Ubiquitin Antibody Signaling 0rders: 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

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Applications: W, IHC-P	Reactivity: All	Sensitivity: Endogenous	Source/Isotype: Rabbit	UniProt ID: #P62987, #P0CG48, #P0CG47, #P62979	Entrez-Gene Id: 7311, 7316, 7314, 6233		
Product Usage Information		Application Western Blotting Immunohistochemistry (P	araffin)		Dilution 1:1000 1:1200		
Storage		Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at – 20°C. Do not aliquot the antibody.					
Specificity/Sensit	tivity	Ubiquitin Antibody detects ubiquitin, polyubiquitin and ubiquitinated proteins. This antibody may cross-react with recombinant NEDD8.					
Species predicted based on 100% se homology		D. melanogaster, Xenopus, Zebrafish, Bovine, Pig, Horse					
Source / Purificat	tion	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the amino terminus of the human ubiquitin protein. Antibodies are purified by protein A and peptide affinity chromatography.					
Background		Ubiquitin is a conserved polypeptide unit that plays an important role in the ubiquitin-proteasome pathway. Ubiquitin can be covalently linked to many cellular proteins by the ubiquitination process, which targets proteins for degradation by the 26S proteasome. Three components are involved in the target protein-ubiquitin conjugation process. Ubiquitin is first activated by forming a thiolester complex with the activation component E1; the activated ubiquitin is subsequently transferred to the ubiquitin-carrier protein E2, then from E2 to ubiquitin ligase E3 for final delivery to the epsilon-NH ₂ of the target protein lysine residue (1-3). The ubiquitin-proteasome pathway has been implicated in a wide range of normal biological processes and in disease-related abnormalities. Several proteins such as IkB, p53, cdc25A, and Bcl-2 have been shown to be targets for the ubiquitin-proteasome process as part of regulation of cell cycle progression, differentiation, cell stress response, and apoptosis (4-7).					
Background Refe	erences	1. Ciechanover, A. (1998) <i>EMBO J</i> 17, 7151-60. 2. Hochstrasser, M. (2000) <i>Nat Cell Biol</i> 2, E153-7. 3. Hochstrasser, M. (2000) <i>Science</i> 289, 563-4. 4. Bernardi, R. et al. (2000) <i>Oncogene</i> 19, 2447-54. 5. Aberle, H. et al. (1997) <i>EMBO J</i> 16, 3797-804. 6. Salomoni, P. and Pandolfi, P.P. (2002) <i>Nat Cell Biol</i> 4, E152-3. 7. Jesenberger, V. and Jentsch, S. (2002) <i>Nat Rev Mol Cell Biol</i> 3, 112-21.					
Species Reactivit	у	Species reactivity is determ	nined by testing in at	least one approved app	lication (e.g., western blot).		
Western Blot Buf	ffer	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 IHC-P: Immunohistochemistry (Paraffin)					
Cross-Reactivity	Кеу	All: All Species Expected					
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		All other trademarks are th more information.	ne property of their re	espective owners. Visit o	ellsignal.com/trademarks for		

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