

#2181 Store at -20°C

Phospho-Rb (Ser608) Antibody


Cell Signaling
TECHNOLOGY®

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

Applications: WB, IP	Reactivity: H R Mk	Sensitivity: Endogenous	MW (kDa): 110	Source: Rabbit	UniProt ID: #P06400	Entrez-Gene Id: 5925
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Product Usage Information	Application Western Blotting Immunoprecipitation	Dilution 1:1000 1:100
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 / Sensitivity	Phospho-Rb (Ser608) Antibody detects endogenous levels of Rb only when phosphorylated at serine 608.	
Species predicted to react based on 100% sequence homology:	Dog	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser608 of human Rb. Antibodies are purified by protein A and peptide affinity chromatography.	
Background	The retinoblastoma tumor suppressor protein Rb regulates cell proliferation by controlling progression through the restriction point within the G1-phase of the cell cycle (1). Rb has three functionally distinct binding domains and interacts with critical regulatory proteins including the E2F family of transcription factors, c-Abl tyrosine kinase, and proteins with a conserved LXCXE motif (2-4). Cell cycle-dependent phosphorylation by a CDK inhibits Rb target binding and allows cell cycle progression (5). Rb inactivation and subsequent cell cycle progression likely requires an initial phosphorylation by cyclin D-CDK4/6 followed by cyclin E-CDK2 phosphorylation (6). Specificity of different CDK/cyclin complexes has been observed <i>in vitro</i> (6-8) and cyclin D1 is required for Ser780 phosphorylation <i>in vivo</i> (9).	
Background References	1. Sherr, C.J. (1996) <i>Science</i> 274, 1672-7. 2. Nevins, J.R. (1992) <i>Science</i> 258, 424-9. 3. Welch, P.J. and Wang, J.Y. (1993) <i>Cell</i> 75, 779-90. 4. Hu, Q.J. et al. (1990) <i>EMBO J</i> 9, 1147-55. 5. Knudsen, E.S. and Wang, J.Y. (1997) <i>Mol Cell Biol</i> 17, 5771-83. 6. Lundberg, A.S. and Weinberg, R.A. (1998) <i>Mol Cell Biol</i> 18, 753-61. 7. Connell-Crowley, L. et al. (1997) <i>Mol Biol Cell</i> 8, 287-301. 8. Kitagawa, M. et al. (1996) <i>EMBO J</i> 15, 7060-9. 9. Geng, Y. et al. (2001) <i>Proc Natl Acad Sci USA</i> 98, 194-9.	

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 BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
Applications Key	WB: Western Blotting IP: Immunoprecipitation
Cross-Reactivity Key	H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus 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 GP: Guinea Pig Rab: rabbit All: all species expected

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