

Anti-Phospho-Rb (Ser780) RB1 Antibody

Catalog Number: P00039

About RB1

Key regulator of entry into cell division that acts as a tumor suppressor. Acts as a transcription repressor of E2F1 target genes. The underphosphorylated, active form of RB1 interacts with E2F1 and represses its transcription activity, leading to cell cycle arrest. Directly involved in heterochromatin formation by maintaining overall chromatin structure and, in particular, that of constitutive heterochromatin by stabilizing histone methylation. Recruits and targets histone methyltransferases SUV39H1, SUV420H1 and SUV420H2, leading to epigenetic transcriptional repression. Controls histone H4 'Lys-20' trimethylation. Inhibits the intrinsic kinase activity of TAF1. In case of viral infections, interactions with SV40 large T antigen, HPV E7 protein or adenovirus E1A protein induce the disassembly of RB1-E2F1 complex thereby disrupting RB1's activity.

Roesch A, et al.(2005) Mod Pathol. 18(4): 565-572.

Huang H, et al.(2004)Oncogene. 23(12): 2161-2176.

Kitagawa M, et al.(1996)EMBO J. 15(24): 7060-7069.

Overview

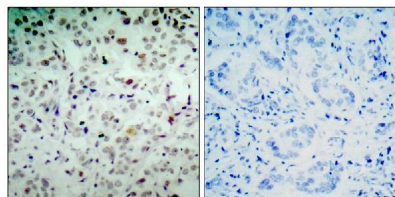
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|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name | Anti-Phospho-Rb (Ser780) RB1 Antibody |
| Reactive Species | Human, Mouse, Rat |
| Description | Boster Bio Anti-Phospho-Rb (Ser780) RB1 Antibody (Catalog # P00039). Tested in WB, IHC, IF applications. This antibody reacts with Human, Mouse, Rat. |
| Application | IF, IHC, WB |
| Clonality | Polyclonal 2F1 |
| 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 Instructions | Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles. |
| Host | Rabbit |
| Uniprot ID | P06400 |

Technical Details

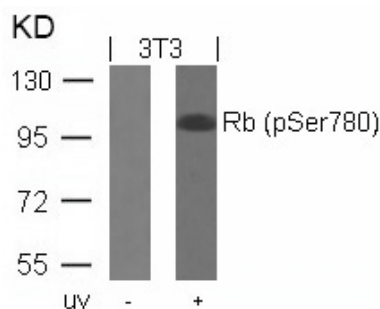
| | |
|----------------------------|--------------------------------------------------------------------------------------------------|
| Immunogen | Peptide sequence around phosphorylation site of serine 780 (T-L-S(p)-P-I) derived from Human Rb. |
| Predicted Reactive Species | Chimpanzee, Macaque |
| Isotype | IgG |
| Form | Liquid |

| | |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Concentration | 1 mg/ml |
| 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. |
| Suggested Dilutions | <p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Predicted MW: 110kd</p> <p>Western blotting: 1:500~1:1000</p> <p>Immunohistochemistry: 1:50~1:100</p> <p>Immunofluorescence: 1:100~1:200</p> |

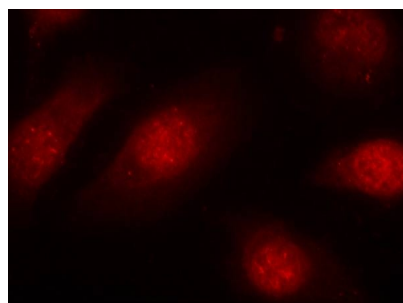
Anti-Phospho-Rb (Ser780) RB1 Antibody (P00039) Images



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using Rb(Phospho-Ser780) antibody P00039(left) or the same antibody preincubated with blocking peptide(right).



Western blot analysis of extracts from 3T3 cells untreated or treated with UV using Rb(Phospho-Ser780) antibody P00039.



Immunofluorescence staining of methanol-fixed HeLa cells using Rb(Phospho-Ser780) antibody P00039.

1 Publications Citing This Product

1. PubMed ID: 26379831, Effects of sericin on the testicular growth hormone/insulin-like growth factor-1 axis in a rat model of type 2 diabetes

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