abcam

Product datasheet

Recombinant Human Rb protein ab83205

画像数 2

製品の詳細

製品名	Recombinant Human Rb protein
精製度	> 95 % SDS-PAGE. Purified by affinity and FPLC chromatography.
発現系	Baculovirus infected insect cells
アクセッション番号	NM_000321
タンパク質長	Full length protein
Animal free	No
由来	Recombinant
生物種	Human
配列	MPPKTPRKTAATAAAAAAEPPAPPPPPPPEEDPEQDSGPEDL PLVRLEFE ETEEPDFTALCQKLKIPDHVRERAWLTWEKVSSVDGVLGGYI QKKKELWG ICIFIAAVDLDEMSFTFTELQKNIEISVHKFFNLLKEIDTST KVDNAMSR LLKKYDVLFALFSKLERTCELIYLTQPSSSISTEINSALVLK VSWITFLL AKGEVLQMEDDLVISFQLMLCVLDYFIKLSPPMLLKEPYKTA VIPINGSP RTPRRGQNRSARIAKQLENDTRIIEVLCKEHECNIDEVKNVY FKNFIPFM NSLGLVTSNGLPEVENLSKRYEEIYLKNKDLDARLFLDHDKT LQTDSIDS FETQRTPRKSNLDEEVNVIPPHTPVRTVMNTIQQLMMILNSA SDQPSENL ISYFNNCTVNPKESILKRVKDIGYIFKEKFAKAVGQGCVEIG SQRYKLGV RLYYRVMESMLKSEEERLSIQNFSKLLNDNIFHMSLLACALE VVMATYSR STSQNLDSGTDLSFPWILNVLNLKAFDFYKVIESFIKAEGNL TREMIKHL ERCEHRIMESLAWLSDSPLFDLIKQSKDREGPTDHLESACPL NLPLQNNH TAADMYLSPVRSPKKKGSTTRVNSTANAETQATSAFQTQKPL

KSTSLSLF
YKKVYRLAYLRLNTLCERLLSEHPELEHIIWTLFQHTLQNEY
ELMRDRHL
DQIMMCSMYGICKVKNIDLKFKIIVTAYKDLPHAVQETFKRV
LIKEEEYD
SIIVFYNSVFMQRLKTNILQYASTRPPTLSPIPHIPRSPYKF
PSSPLRIP
GGNIYISPLKSPYKISEGLPTPTKMTPRSRILVSIGESFGTS
EKFQKINQ
MVCNSDRVLKRSAEGSNPPKPLKKLRFDIEGSDEADGSKHLP
GESKFQQK LAEMTSTRTRMQKQKMNDSMDTSNKEEK

予測される分子量	108 kDa
領域	1 to 928
タグ	His tag N-Terminus

特性

Our **Abpromise guarantee** covers the use of **ab83205** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

アプリケーション	SDS-PAGE Gel Supershift Assays Western blot EMSA
製品の状態	Liquid

前処理および保存

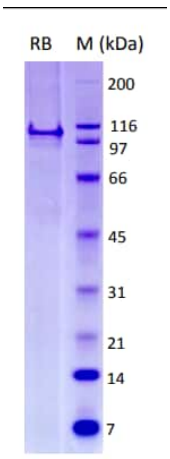
保存方法および安定性	Shipped on dry ice. Upon delivery aliquot and store at -80ºC. Avoid freeze / thaw cycles. pH: 7.9 Constituents: 0.0154% DTT, 0.316% Tris HCl, 0.00584% EDTA, 20% Glycerol (glycerin, glycerine)

関連情報

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	Expressed in the retina.
関連疾患	Childhood cancer retinoblastoma Bladder cancer Osteogenic sarcoma
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. 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.
細胞内局在	Nucleus.

画像



SDS-PAGE - Recombinant Human Rb protein (ab83205)

Western blot - Recombinant Human Rb protein (ab83205)

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