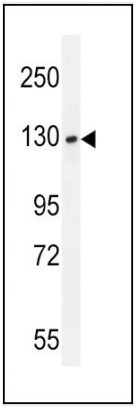
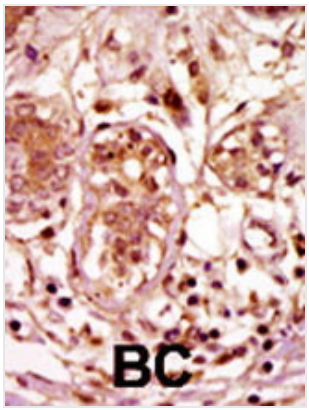
BUB1 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	BUB1, Polyclonal Antibody
Full Product Name	BUB1, CT (Mitotic Checkpoint Serine/Threonine-protein Kinase BUB1, hBub1, BUB1A, BUB1L) (Azide free) (HRP)
Product Gene Name	anti-BUB1 antibody
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with Horseradish Peroxidase (HRP).
Purity/Purification	Purified by Protein G Affinity Chromatography.
Specificity	Recognizes human BUB1A.
Preparation and Storage	Store product at 4 degree C if to be used immediately within two weeks. For long-term storage, aliquot to avoid repeated freezing and thawing and store at -20 degree C. Aliquots are stable at -20 degree C for 12 months after receipt. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. Note: Sodium azide is a potent inhibitor of peroxidase and should not be added to HRP conjugates. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap.
Molecular Weight	122,375 Da
Chromosome Location	Chromosome: 2; NC_000002.11 (111395409..111435684, complement). Location: 2q14
OMIM	602452
3D Structure	ModBase 3D Structure for O43683
Immunogen	Synthetic peptide selected from the C-terminal region of human BUB1A (KLH).
Conjugate	HRP
Note	Preservative Free
Product Categories/Family for anti-BUB1 antibody	Antibodies; DNA Replication; Repair
Applications Tested/Suitable for anti-BUB1 antibody	Immunohistochemistry (IHC), ELISA (EIA), Western Blot (WB)
Application Notes for anti-BUB1 antibody	IHC: 1:50-1:100 ELISA: 1:1,000 WB: 1:100-1:500 Applications are based on unconjugated antibody.
Related Product Information for anti-BUB1 antibody	MBS6465999 is an antibody targeting BUB1. Also known as BUB1, CT (Mitotic Checkpoint Serine/Threonine-protein Kinase BUB1, hBub1, BUB1A, BUB1L) (Azide free) (HRP). Reactive in Human. Host: Rabbit.
Product References and Citations for anti-BUB1 antibody	1. Shichiri, M., et al., Cancer Res. 62(1):13-17 (2002). 2. Cayrol, C., et al., Biochem. Biophys. Res. Commun. 298(5):720-730 (2002). 3. Nakagawa, H., et al., Oncol. Rep. 9(6):1229-1232 (2002). 4. Ru, H.Y., et al., Oncogene 21(30):4673-4679 (2002). 5. Lin, S.F., et al., Leuk. Lymphoma 43(2):385-391 (2002).
Other Notes	Small volumes of anti-BUB1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



Western Blot (WB) of anti-BUB1 antibody
BUB1A Antibody (F1058) western blot analysis in T47D cell line lysates (35ug/lane).This demonstrates the BUB1A antibody detected the BUB1A protein (arrow).



Immunohistochemistry (IHC) of anti-BUB1 antibody
Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for BUB1. It may not necessarily be applicable to this product.

NCBI GI #	4757878
NCBI GeneID	699
NCBI Accession #	NP_004327.1
UniProt Primary Accession #	O43683
UniProt Secondary Accession #	O43430; O43643; O60626; Q53QE4
UniProt Related Accession #	O43683
GenBank Nucleotide #	NM_004336.3
NCBI Official Full Name	mitotic checkpoint serine/threonine-protein kinase BUB1
NCBI Official Synonym Full Names	BUB1 mitotic checkpoint serine/threonine kinase
NCBI Official Symbol	BUB1
NCBI Official Synonym Symbols	BUB1A; BUB1L; hBUB1
UniProt Protein Name	Mitotic checkpoint serine/threonine-protein kinase BUB1
UniProt Synonym Protein Names	BUB1A
Protein Family	Checkpoint serine/threonine-protein kinase
UniProt Gene Name	BUB1
UniProt Synonym Gene Names	BUB1L; hBUB1
UniProt Entry Name	BUB1_HUMAN
NCBI Protein Information	mitotic checkpoint serine/threonine-protein kinase BUB1; mitotic spindle checkpoint kinase; putative serine/threonine-protein kinase; budding uninhibited by benzimidazoles 1 homolog; BUB1 budding uninhibited by benzimidazoles 1 homolog
NCBI Summary for BUB1	This gene encodes a kinase involved in spindle checkpoint function. The kinase functions in part by phosphorylating a member of the miotic checkpoint complex and activating the spindle checkpoint. Mutations in this gene have been associated with aneuploidy and several forms of cancer. [provided by RefSeq, Jul 2008]

UniProt Comments for BUB1	BUB1: a mitotic-checkpoint protein kinase of the BUB family. Autophosphorylated when the cells enters mitosis. Kinetochore localization is required for normal mitotic timing and checkpoint response to spindle damage. 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. LOF mutations seen in two colon cancer cell lines exhibiting chromosomal instability, in several leukemias and lymphomas, and in a pancreatic cancer cell line. BUB1 functions in mitotic spindle assembly, and may cause chromosomal instability. In mouse BRCA2 knockouts, mutations in BUB1 and BUBR1 are frequently seen in the resulting tumors. BUB1 and BUBR1 are overexpressed, but not mutated, in many gastric cancers. Protein type: Kinase, protein; EC 2.7.11.1; Protein kinase, Ser/Thr (non-receptor); Protein kinase, Other; Cell cycle regulation; Other group; BUB family Chromosomal Location of Human Ortholog: 2q14 Cellular Component: nucleoplasm; kinetochore; membrane; cytoplasm; cytosol; condensed nuclear chromosome, pericentric region Molecular Function: protein serine/threonine kinase activity; protein binding; ATP binding; protein kinase activity Biological Process: cell proliferation; mitosis; viral reproduction; apoptosis; cell division; mitotic cell cycle checkpoint; mitotic cell cycle spindle assembly checkpoint; regulation of chromosome segregation; regulation of sister chromatid cohesion; mitotic cell cycle; protein amino acid phosphorylation; chromosome segregation
Research Articles on BUB1	**1.** the molecular mechanism of DNA damage-induced Bub1 activation and highlight a critical role of Bub1 in DNA damage response
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-antibody/bub1/6465999