

Datasheet for ABIN6264703

anti-Retinoblastoma 1 antibody (C-Term)

3 Images

1 Publication

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Overview

Quantity:	100 µL
Target:	Retinoblastoma 1 (RB1)
Binding Specificity:	C-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Retinoblastoma 1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA, Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Immunogen:	A synthesized peptide derived from human Retinoblastoma, corresponding to a region within C-terminal amino acids.
Isotype:	IgG
Specificity:	Retinoblastoma Antibody detects endogenous levels of total Retinoblastoma.
Predicted Reactivity:	Pig,Bovine,Horse,Sheep,Rabbit,Dog,Chicken,Xenopus
Purification:	The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific).

Target Details

Target:	Retinoblastoma 1 (RB1)
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Target Details

Alternative Name: RB1 ([RB1 Products](#))

Background: Description: 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, 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). 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.

Gene: RB1

Molecular Weight: 106kDa

Gene ID: 5925

UniProt: [P06400](#)

Pathways: [Cell Division Cycle](#), [Intracellular Steroid Hormone Receptor Signaling Pathway](#), [Mitotic G1-G1/S Phases](#), [DNA Replication](#), [Maintenance of Protein Location](#), [Synthesis of DNA](#), [Autophagy](#)

Application Details

Application Notes: WB 1:500-1:2000, IHC 1:50-1:200, IF/ICC 1:100-1:500, ELISA(peptide) 1:20000-1:40000

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1 mg/mL

Buffer: Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.

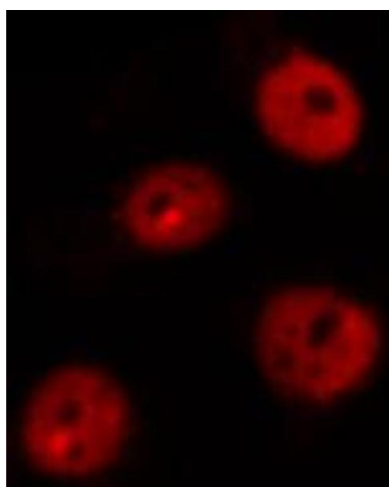
Handling

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:	Store at -20 °C. Stable for 12 months from date of receipt.
Expiry Date:	12 months

Publications

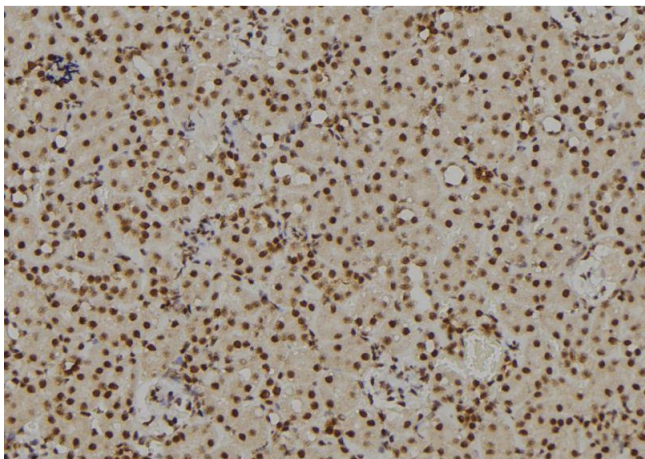
Product cited in:	Jie, Weilong, Ming, Fei, Xinghua, Junhua, Guobin, Kaixiong, Xiaoming: "Enhancer of zeste homolog 2 depletion induces cellular senescence via histone demethylation along the INK4/ARF locus." in: The international journal of biochemistry & cell biology , Vol. 65, pp. 104-12, (2016) (PubMed).
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Images



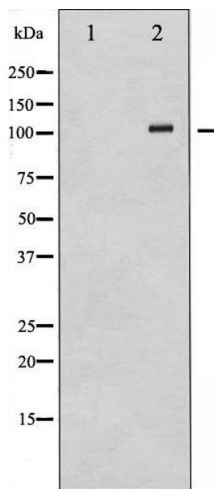
Immunofluorescence (fixed cells)

Image 1. ABIN6269101 staining MOLT by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25°C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



Immunohistochemistry

Image 2. ABIN6269101 at 1/100 staining Rat kidney tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



Western Blotting

Image 3. Western blot analysis of Retinoblastoma expression in K562 whole cell lysates, The lane on the left is treated with the antigen-specific peptide.