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Biotinylated Rb-T821 Non-phospho Control Peptide

Synthetic Peptide
Catalog # SP2031d

Specification

Biotinylated Rb-T821 Non-phospho Control Peptide - Product Information

Primary Accession	P33568
Other Accession	P13405, P06400
Sequence	**Biotin-KISEGLPTPTKMTPR**

Biotinylated Rb-T821 Non-phospho Control Peptide - Additional Information

Gene ID 24708

Other Names
Retinoblastoma-associated protein, pRb, Rb, pp105, Rb1, Rb-1

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Biotinylated Rb-T821 Non-phospho Control Peptide - Protein Information

Name Rb1

Synonyms Rb-1

Function
Tumor suppressor that is a key regulator of the G1/S transition of the cell cycle. The hypophosphorylated form binds transcription regulators of the E2F family, preventing transcription of E2F-responsive genes. Both physically blocks E2Fs transactivating domain and recruits chromatin-modifying enzymes that actively repress transcription. Cyclin and CDK-dependent phosphorylation of RB1 induces its dissociation from E2Fs, thereby activating transcription of E2F responsive genes and triggering entry into S phase. RB1 also promotes the G0-G1 transition upon phosphorylation and activation by CDK3/cyclin-C. 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 (PubMed:19081374). 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).

Cellular Location
Nucleus {ECO:0000250|UniProtKB:P13405}.

Biotinylated Rb-T821 Non-phospho Control Peptide - Images