Product Name: BUB1 Rabbit Polyclonal Antibody
Catalog #: APRab07693
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Rat,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,ELISA 1:20000-1:40000
Molecular Weight	120kDa

Antigen Information

Gene Name	BUB1
Alternative Names	BUB1; BUB1L; Mitotic checkpoint serine/threonine-protein kinase BUB1; hBUB1; BUB1A
Gene ID	699.0
SwissProt ID	O43683
Immunogen	The antiserum was produced against synthesized peptide derived from human BUB1. AA range:781-830

Background

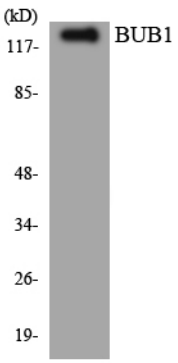
This gene encodes a serine/threonine-protein kinase that play a central role in mitosis. The encoded protein functions in part by

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],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 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.,

Research Area

Cell_Cycle_G1S;Cell_Cycle_G2M_DNA;Oocyte meiosis;Progesterone-mediated oocyte maturation;

Image Data



Western blot analysis of the lysates from HUVECcells using BUB1 antibody.