



BUB1 Monoclonal Antibody

Catalog No	YP-mAb-16667
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB
Gene Name	BUB1
Protein Name	Mitotic checkpoint serine/threonine-protein kinase BUB1
Immunogen	The antiserum was produced against synthesized peptide derived from human BUB1. AA range:781-830
Specificity	BUB1 Monoclonal Antibody detects endogenous levels of BUB1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	BUB1; BUB1L; Mitotic checkpoint serine/threonine-protein kinase BUB1; hBUB1; BUB1A
Observed Band	120kD
Cell Pathway	Nucleus. Chromosome, centromere, kinetochore. Nuclear in interphase cells. Accumulates gradually during G1 and S phase of the cell cycle, peaks at G2/M, and drops dramatically after mitosis. Localizes to the outer kinetochore. Kinetochore localization is required for normal mitotic timing and checkpoint response to spindle damage and occurs very early in prophase. AURKB, KNL1 and INCENP are required for kinetochore localization (By similarity).
Tissue Specificity	High expression in testis and thymus, less in colon, spleen, lung and small intestine. Expressed in fetal thymus, bone marrow, heart, liver, spleen and thymus. Expression is associated with cells/tissues with a high mitotic index.
Function	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,disease:Defects in BUB1 are associated with tumor formation.,domain:CD1 domain directs kinetochore localization and binding to BUB3.,enzyme regulation:Autophosphorylated when the cells enters mitosis.,function:Involved in cell cycle checkpoint enforcement. Can interact and phosphorylate BUB3.,induction:Inhibited by phorbol 12-myristate 13-acetate (PMA).,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. BUB1



subfamily.,similarity:Contains 1 CD1 domain.,similarity:Contains 1 protein kinase domain.,subcellular location:Nuclear in interphase cells. Kinetochore localization is required for normal mitotic timing and checkpoint response to spindle damage.,tissue specificity:High expressio

Background

This gene encodes a serine/threonine-protein kinase that play a central role in mitosis. The encoded protein functions in part by phosphorylating members of the mitotic checkpoint complex and activating the spindle checkpoint. This protein also plays a role in inhibiting the activation of the anaphase promoting complex/cyclosome. This protein may also function in the DNA damage response. Mutations in this gene have been associated with aneuploidy and several forms of cancer. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Jul 2013],

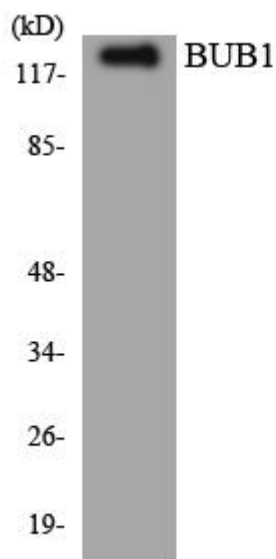
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using BUB1 Monoclonal Antibody