

Datasheet for ABIN680548

anti-Retinoblastoma 1 antibody (AA 51-150)[Go to Product page](#)**1** Image**2** Publications

Overview

Quantity:	100 µL
Target:	Retinoblastoma 1 (RB1)
Binding Specificity:	AA 51-150
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Retinoblastoma 1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human Rb/P105 RB
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	Cow,Pig,Horse,Rabbit
Purification:	Purified by Protein A.

Target Details

Target:	Retinoblastoma 1 (RB1)
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Target Details

Alternative Name: [P105 RB \(RB1 Products\)](#)

Background: Synonyms: RB, pRb, OSRC, pp11, p15-Rb, PPP1R13, Retinoblastoma-associated protein, RB1
Background: Key regulator of entry into cell division that acts as a tumor suppressor. Promotes G-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, SUV42H1 and SUV42H2, leading to epigenetic transcriptional repression. Controls histone H4 'Lys-2' 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 SV4 large T antigen, HPV E7 protein or adenovirus E1A protein induce the disassembly of RB1-E2F1 complex thereby disrupting RB1's activity.

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 1:300-5000
ELISA 1:500-1000
IHC-P 1:200-400
IHC-F 1:100-500
IF(IHC-P) 1:50-200
IF(IHC-F) 1:50-200
IF(ICC) 1:50-200

Restrictions: For Research Use only

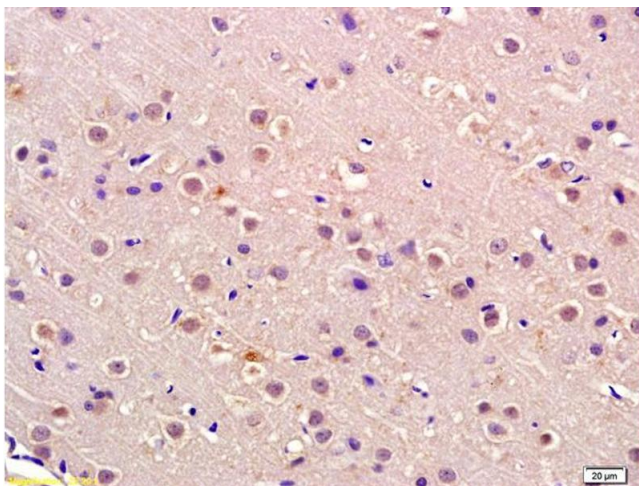
Handling

Format:	Liquid
Concentration:	1 µg/µL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

Publications

- Product cited in:
- Huang, Xu, Zhang, Ma, Guo, Wang, Zhang, Gou, Chen, Liang, Cao: "ICAM-1-Targeted Liposomes Loaded with Liver X Receptor Agonists Suppress PDGF-Induced Proliferation of Vascular Smooth Muscle Cells." in: **Nanoscale research letters**, Vol. 12, Issue 1, pp. 322, (2017) ([PubMed](#)).
- Teng, Chang, Wang, Lu, Wu, Yang, Chiu, Yang, Hsu, Ho: "Phospholipid-functionalized mesoporous silica nanocarriers for selective photodynamic therapy of cancer." in: **Biomaterials**, Vol. 34, Issue 30, pp. 7462-70, (2013) ([PubMed](#)).

Images



Immunohistochemistry

Image 1. Formalin-fixed and paraffin embedded rat brain labeled with Anti-P105 RB Polyclonal Antibody, Unconjugated (ABIN680548) at 1:200 followed by conjugation to the secondary antibody and DAB staining