

Phospho-Rb-like-1(S975) Antibody Blocking peptide
Synthetic peptide
Catalog # BP3232a**Specification**

Phospho-Rb-like-1(S975) Antibody Blocking peptide - Product InformationPrimary Accession [P28749](#)**Phospho-Rb-like-1(S975) Antibody Blocking peptide - Additional Information****Gene ID** 5933**Other Names**

Retinoblastoma-like protein 1, 107 kDa retinoblastoma-associated protein, p107, pRb1, RBL1

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP3232a](/product/products/AP3232a) was selected from the region of human Phospho-Rb-like-1-S975. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

Phospho-Rb-like-1(S975) Antibody Blocking peptide - Protein Information**Name** RBL1**Function**

Key regulator of entry into cell division (PubMed: [17671431](http://www.uniprot.org/citations/17671431)). Directly involved in heterochromatin formation by maintaining overall chromatin structure and, in particular, that of constitutive heterochromatin by stabilizing histone methylation (By similarity). Recruits and targets histone methyltransferases KMT5B and KMT5C, leading to epigenetic transcriptional repression (By similarity). Controls histone H4 'Lys-20' trimethylation (By similarity). Probably acts as a transcription repressor by recruiting chromatin-modifying enzymes to promoters (By similarity). Potent inhibitor of E2F-mediated trans-activation (PubMed: [8319904](http://www.uniprot.org/citations/8319904)). May act as a tumor suppressor (PubMed: [8319904](http://www.uniprot.org/citations/8319904)).

Cellular Location

Nucleus.

Phospho-Rb-like-1(S975) Antibody Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

Phospho-Rb-like-1(S975) Antibody Blocking peptide - Images**Phospho-Rb-like-1(S975) Antibody Blocking peptide - Background**

RB-like 1 is similar in sequence and possibly function to the product of the retinoblastoma 1 (RB1) gene. The RB1 gene product is a tumor suppressor protein that appears to be involved in cell cycle regulation, as it is phosphorylated in the S to M phase transition and is dephosphorylated in the G1 phase of the cell cycle. Both the RB1 protein and RB-like 1 can form a complex with adenovirus E1A protein and SV40 large T-antigen, with the SV40 large T-antigen binding only to the unphosphorylated form of each protein. In addition, both proteins can inhibit the transcription of cell cycle genes containing E2F binding sites in their promoters. Due to the sequence and biochemical similarities with the RB1 protein, it is thought that RB-like 1 may also be a tumor suppressor.

Phospho-Rb-like-1(S975) Antibody Blocking peptide - References

Rodier, G., et al., J. Cell Biol. 168(1):55-66 (2005). Barbie, T.U., et al., Proc. Natl. Acad. Sci. U.S.A. 100(26):15601-15606 (2003). Joaquin, M., et al., J. Biol. Chem. 278(45):44255-44264 (2003). Cicchillitti, L., et al., J. Biol. Chem. 278(21):19509-19517 (2003). Leng, X., et al., Mol. Cell. Biol. 22(7):2242-2254 (2002).