bs-1347R **[Primary Antibody]**

phospho-Rb (Ser780) Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 5925 **SWISS:** P06400

Target: Rb (Ser780)

Immunogen: KLH conjugated Synthesised phosphopeptide derived from human Rb around the phosphorylation site of Ser780: L(p-S)PI.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: The protein encoded by this gene is a negative regulator of the cell cycle and was the first tumor suppressor gene found. The encoded protein also stabilizes constitutive heterochromatin to maintain the overall chromatin structure. The active, hypophosphorylated form of the protein binds transcription factor E2F1. Defects in this gene are a cause of childhood cancer retinoblastoma (RB), bladder cancer, and osteogenic sarcoma.
Rb is a tumor suppressor gene which functions as a negative regulator of the cell cycle by interacting with transcription factors including E2F1, PU1, ATF2, UBF, Elf1 and cAbl. This ability of Rb to alter transcription is regulated by phosphorylation catalyzed by the cyclin dependent protein kinases (cdks). Rb is phosphorylated on serine and threonine, but not on tyrosine residues. It forms a complex with SV40 large T antigen, adenovirus E1A, and human papilloma virus 16E. Rb protein may act by regulating transcription and loss of its function leads to uncontrolled cell growth. Aberrations in the Rb gene have been implicated in cancers of breast, colon, prostate, kidney, nasopharynx, and leukemia.

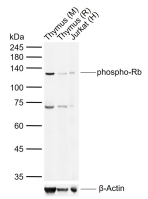
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (1ug/test)
ICC/IF (1:100)

Reactivity: Human, Mouse, Rat (predicted: Cow, Chicken, Dog)

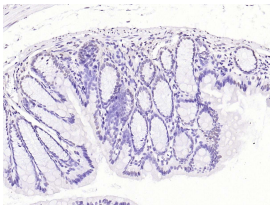
Predicted MW.: 106 kDa

Subcellular Location: Nucleus

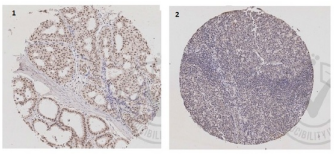
VALIDATION IMAGES



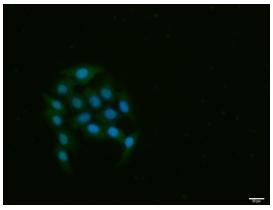
Sample: Lane 1: Mouse Thymus tissue lysates Lane 2: Rat Thymus tissue lysates Lane 3: Human Jurkat cell lysates Primary: Anti-phospho-Rb (Ser780) (bs-1347R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 106 kDa Observed band size: 125 kDa



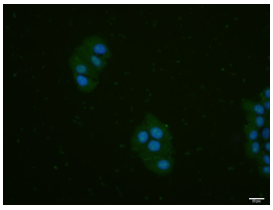
Paraformaldehyde-fixed, paraffin embedded (mouse colon); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-Rb (Ser780)) Polyclonal Antibody, Unconjugated (bs-1347R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Independently Validated Antibody, image provided by Science Direct, badge number 029648:Formalin-fixed and paraffin embedded human breast tissue labeled with Anti-phospho-Rb/p105-Rb(Ser780) Polyclonal Antibody, Unconjugated (bs-1347R) at 1:200 followed by conjugation to the secondary antibody and DAB staining. Negative control, Human lymph node tissue, also stained postive



MCF-7 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (phospho-Rb (Ser780)) polyclonal Antibody, Unconjugated (bs-1347R) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.



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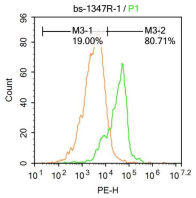

Molt-4 cells were fixed with 4% PFA for 10min at room temperature ,permeabilized with 90% ice-cold methanol for 20 min at -20°C, and incubated in 5% BSA blocking buffer for 30 min at room temperature. Cells were then stained with phospho-Rb (Ser780) Antibody(bs-1347R)at 1:500 dilution in blocking buffer and incubated for 30 min at room temperature, washed twice with 2%BSA in PBS, followed by secondary antibody incubation for 40 min at room temperature. Acquisitions of 20,000 events were performed. Cells stained with primary antibody (green), and isotype control (orange).

SELECTED CITATIONS

- **[IF=8.755]** Sijie Wang. et al. PFKFB4 facilitates palbociclib resistance in oestrogen receptor-positive breast cancer by enhancing stemness. CELL PROLIFERAT. 2022 Sep;:e13337 WB ;Human. 36127291
- **[IF=5.652]** Haijun Sun. et al. WD Repeat Domain 43 promotes malignant progression of non-small cell lung cancer by regulating CDK2. INT J BIOCHEM CELL B. 2022 Aug;:106293 WB ;Human. 10.1016/j.biocel.2022.106293
- **[IF=4.302]** Ju B et al. miR-193a/b-3p relieves hepatic fibrosis and restrains proliferation and activation of hepaticstellate cells. J Cell Mol Med. 2019 Apr 3. WB ;Human. 30945448
- **[IF=3.332]** Muhammad T et al. Aloperine in combination with therapeutic adenoviral vector synergistically suppressed the growth of non-small cell lung cancer. J Cancer Res Clin Oncol. 2020 Feb 22. WB ;Human. 32088783