#4944 Store at –20°C

HR6A/HR6B Antibody

Cell Signaling TECHNOLOGY®

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For Research Use Only. Not For Use In Diagnostic Procedures.

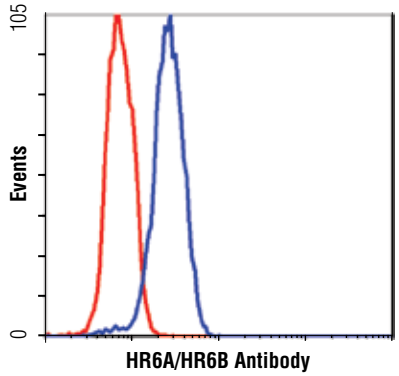
Entrez-Gene ID #7319, 7320
Swiss-Prot Acc. #P49459, P63146

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IF-IC, F	H, M, R, Mk, (C, Dm, X, Z)	17 kDa	Rabbit**
Endogenous			

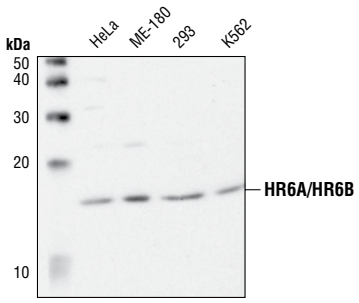
Background: The ubiquitin-conjugating (UBC) enzymes HR6A and HR6B are the mammalian orthologues of the Saccharomyces cerevisiae Rad6 gene products (1). In S. cerevisiae, Rad6 facilitates cell cycle progression and ubiquitinates histone H2B (2,3). In vivo phosphorylation of HR6A Ser120 by cyclin-dependent kinases is thought to be important for the coordination and timing of ubiquitination events involved in cell cycle progression (4). In response to DNA damage, HR6A is known to interact physically with p53 and p14ARF, but knockout mice lacking HR6A or HR6B exhibit normal DNA damage responses (5,6). HR6B knock-out males exhibit defective spermatogenesis, while HR6A knockout females fail to produce viable offspring (6).

Specificity/Sensitivity: HR6A/HR6B Antibody detects endogenous levels of total HR6A and HR6B proteins.

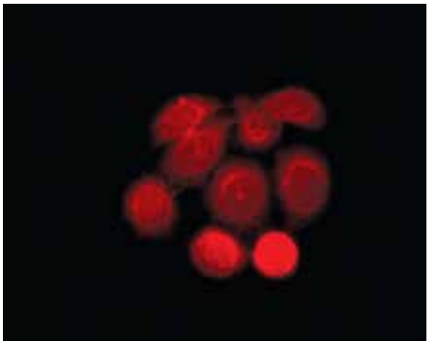
Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to amino acids at the amino-terminus of human HR6A. Antibodies are purified by protein A and peptide affinity chromatography.



Flow cytometric analysis of untreated Jurkat cells, using HR6A/HR6B Antibody (blue) compared to a nonspecific negative control antibody (red).



Western blot analysis of extracts from HeLa, ME-180, 293 and K562 cells, using HR6A/HR6B Antibody.



Immunofluorescent analysis of ME-180 cells, using HR6A/HR6B Antibody.

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.*

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunofluorescence (IF-IC)	1:100
Flow Cytometry	1:50

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

Background References:

(1) Koken, M. H. et al. (1991) *Proc. Natl. Acad. Sci. USA* 88, 8865–8869.

(2) Ellison, K. S. et al. (1991) *J. Biol. Chem.* 266, 24116–24120.

(3) Robzyk, K. et al. (2000) *Science* 287, 501–504.

(4) Sarcevic, B. et al. (2002) *EMBO J.* 21, 2009–2018.

(5) Lyakhovich, A. and Shekhar, M.P. (2003) *Mol. Cell. Biol.* 23, 2463–2475.

(6) Roest, H. P. et al. (2004) *Mol. Cell. Biol.* 24, 5485–5495.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide
Species Cross-Reactivity Key: **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **Ce**—C. elegans **Hr**—Horse **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.