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Phospho-Rb (Ser807/811) (D20B12) XP[®] Rabbit mAb (PE Conjugate)



Orders: 877-616-CELL (2355)

orders@cell signal.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:Sensitivity:Source/Isotype:UniProt ID:Entrez-Gene Id:FC-FPH M R MkEndogenousRabbit IgG#P064005925

 Product Usage Information
 Application
 Dilution

 Flow Cytometry (Fixed/Permeabilized)
 1:50

Storage Supplied in PBS (pH 7.2), less than 0.1% sodium azide and 2 mg/ml BSA. Store at 4°C. Do not aliquot the antibodies. Protect from light. Do not freeze.

Specificity / Sensitivity

Phospho-Rb (Ser807/811) (D20B12) XP® Rabbit mAb (PE Conjugate) recognizes endogenous levels of Rb protein only when phosphorylated at Ser807, Ser811, or at both sites. This antibody does not cross-

react with Rb phosphorylated at Ser608.

Source / Purification Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to

residues surrounding Ser807/811 of human Rb protein.

Product Description This Cell Signaling Technology antibody is conjugated to phycoerythrin (PE) and tested in-house for direct

flow cytometry analysis in human cells. The antibody is expected to exhibit the same species cross-reactivity as the unconjugated Phospho-Rb (Ser807/811) (D20B12) XP[®] Rabbit mAb #8516.

BackgroundThe 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 in vitro (6-8) and cyclin D1 is required for Ser780 phosphorylation in vivo (9).

Background References 1. Sherr, C.J. (1996) Science 274, 1672-7.

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6. Lundberg, A.S. and Weinberg, R.A. (1998) Mol Cell Biol 18, 753-61.

7. Connell-Crowley, L. et al. (1997) Mol Biol Cell 8, 287-301.

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9. Geng, Y. et al. (2001) Proc Natl Acad Sci USA 98, 194-9.

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

Applications Key FC-FP: Flow Cytometry (Fixed/Permeabilized)

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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