

Datasheet for ABIN6256422

**anti-Retinoblastoma 1 antibody (pSer780)****4** Images[Go to Product page](#)

## Overview

Quantity:	100 µL
Target:	Retinoblastoma 1 (RB1)
Binding Specificity:	pSer780
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 around the phosphorylation site of Ser780.
Isotype:	IgG
Specificity:	Phospho-Retinoblastoma (Ser780) Antibody detects endogenous levels of Retinoblastoma only when phosphorylated at Serine 780.
Predicted Reactivity:	Pig,Bovine,Horse,Sheep,Rabbit,Dog,Chicken,Xenopus
Purification:	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.

## Target Details

Target:	Retinoblastoma 1 (RB1)
Alternative Name:	RB1 ( <a href="#">RB1 Products</a> )
Background:	<p>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.</p> <p>Gene: RB1</p>
Molecular Weight:	106kDa
Gene ID:	5925
UniProt:	<a href="#">P06400</a>
Pathways:	<a href="#">Cell Division Cycle</a> , <a href="#">Intracellular Steroid Hormone Receptor Signaling Pathway</a> , <a href="#">Mitotic G1-G1/S Phases</a> , <a href="#">DNA Replication</a> , <a href="#">Maintenance of Protein Location</a> , <a href="#">Synthesis of DNA</a> , <a href="#">Autophagy</a>

## 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

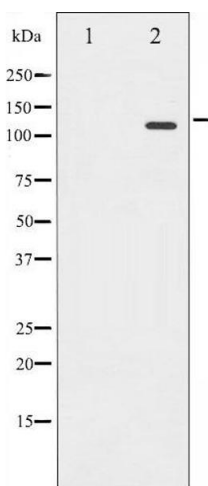
## Handling

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 %

## Handling

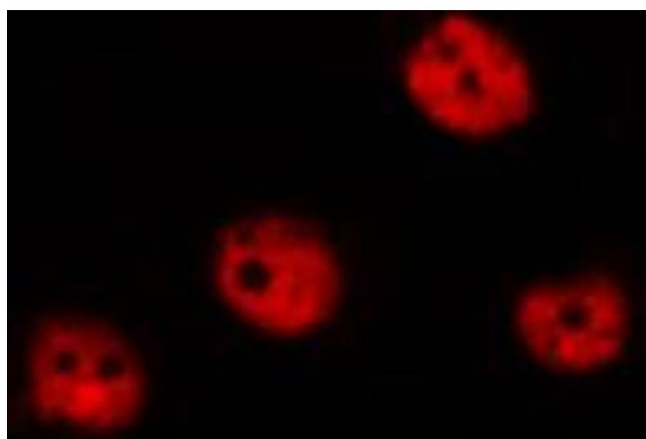
	glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20 °C. Stable for 12 months from date of receipt.
Expiry Date:	12 months

## Images



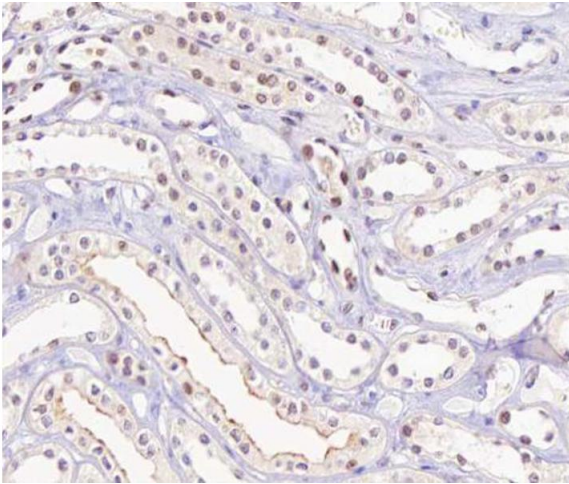
### Western Blotting

**Image 1.** Western blot analysis of Retinoblastoma phosphorylation expression in serum treated K562 whole cell lysates. The lane on the left is treated with the antigen-specific peptide.



### Immunofluorescence (fixed cells)

**Image 2.** ABIN6267315 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 3.** ABIN6267315 at 1/200 staining human kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue 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.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN6256422.