

RB(Phospho-Ser811) antibody

Catalog No: #12173

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Description

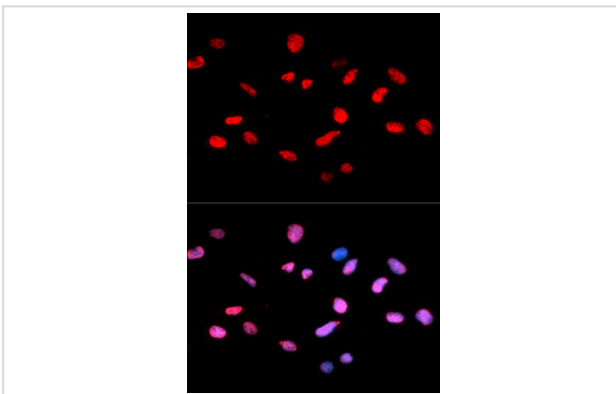
Product Name	RB(Phospho-Ser811) antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Applications	WB IF
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of RB only when phosphorylated at serine 811.
Immunogen Type	Peptide
Immunogen Description	A phospho specific peptide corresponding to residues surrounding S811 of human RB.
Target Name	RB
Modification	Phospho-Ser811
Other Names	RB1; RB; pRb; OSRC; pp110; p105-Rb
Accession No.	Swiss-Prot#: P06400NCBI Gene ID: 5925
SDS-PAGE MW	102kd
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

Western blotting: □1:500 - 1:2000

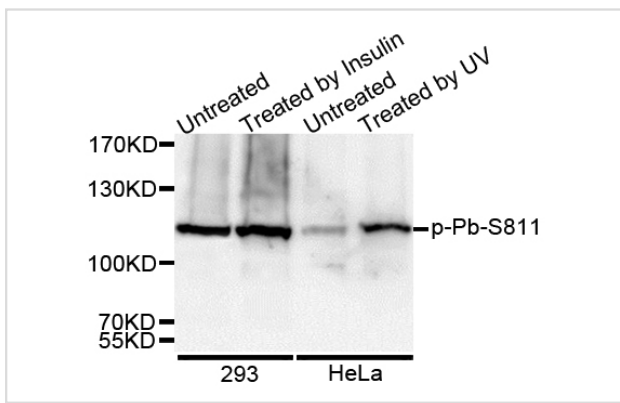
Immunofluorescence: □1:50 - 1:200

Images



Immunofluorescence analysis of U2OS cell using Phospho-RB-S811 antibody. Blue: DAPI for nuclear staining.

Western blot analysis of extracts of various cell lines, using Phospho-Rb-S811 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).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.