Revision 1

#9969 Store at -20°C

Rb Antibody Sampler Kit

1 Kit (4 x 20 microliters)

Cell Signaling TECHNOLOGY®

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

Product Includes	Product #	Quantity	Mol. Wt	Isotype/Source
Phospho-Rb (Ser780) (D59B7) Rabbit mAb	8180	20 µl	110 kDa	Rabbit IgG
Phospho-Rb (Ser795) Antibody	9301	20 µl	110 kDa	Rabbit
Phospho-Rb (Ser807/811) (D20B12) XP® Rabbit mAb	8516	20 µl	110 kDa	Rabbit IgG
Rb (4H1) Mouse mAb	9309	20 µl	110 kDa	Mouse IgG2a
Anti-rabbit IgG, HRP-linked Antibody	7074	100 µl		Goat
Anti-mouse IgG, HRP-linked Antibody	7076	100 µl		Horse

Please visit cellsignal.com for individual component applications, species cross-reactivity, dilutions, protocols, and additional product information.

Description

The Rb Antibody Sampler Kit provides reagents and protocols to investigate cell cycle progression within cells. The kit contains primary and secondary antibodies to perform two Western blot experiments with each antibody.

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

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

Background References

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