

Phospho-RB1 (Ser780) Polyclonal Antibody

Catalog No. E-AB-20976

Note: Centrifuge before opening to ensure complete recovery of vial contents.

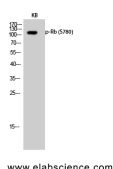
Description

Reactivity	Human, Mouse, Rat
Immunogen	Synthesized peptide derived from human Rb around the phosphorylation site of Ser780
Host	Rabbit
Isotype	IgG
Purification	Affinity purification
Conjugation	Unconjugated
Buffer	PBS with 0.02% sodium azide, 0.5% protective protein and 50% glycerol, pH7.4

Applications Recommended Dilution

WB	1:500-1:2000
IHC	1:100-1:300
IF	1:200-1:1000
ELISA	1:10000

Data



Western Blot analysis of KB cells with Phospho-RB1
(Ser780) Polyclonal Antibody
Observed Mw:106kDa
Calculated Mw:106kDa

Preparation & Storage

Storage Store at -20°C. Avoid freeze / thaw cycles.

Background

Key regulator of entry into cell division that acts as a tumor suppressor. 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, SUV420H1 and SUV420H2, leading to epigenetic transcriptional repression. Controls histone H4 'Lys-20' trimethylation. Inhibits the intrinsic kinase activity of TAF1. Mediates transcriptional repression by

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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.