

产品名称: Rb Rabbit Polyclonal Antibody
产品货号: AP Rab16929



产品概述 (Summary)

产品名称 (Production Name)	Rb Rabbit Polyclonal Antibody
描述 (Description)	Rabbit polyclonal Antibody
宿主 (Host)	Rabbit
应用 (Application)	WB,IHC,ICC/IF,ELISA
种属反应性 (Reactivity)	Human,Mouse,Rat

产品性能 (Performance)

偶联物 (Conjugation)	Unconjugated
修饰 (Modification)	Unmodified
同种型 (Isotype)	IgG
克隆 (Clonality)	Polyclonal
形式 (Form)	Liquid
存放说明 (Storage)	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
储存溶液 (Buffer)	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
纯化方式 (Purification)	Affinity purification

免疫原信息 (Immunogen)

基因名 (Gene Name)	RB1
别名 (Alternative Names)	RB1; Retinoblastoma-associated protein; p105-Rb; pRb; Rb; pp110
基因 ID (Gene ID)	5925.0
蛋白 ID (SwissProt ID)	P06400.The antiserum was produced against synthesized peptide derived from human Retinoblastoma. AA range:751-800

产品应用 (Application)

稀释比 (Dilution Ratio)	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:10000-1:20000
蛋白分子量 (Molecular Weight)	106kDa

研究背景 (Background)

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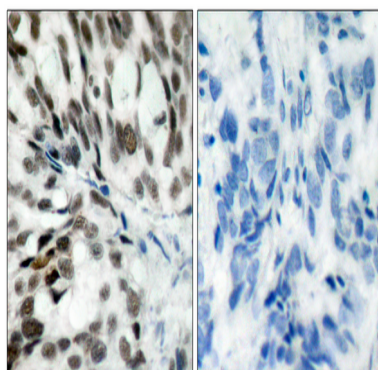
The protein encoded by this gene is a negative regulator of the cell cycle and was the first tumor suppressor gene found. The encoded protein also stabilizes constitutive heterochromatin to maintain the overall chromatin structure. The active, hypophosphorylated form of the protein binds transcription factor E2F1. Defects in this gene are a cause of childhood cancer retinoblastoma (RB), bladder cancer, and osteogenic sarcoma. [provided by RefSeq, Jul 2008],disease:Defects in RB1 are a cause of bladder cancer [MIM:109800],disease:Defects in RB1 are a cause of osteogenic sarcoma [MIM:259500],disease:Defects in RB1 are the cause of childhood cancer retinoblastoma (RB) [MIM:180200]. RB is a congenital malignant tumor that arises from the nuclear layers of the retina. It occurs in about 1:20'000 live births and represents about 2% of childhood malignancies. It is bilateral in about 30% of cases. Although most RB appear sporadically, about 20% are transmitted as an autosomal dominant trait with incomplete penetrance. The diagnosis is usually made before the age of 2 years when strabismus or a gray to yellow reflex from pupil ("cat eye") is investigated.,function:Key regulator of entry into cell division that acts as a tumor suppressor. 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. 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.,online information:RB1 mutation db,online information:Retinoblastoma protein entry,PTM:Phosphorylated in G1, thereby releasing E2F1 which is then able to activate cell growth. Dephosphorylated at the late M phase. SV40 large T antigen, HPV E7 and adenovirus E1A bind to the underphosphorylated, active form of pRb.,similarity:Belongs to the retinoblastoma protein (RB) family.,subunit:Interacts with ATAD5 (By similarity). The hypophosphorylated form interacts with and sequesters the E2F1 transcription factor. The unphosphorylated form interacts with ARID3B, KDM5A, SUV39H1, MJD2A/JHDM3A and THOC1. Interacts with the N-terminal domain of TAF1. Interacts with AATF, DNMT1, LIN9, LMNA, SUV420H1, SUV420H2, PELP1 and TMPO-alpha. May interact with NDC80. Interacts with EID1 and UBR4. Interacts with ARID4A and KDM5B. Interacts with E4F1. Interacts with adenovirus E1A protein, HPV E7 protein and SV40 large T antigen.,tissue specificity:Expressed in the retina.,

研究领域 (Research Area)

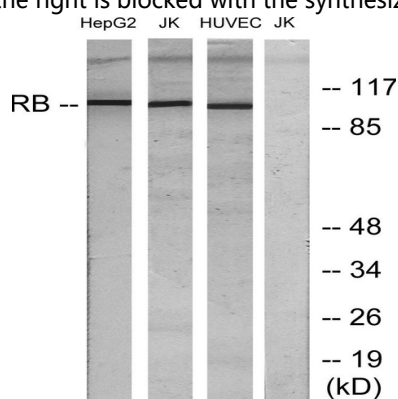
Stem cell pathway; Cell_Cycle_G1S;Cell_Cycle_G2M_DNA; Protein_Acetylation

图片 (Image Data)

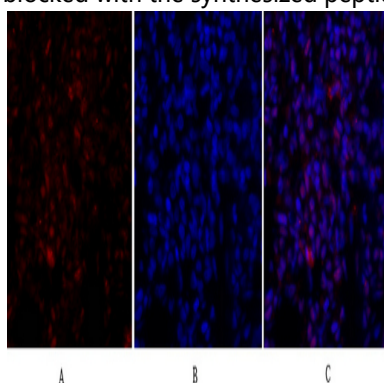
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Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using Retinoblastoma Antibody. The picture on the right is blocked with the synthesized peptide.

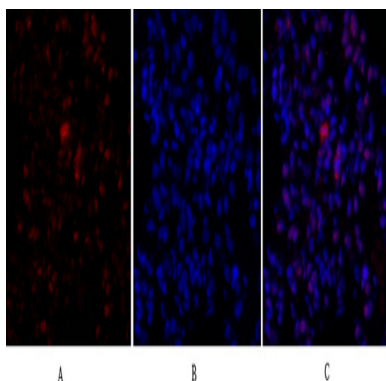


Western blot analysis of lysates from HepG2, Jurkat, and HUVEC cells, using Retinoblastoma Antibody. The lane on the right is blocked with the synthesized peptide.

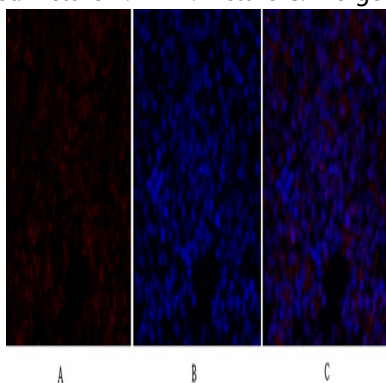


Immunofluorescence analysis of rat-lung tissue. 1, Rb Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B

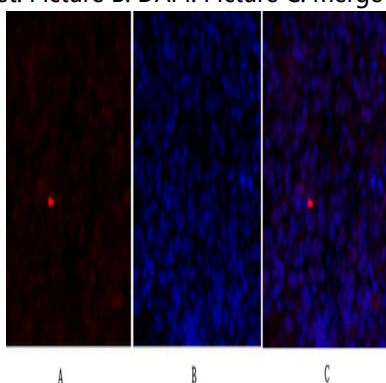
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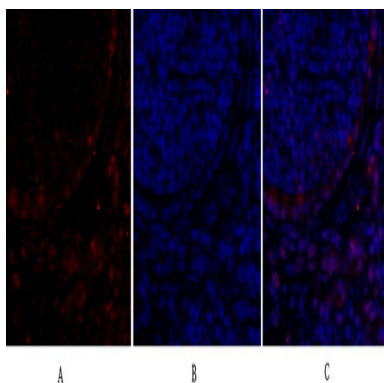


Immunofluorescence analysis of rat-spleen tissue. 1,Rb Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



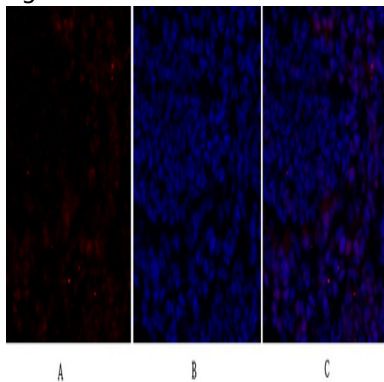
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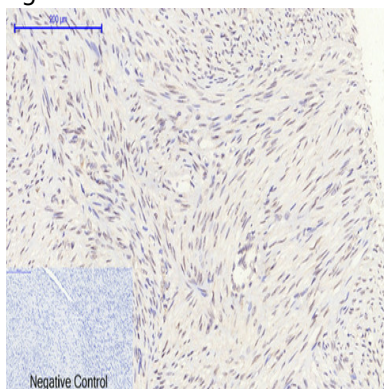
Immunofluorescence analysis of mouse-lung tissue. 1, Rb Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight).
2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min.

Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of mouse-lung tissue. 1, Rb Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight).
2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min.

Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



Immunohistochemical analysis of paraffin-embedded Human-uterus-cancer tissue. 1, Rb Polyclonal Antibody was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.

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注意事项 (Note)

For research use only .