abcam

Product datasheet

Anti-Rb (phospho S780) antibody ab47763

★★★★★ 2 Abreviews 40 References 画像数 3

製品の概要

製品名 Anti-Rb (phospho S780) antibody

製品の詳細 Rabbit polyclonal to Rb (phospho S780)

由来種 Rabbit

アプリケーション 適用あり: ELISA, WB, IHC-P, IHC-Fr

種交差性 交差種: Mouse, Rat, Human

免疫原 Synthetic peptide corresponding to Human Rb (phospho S780).

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

製品の特性

特記事項

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

バッファー pH: 7

Preservative: 0.02% Sodium azide

Constituents: 49% PBS, 50% Glycerol, 0.87% Sodium chloride

PBS Without Mg+2 and Ca+2

精製度 Immunogen affinity purified

特記事項(精製) 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.

ポリ/モノ ポリクローナル

アイソタイプ lgG

The Abpromise guarantee

Abpromise保証は、次のテスト済みアプリケーションにおけるab47763の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
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

ターゲット情報

機能

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.

組織特異性

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関連疾患

Childhood cancer retinoblastoma

Bladder cancer

Osteogenic sarcoma

Expressed in the retina.

配列類似性

Belongs to the retinoblastoma protein (RB) family.

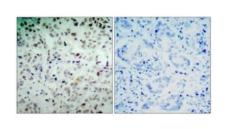
ドメイン

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

翻訳後修飾

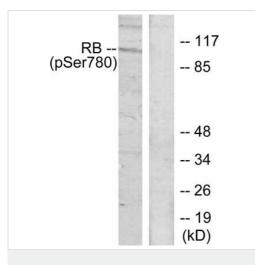
Phosphorylated by CDK6 and CDK4, and subsequently by CDK2 at Ser-567 in G1, thereby releasing E2F1 which is then able to activate cell growth. Dephosphorylated at the late M phase. SV40 large T antigen, HPV E7 and adenovirus E1A bind to the underphosphorylated, active form of pRb. Phosphorylation at 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.

画像



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

<u>ab47763</u> 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)

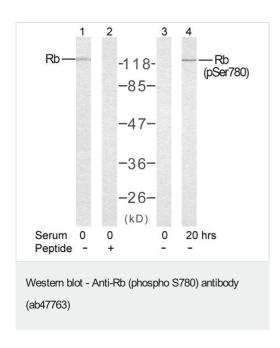
All lanes : Anti-Rb (phospho S780) antibody (ab47763) at 1/500 dilution

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

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