

## **Bub3 Antibody**



Orders: 877-616-CELL (2355) orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com

cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

## For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity: H M R Hm Mk	Sensitivity: Endogenous	<b>MW (kDa):</b> 40	Source/Isotype: Rabbit	<b>UniProt ID:</b> #043684	Entrez-Gene Id: 9184
Product Usage Information	2	<b>Application</b> Western Blotting			<b>Dilution</b> 1:1000	
Storage		Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 $\mu$ g/ml BSA and 50% glycerol. Store at – 20°C. Do not aliquot the antibody.				
Specificity/Sensitivity		Bub3 Antibody detects endogenous levels of total Bub3 protein.				
Source / Purification		Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to carboxy-terminal residues of human Bub3.				
Background		The Mitotic Checkpoint Complex (MCC), which contains Bub1, Bub1b, Bub3, Mad2, and Cdc20, controls chromosome segregation and monitors kinetochore-microtubule interactions (1). During mitosis, the MCC complex inhibits the ubiquitin ligase activity of the Anaphase Promoting Complex/Cyclosome (APC/C), thereby preventing cells with unaligned chromosomes from prematurely entering anaphase (2). Research studies have shown that Bub1b and Bub1 kinases are mutated in several types of human malignancies including hematopoietic, colorectal, lung, and breast cancers (3). Biallelic mutations in Bub1b have been found in mosaic variegated aneuploidy syndrome and premature chromatid separation syndrome (4). Bub1b mouse germline knockouts are embryonic lethal with heterozygous animals displaying genetic instability, early aging phenotypes, and increased cancer susceptibility (5). Bub3 binds both Bub1 and Bub1b, facilitating their recruitment to kinetochores (6), and is required for functional microtubule-kinetochore interactions (7).				
Background References		<ol> <li>Fukagawa, T. (2008) Front Biosci 13, 2705-13.</li> <li>Chen, R.H. (2007) J Biomed Sci 14, 475-9.</li> <li>Dai, W. et al. (2004) Cancer Res 64, 440-5.</li> <li>Kops, G.J. et al. (2005) Nat Rev Cancer 5, 773-85.</li> <li>Baker, D.J. et al. (2004) Nat Genet 36, 744-9.</li> <li>Taylor, S.S. et al. (1998) J Cell Biol 142, 1-11.</li> <li>Logarinho, E. et al. (2008) Mol Biol Cell 19, 1798-813.</li> </ol>				

**Species Reactivity** Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat

dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key W: Western Blotting

Cross-Reactivity Key H: Human M: Mouse R: Rat Hm: Hamster Mk: Monkey

Trademarks and Patents Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for the property of their respective owners are the property of their respective owners. Visit cellsignal.com/trademarks for the property of their respective owners are the property of their respective owners. Visit cells are the property of their respective owners are the property of their respective owners. Visit cells are the property of their respective owners are the property of their respective owners. Visit cells are the property of their respective owners are the property of their respective owners are the property of their respective owners. Visit cells are the property of their respective owners are the property of their respective owners are the property of the p

more information.

**Limited Uses**Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's

the following terms apply to Products provided by CS1, its affiliates of its distributors. Any customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no

force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for

Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.

Orders: 877-616-CELL (2355) • orders@cellsignal.com • Support: 877-678-TECH (8324) • info@cellsignal.com • Web: cellsignal.com For Research Use Only. Not for Use in Diagnostic Procedures.