

## Allgemeine Informationen

<b>Katalog-Nr.:</b> 67521-1-Ig	<b>GenBank-Zugangsnummer:</b> BC039060	<b>Reinigungsmethode:</b> Protein-A-Reinigung
<b>Größe:</b> 150ul, Konzentration: 1700 µg/ml von5925 Nanodrop und 1000 µg/ml durch die Bradford-Methode mit BSA als Standard;	<b>GeneID (NCBI):</b> 5925	<b>CloneNo.:</b> 1A2A6
<b>Wirt:</b> Maus	<b>Vollständiger Name:</b> retinoblastoma 1	<b>Empfohlene Verdünnungen:</b> WB 1:1000-1:6000 IHC 1:500-1:2000
<b>Isotyp:</b> IgG2a	<b>Berechnete Masse:</b> 928 aa, 106 kDa	
<b>Immunogen Katalognummer:</b> AG22578	<b>Beobachtete Masse:</b> 110 kDa	

## Anwendungen

<b>Geprüfte Anwendungen:</b> IHC, WB,ELISA	<b>Positivkontrollen:</b>
<b>Getestete Reaktivität:</b> Human	<b>WB:</b> Jurkat-Zellen, HL-60-Zellen, K-562-Zellen, MCF-7-Zellen, TF-1-Zellen
<b>Hinweis-IHC: Antigenmaskierung mit TE-Puffer pH 9,0 empfohlen. (*) Wahlweise kann die Antigenmaskierung auch mit Citratpuffer pH 6,0 erfolgen.</b>	<b>IHC:</b> Insulinomgewebe,

## Hintergrundinformationen

RB1, also named as pp110, pRb and p105 Rb, belongs to the retinoblastoma protein (RB) family. It is a key regulator of entry into cell division that acts as a tumor suppressor. RB1 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. It is directly involved in heterochromatin formation by maintaining overall chromatin structure and, in particular, that of constitutive heterochromatin by stabilizing histone methylation. It recruits and targets histone methyltransferases SUV39H1, SUV420H1 and SUV420H2, leading to epigenetic transcriptional repression. RB1 controls histone H4 'Lys-20' trimethylation and inhibits the intrinsic kinase activity of TAF1. It 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. 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.

## Lagerung

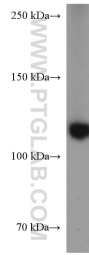
**Lagerungsbedingungen:**  
Bei -20°C lagern.  
**Lagerungspuffer:**  
PBS mit 0.02% Natriumazid und 50% Glycerin pH 7.3.  
Aliquotieren ist nicht notwendig bei -20°C Lagerung

\*\*\* 20ul-Größen enthalten 0.1% BSA

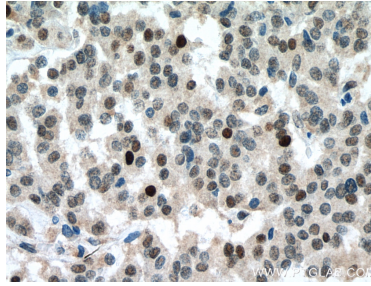
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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## Ausgewählte Validierungsdaten



Jurkat cells were subjected to SDS PAGE followed by western blot with 67521-1-Ig (RB1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded Insulinoma tissue slide using 67521-1-Ig (RB1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).