10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Rb RB1 Rabbit Monoclonal Antibody

Catalog # ABO13216

Product Information

Application	WB, IHC, IF, ICC, IP
Primary Accession	P06400
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-Rb RB1 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP applications. This antibody reacts with Human, Mouse.

Additional Information

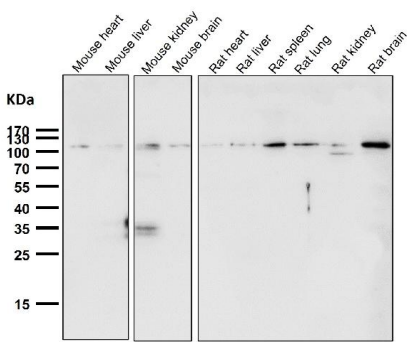
Gene ID	5925
Other Names	Retinoblastoma-associated protein, p105-Rb, p110-RB1, pRb, Rb, pp110, RB1
Calculated MW	106159
Application Details	WB 1:1000-1:2000 IHC 1:100-1:500 ICC/IF 1:100-1:500 IP 1:50
Subcellular Localization	Nucleus.
Tissue Specificity	Expressed in the retina.
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: FCD-18
Immunogen	A synthesized peptide derived from human Rb
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

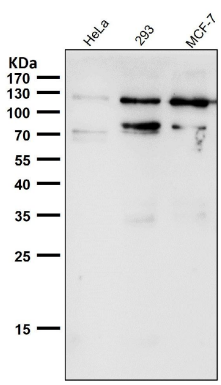
Name	RB1

Function	Tumor suppressor that is a key regulator of the G1/S transition of the cell cycle (PubMed:10499802). The hypophosphorylated form binds transcription regulators of the E2F family, preventing transcription of E2F-responsive genes (PubMed:10499802). Both physically blocks E2Fs transactivating domain and recruits chromatin- modifying enzymes that actively repress transcription (PubMed:10499802). Cyclin and CDK-dependent phosphorylation of RB1 induces its dissociation from E2Fs, thereby activating transcription of E2F responsive genes and triggering entry into S phase (PubMed:10499802). RB1 also promotes the G0-G1 transition upon phosphorylation and activation by CDK3/cyclin-C (PubMed:15084261). 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).
Cellular Location	Nucleus. Cytoplasm {ECO:0000250|UniProtKB:P13405}. Note=During keratinocyte differentiation, acetylation by KAT2B/PCAF is required for nuclear localization (PubMed:20940255). Localizes to the cytoplasm when hyperphosphorylated (By similarity). {ECO:0000250|UniProtKB:P13405, ECO:0000269|PubMed:20940255}
Tissue Location	Expressed in the retina. Expressed in foreskin keratinocytes (at protein level) (PubMed:20940255)

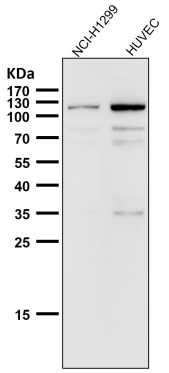
Images



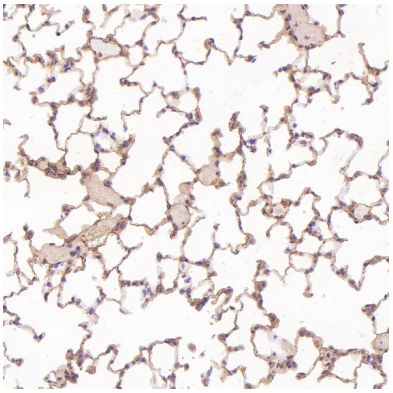
All lanes use the Antibody at 1:3K dilution for 1 hour at room temperature.



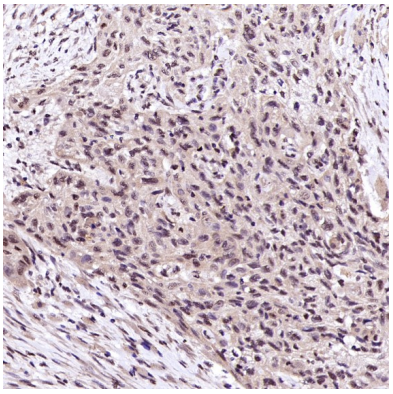
All lanes use the Antibody at 1:3K dilution for 1 hour at room temperature.



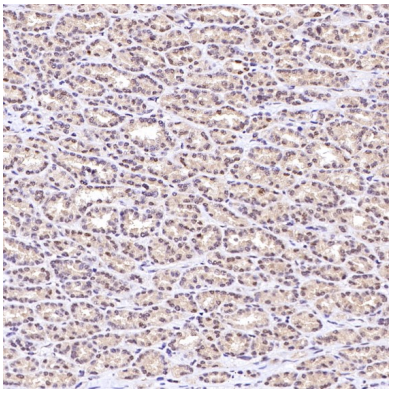
All lanes use the Antibody at 1:3K dilution for 1 hour at room temperature.



Immunohistochemical analysis of paraffin-embedded Rat lung, using the Antibody at 1:250 dilution.

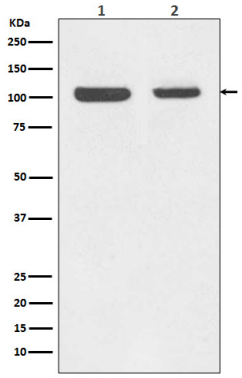


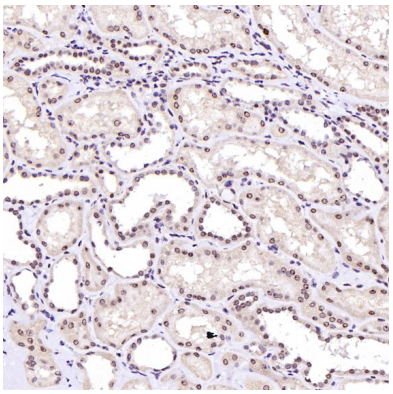
Immunohistochemical analysis of paraffin-embedded Human tongue cancer, using the Antibody at 1:250 dilution.



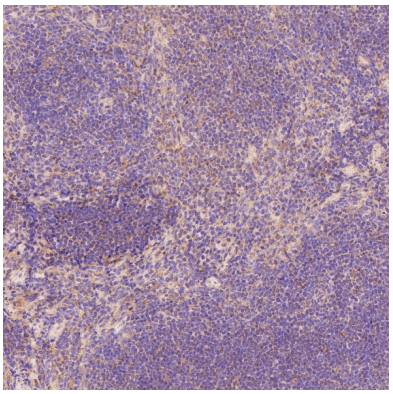
Immunohistochemical analysis of paraffin-embedded Human renal cancer, using the Antibody at 1:250 dilution.

Western blot analysis of Retinoblastoma expression in (1) Jurkat cell lysate; (2) MCF-7 cell lysate.

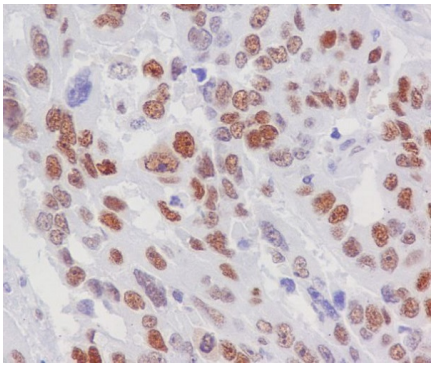




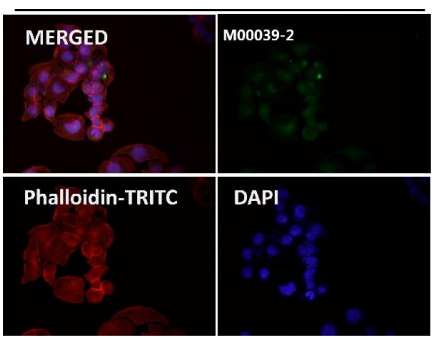
Immunohistochemical analysis of paraffin-embedded Human kidney, using the Antibody at 1:1000 dilution.



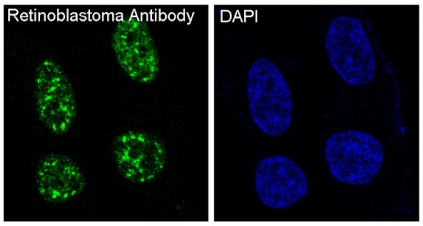
Immunohistochemical analysis of paraffin-embedded Mouse spleen, using the Antibody at 1:250 dilution.



Immunohistochemical analysis of paraffin-embedded human lung cancer, using Retinoblastoma Antibody.



Immunofluorescent analysis using the Antibody at 1:50 dilution.



Immunofluorescent analysis of SH-SY5Y cells, using Retinoblastoma Antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.