# abcam

### **Product datasheet**

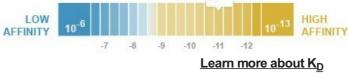
## Anti-Rb (phospho T826) antibody [EPR5351] ab133446

重组 RabMAb

#### <u>7 References</u> 4 图像

概述	
产 <b>品名称</b>	Anti-Rb (phospho T826) <b>抗体</b> [EPR5351]
描述	<b>兔</b> 单 <b>克隆抗体</b> [EPR5351] to Rb (phospho T826)
宿主	Rabbit
经测试应 <b>用</b>	适用于: WB, IP 不适用于: Flow Cyt or IHC-P
种属反应性	与反应: Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>阳性</b> 对照	WB: Jurkat cell lysate treated with FBS. IP: Raji.
常规说明	<ul> <li>This product is a recombinant monoclonal antibody, which offers several advantages including:</li> <li>High batch-to-batch consistency and reproducibility</li> <li>Improved sensitivity and specificity</li> <li>Long-term security of supply</li> <li>Animal-free production</li> <li>For more information <u>see here</u>.</li> <li>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <u>RabMAb<sup>®</sup> patents</u>.</li> <li>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</li> </ul>
性能	

形式	Liquid
存 <b>放</b> 说明	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
解离常数(K <sub>D</sub> )	$K_{\rm D} = 9.20 \times 10^{-11} {\rm M}$
	10 <sup>-11</sup>



存储溶液	pH: 7.2
	Preservative: 0.05% Sodium azide
	Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue
	culture supernatant
纯 <b>度</b>	Protein A purified
克隆	单 <b>克隆</b>
克 <b>隆</b> 编号	EPR5351
同种型	lgG

应用

#### The Abpromise guarantee Abpromise™承诺保证使用ab133446于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说 <b>明</b>
WB		1/1000 - 1/10000. Detects a band of approximately 110 kDa (predicted molecular weight: 106 kDa).
IP		1/10 - 1/100.

应用说明

Is unsuitable for Flow Cyt or IHC-P.

靶标

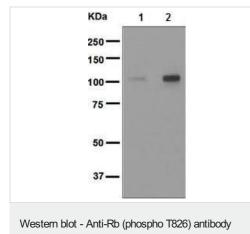
#### 功能

功能	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.
组织 <b>特异性</b>	Expressed in the retina.
疾病相关	Childhood cancer retinoblastoma Bladder cancer Osteogenic sarcoma
序列相似性	Belongs to the retinoblastoma protein (RB) family.
结 <b>构域</b>	The Pocket domain binds to the threonine-phosphorylated domain C, thereby preventing interaction with heterodimeric E2F/DP transcription factor complexes.
<b>翻</b> 译 <b>后修</b> 饰	Phosphorylated by CDK6 and CDK4, and subsequently by CDK2 at Ser-567 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. Phosphorylation at Thr-821 and Thr-826 promotes interaction between the C-terminal domain C and the Pocket domain, and thereby inhibits interactions with heterodimeric E2F/DP transcription factor complexes. Dephosphorylated at Ser-795 by calcineruin upon calcium stimulation. CDK3/cyclin-C-mediated phosphorylation at Ser-807 and Ser-811 is required for G0-G1 transition. Phosphorylated by CDK1 and CDK2 upon TGFB1-mediated apoptosis. N-terminus is methylated by METTL11A/NTM1 (By similarity). Monomethylation at Lys-810 by SMYD2 enhances phosphorylation at Ser-807 and Ser-811, and promotes cell cycle progression. Monomethylation at Lys-860 by SMYD2 promotes interaction with L3MBTL1. Acetylation at Lys-873 and Lys-874 regulates subcellular localization, at least during keratinocytes differentiation.

#### 细胞定位

#### 图片



[EPR5351] (ab133446)

All lanes : Anti-Rb (phospho T826) antibody [EPR5351] (ab133446) at 1/1000 dilution

Lane 1 : Jurkat cell lysate Lane 2 : Jurkat cell lysate treated with FBS.

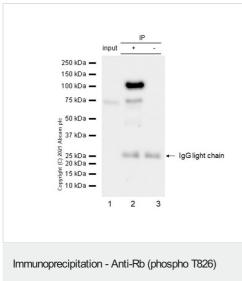
Lysates/proteins at 10 µg per lane.

#### Secondary

Nucleus.

**All lanes :** Goat anti-rabbit HRP conjugated antibody at 1/2000 dilution

Predicted band size: 106 kDa Observed band size: 110 kDa



antibody [EPR5351] (ab133446)

Rb was immunoprecipitated from 0.35 mg Raji (Human Burkitt's lymphoma B lymphocyte) whole cell lysate 10 µg with 133446 at 1/50 dilution (2µg). VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used at 1/5000 dilution.

Lane 1: Raji (Human Burkitt's lymphoma B lymphocyte) whole cell lysate 10  $\mu g$ 

Lane 2: ab133446 IP in Raji whole cell lysate

Lane 3: Rabbit monoclonal IgG (<u>**ab172730**</u>) instead of ab133446 in Raji whole cell lysate

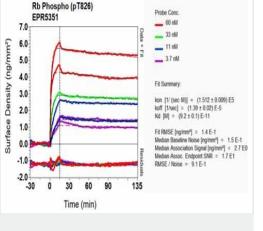
Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Lower bands could be Rb fragments (PMID:11420704)

Equilibrium disassociation constant (K<sub>D</sub>)

Learn more about K<sub>D</sub>

#### Click here to learn more about KD



OI-RD Scanning - Anti-Rb (phospho T826) antibody [EPR5351] (ab133446)



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