predominantly trisomies and monosomies,involving multiple different chromosomes and tissues. Affectedindividuals typically present with severe intrauterine growthretardation and microcephaly. Eye anomalies, mild dysmorphism,variable developmental delay, and a broad spectrum of additionalcongenital abnormalities and medical conditions may also occur. Therisk of malignancy is high, with rhabdomyosarcoma, Wilms tumor andleukemia reported in several cases. Note=The disease is caused bymutations affecting the gene represented in this entry. MVA1 iscaused by biallelic mutations in the BUB1B gene.

Similarity:

Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. BUB1 subfamily.

Contains 1 BUB1 N-terminal domain.

Contains 1 protein kinase domain.

SWISS:

O60566

Gene ID:

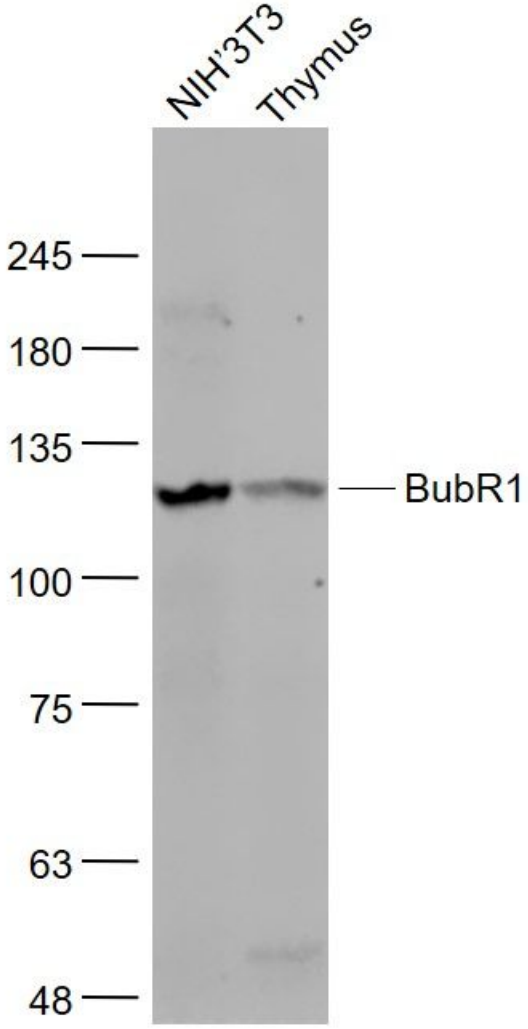
701

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

BubR1 是存在于哺乳动物中的有丝分裂检查点基因家族 Mad3 的同源基因,其编码蛋白 BubR1 是一个多结构域蛋白,在监测细胞有丝分裂前中期向后期转化的过程中扮演重要的角色。

产品图片


NIH'3T3
Thymus
245
180
135
100
75
63
48
BubR1