



Datasheet for ABIN3029756

anti-Retinoblastoma Protein (Rb) antibody (pSer811)



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5 Images

Overview

Quantity:	0.4 mL
Target:	Retinoblastoma Protein (Rb) (Rb Protein)
Binding Specificity:	pSer811
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Retinoblastoma Protein (Rb) antibody is un-conjugated
Application:	ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF), Dot Blot (DB)

Product Details

Immunogen:	This p-Rb1 antibody was produced from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding pS811 of human Retinoblastoma.
Isotype:	Ig Fraction
Cross-Reactivity (Details):	Expected species reactivity: Mouse, Rat
Purification:	Antigen affinity purified

Target Details

Target:	Retinoblastoma Protein (Rb) (Rb Protein)
Alternative Name:	Retinoblastoma / Rb (Rb Protein Products)

Target Details

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 p-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. [UniProt]

UniProt: [P06400](#)

Pathways: [Mitotic G1-G1/S Phases](#)

Application Details

Application Notes: Titration of the p-Rb1 antibody may be required due to differences in protocols and secondary/substrate sensitivity. Dot blot: 1:500,IHC (Paraffin): 1:50-1:100,Immunofluorescence: 1:10-1:50

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: In 1X PBS, pH 7.4, with 0.09 % sodium azide

Preservative: Sodium azide

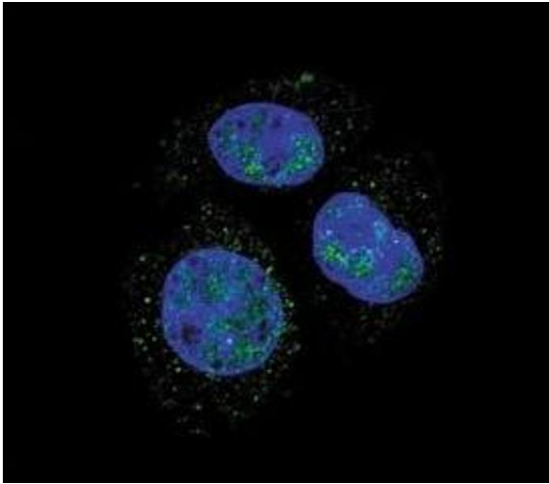
Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C

Storage Comment: Aliquot the p-Rb1 antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw

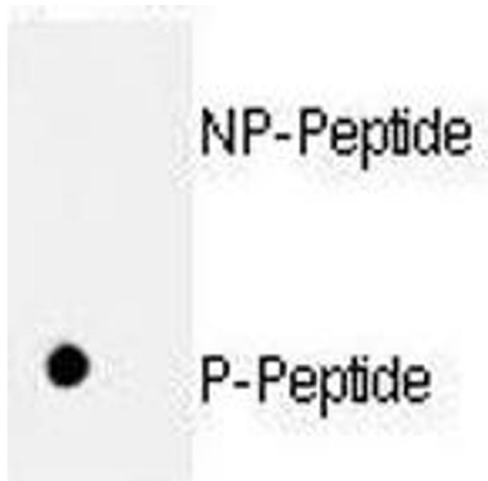
cycles.

Images



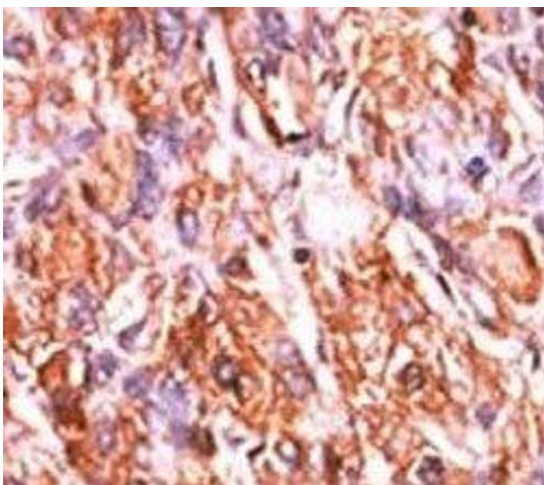
Immunofluorescence

Image 1. Confocal immunofluorescent analysis of p-Rb1 antibody with HepG2 cells followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used as a nuclear counterstain (blue).



Dot Blot

Image 2. Dot blot analysis of p-Rb1 antibody. 50ng of nonphos-peptide or phos-peptide were adsorbed on their respective dots.



Immunohistochemistry

Image 3. IHC analysis of FFPE human hepatocarcinoma tissue stained with the p-Rb1 antibody.

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN3029756.