Elabscience®

RB1 Polyclonal Antibody

catalog number: E-AB-32752

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 non-phosphorylation site of
	S807.
Host	Rabbit
Isotype	IgG
Purification	Affinity purification
Buffer	Phosphate buffered solution, pH 7.4, containing 0.05% stabilizer, 0.5% protein
	protectant and 50% glycerol.
Applications	Recommended Dilution
WB	1:500-1:2000
IHC	1:100-1:300
Data	
Western Blot ana	ysis of 3T3 cells using RB1 Polyclonal
Antibody at dilution of 1:1000.	
Observed-MW:106 kDa	
Calculated-MW:106 kDa	
Preparation & Storage	
Storage	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
Shipping	The product is shipped with ice pack, upon receipt, store it immediately at the
	temperature recommended.

Background

Elabscience®

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 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.

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