

**RB(S612) Antibody**  
 Purified Rabbit Polyclonal Antibody (Pab)  
 Catalog # AP22385a-200 □

## Specification

### RB(S612) Antibody - Product info

Application	WB
Primary Accession	<a href="#">P06400</a>
Reactivity	Human, Mouse, Rat
Predicted	Human, Mouse, Rat
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit Ig
Clone Names	RB61368
Calculated MW	106159

### RB(S612) Antibody - Additional info

Gene ID 5925

#### Other Names

Retinoblastoma-associated protein, p105-Rb, pRb, Rb, pp110, RB1

#### Target/Specificity

This RB(S612) antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 853-886 amino acids from the human region of human RB(S612).

#### Dilution

WB~1:2000

#### Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

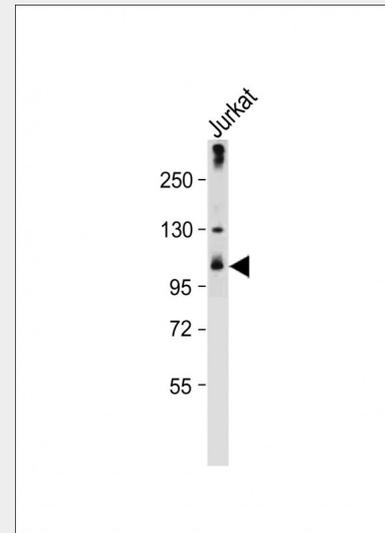
RB(S612) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### RB(S612) Antibody - Protein Information

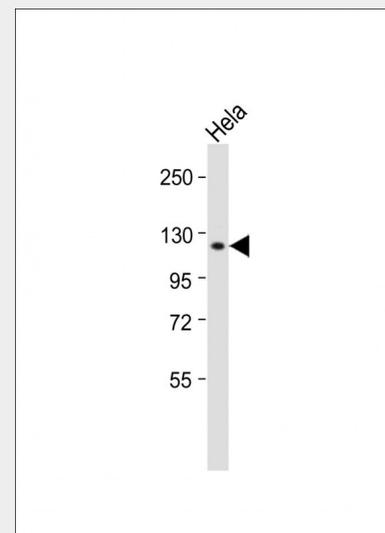
Name RB1

#### Function

Key regulator of entry into cell division that acts as a tumor suppressor. Promotes G0-G1 transition when phosphorylated by CDK3/cyclin-C. 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



Anti-RB(S612) Antibody at 1:2000 dilution + Jurkat whole cell lysate  
 Lysates/proteins at 20 µg per lane.  
 Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 106 kDa  
 Blocking/Dilution buffer: 5% NFDm/TBST.



Anti-RB(S612) Antibody at 1:2000 dilution + HeLa whole cell lysate  
 Lysates/proteins at 20 µg per lane.  
 Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 106 kDa  
 Blocking/Dilution buffer: 5% NFDm/TBST.

heterochromatin formation by maintaining overall chromatin structure and, in particular, that of constitutive heterochromatin by stabilizing histone methylation. Recruits and targets histone methyltransferases SUV39H1, KMT5B and KMT5C, leading to epigenetic transcriptional repression. Controls histone H4 'Lys-20' trimethylation. Inhibits the intrinsic kinase activity of TAF1. Mediates transcriptional repression by SMARCA4/BRG1 by recruiting a histone deacetylase (HDAC) complex to the c-FOS promoter. In resting neurons, transcription of the c-FOS promoter is inhibited by BRG1-dependent recruitment of a phospho-RB1-HDAC1 repressor complex. Upon calcium influx, RB1 is dephosphorylated by calcineurin, which leads to release of the repressor complex (By similarity).

Cellular Location  
Nucleus.

Tissue Location  
Expressed in the retina.

### RB(S612) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

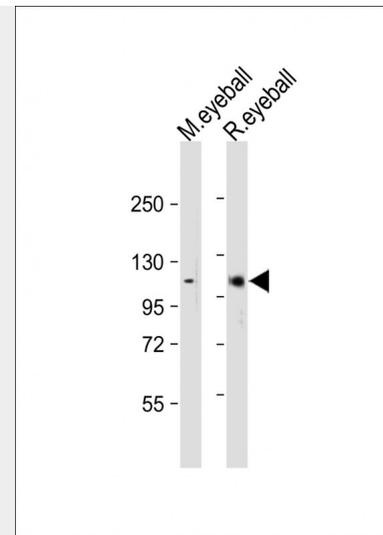
- [□Western Blot](#)
- [□Blocking Peptides](#)
- [□Dot Blot](#)
- [□Immunohistochemistry](#)
- [□Immunofluorescence](#)
- [□Immunoprecipitation](#)
- [□Flow Cytometry](#)
- [□Cell Culture](#)

### RB(S612) Antibody - Background

Key regulator of entry into cell division that acts as a tumor suppressor. Promotes G0-G1 transition when phosphorylated by CDK3/cyclin-C. 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. Mediates transcriptional repression by SMARCA4/BRG1 by recruiting a histone deacetylase (HDAC) complex to the c-FOS promoter. In resting neurons, transcription of the c-FOS promoter is inhibited by BRG1-dependent recruitment of a phospho-RB1-HDAC1 repressor complex. Upon calcium influx, RB1 is dephosphorylated by calcineurin, which leads to release of the repressor complex (By similarity). 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.

### RB(S612) Antibody - References

Lee W.-H., et al. Nature 329:642-645(1987). Lee W.-H., et al. Science 235:1394-1399(1987). Friend S.H., et al. Proc. Natl. Acad. Sci. U.S.A. 84:9059-9063(1987). McGee T.L., et al. Gene 80:119-128(1989). Hogg A., et al. Oncogene 7:1445-1451(1992).



All lanes : Anti-RB(S612) Antibody at 1:2000 dilution Lane 1: Mouse eyeball tissue lysate Lane 2: Rat eyeball tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 106 kDa Blocking/Dilution buffer: 5% NFD/MTBST.