abcam

Product datasheet

Anti-Rb (phospho S780) antibody ab47763

★★★★★ 2 Abreviews 40 References 3 图像

概述

产品名称	Anti-Rb (phospho S780)**抗体**
描述	**兔多克隆抗体**to Rb (phospho S780)
宿主	Rabbit
经测试应用	**适用于:** ELISA, WB, IHC-P, IHC-Fr
种属反应性	**与反应:** Mouse, Rat, Human
免疫原	Synthetic peptide corresponding to Human Rb (phospho S780).
常规说明	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
存储溶液	pH: 7 Preservative: 0.02% Sodium azide Constituents: 49% PBS, 50% Glycerol, 0.87% Sodium chloride PBS Without Mg+2 and Ca+2
纯度	Immunogen affinity purified
纯化说明	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.
克隆	**多克隆**
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab47763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	说明
ELISA		Use at an assay dependent concentration.
WB	★★★★★ (1)	1/500 - 1/1000. Detects a band of approximately 125 kDa (predicted molecular weight: 106 kDa).
IHC-P		1/50 - 1/100.
IHC-Fr		Use at an assay dependent concentration. PubMed: 17690131

靶标

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.

组织特异性 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.

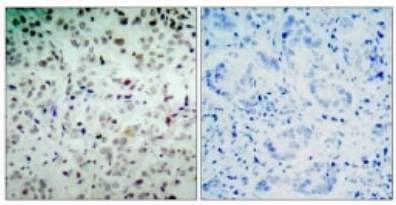
结构域 The Pocket domain binds to the threonine-phosphorylated domain C, thereby preventing interaction with heterodimeric E2F/DP transcription factor complexes.

翻译后修饰 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.

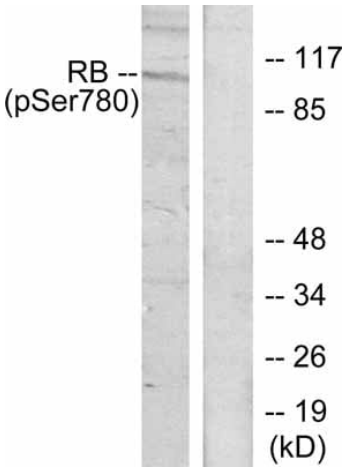
细胞定位 Nucleus.

图片



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Rb (phospho S780) antibody (ab47763)

ab47763 at 1/50 dilution staining paraffin-embedded human breast carcinoma; left without and right with immunising peptide.



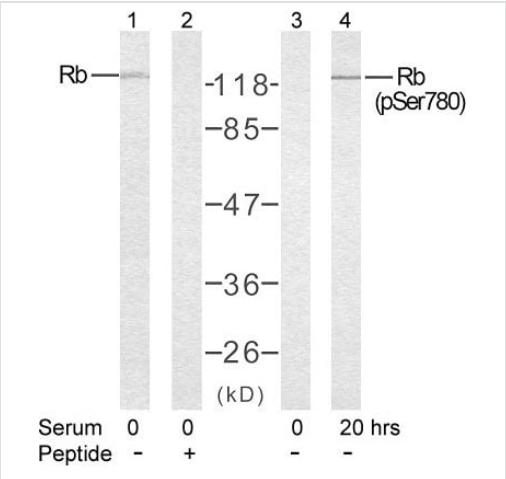
Western blot - Anti-Rb (phospho S780) antibody (ab47763)

All lanes : Anti-Rb (phospho S780) antibody (ab47763) at 1/500 dilution

Lane 1 : K562 cell extract treated with serum for 20 hours
Lane 2 : K562 cell extract

Predicted band size: 106 kDa

Typically 5-30ug of total protein was loaded per lane of the gel.



Western blot - Anti-Rb (phospho S780) antibody (ab47763)

Western blot analysis of extracts from K562 cells treated or untreated with serum using Rb antibody and ab47763.

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