

## Datasheet for ABIN7167784

# anti-Retinoblastoma 1 antibody (AA 649-928)

2 Images



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| Overview             |   |  |
|----------------------|---|--|
| Quantity:            | 100 μL  |  |
| Target:              | Retinoblastoma 1 (RB1)  |  |
| Binding Specificity: | AA 649-928  |  |
| Reactivity:          | Human   |  |
| Host:                | Rabbit  |  |
| Clonality:           | Polyclonal  |  |
| Conjugate:           | This Retinoblastoma 1 antibody is un-conjugated   |  |
| Application:         | Immunohistochemistry (IHC), ELISA   |  |
| Product Details      |   |  |
| Immunogen:           | Recombinant Human Retinoblastoma-associated protein (649-928AA)   |  |
| Isotype:             | IgG   |  |
| Cross-Reactivity:    | Human   |  |
| Purification:        | Antigen Affinity Purified   |  |
| Target Details       |   |  |
| Target:              | Retinoblastoma 1 (RB1)  |  |
| Alternative Name:    | RB1 (RB1 Products)  |  |
| Background:          | 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.

Aliases: Exon 17 tumor GOS561 substitution mutation causes premature stop antibody, GOS563 exon 17 substitution mutation causes premature stop antibody, OSRC antibody, Osteosarcoma antibody, p105-Rb antibody, P105RB antibody, PP105 antibody, pp110 antibody, PPP1R130 antibody, pRb antibody, Prepro retinoblastoma associated protein antibody, Protein phosphatase 1 regulatory subunit 130 antibody, Rb antibody, RB transcriptional corepressor 1 antibody, RB\_HUMAN antibody, RB1 antibody, RB1 gene antibody, Retinoblastoma 1 antibody, Retinoblastoma suspectibility protein antibody, Retinoblastoma-associated protein antibody

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: Recommended dilution: IHC:1:20-1:200,

Restrictions: For Research Use only

#### Handling

Format:

Buffer:

PBS with 0.02 % sodium azide, 50 % glycerol, pH 7.3.

Preservative:

Sodium azide

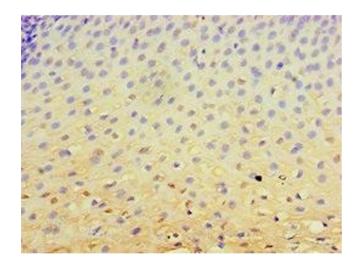
Precaution of Use:

This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which

## Handling

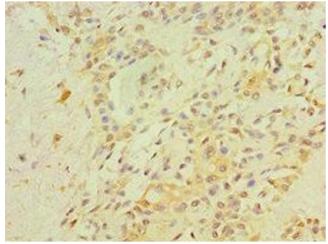
|                  | should be handled by trained staff only.                      |
|------------------|---|
| Storage:         | -20 °C,-80 °C   |
| Storage Comment: | Upon receipt, store at -20°C or -80°C. Avoid repeated freeze. |

## Images



## Immunohistochemistry

**Image 1.** Immunohistochemistry of paraffin-embedded human esophagus tissue using ABIN7167784 at dilution of 1:100



## Immunohistochemistry

**Image 2.** Immunohistochemistry of paraffin-embedded human breast cancer using ABIN7167784 at dilution of 1:100