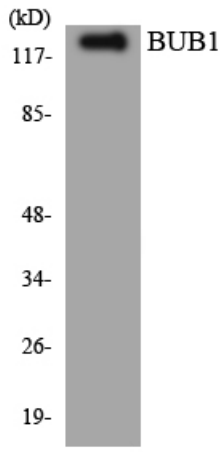
# BUB1 Polyclonal Antibody

| | |
|---|---|
| **Catalog No** | BYab-16667 |
| **Isotype** | IgG |
| **Reactivity** | Human;Rat;Mouse; |
| **Applications** | WB;ELISA |
| **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 Polyclonal Antibody detects endogenous levels of BUB1 protein. |
| **Formulation** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide. |
| **Source** | Polyclonal, Rabbit,IgG |
| **Purification** | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. |
| **Dilution** | Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications. |
| **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 the lysates from HUVECcells using BUB1 antibody.