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PIM2 Antibody (C-term) Blocking Peptide

Synthetic peptide

Catalog # BP7933a

Specification

PIM2 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q9P1W9

PIM2 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 11040

Other Names
Serine/threonine-protein kinase pim-2, Pim-2h, PIM2

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7933a was selected from the C-term region of human PIM2 . 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.

PIM2 Antibody (C-term) Blocking Peptide - Protein Information

Name PIM2

Function

PIM2 Antibody (C-term) Blocking Peptide - Background

Pim proteins (Pim-1, Pim-2 and Pim-3) are oncogene-encoded serine/threonine kinases. Pim-2 is highly homologous to Pim-1 with similar oncogenic functions. Pim-2 overexpression promotes resistance to a host of apoptotic stimuli; its expression is negatively regulated by growth factor depletion. Increased levels of Pim-2 has also been observed in certain cancers.

PIM2 Antibody (C-term) Blocking Peptide - References

Yan, B., et al., J. Biol. Chem. 278(46):45358-45367 (2003).Baytel, D., et al., Biochim. Biophys. Acta 1442 (2-3), 274-285 (1998).

Proto-oncogene with serine/threonine kinase activity involved in cell survival and cell proliferation. Exerts its oncogenic activity through: the regulation of MYC transcriptional activity, the regulation of cell cycle progression, the regulation of cap-dependent protein translation and through survival signaling by phosphorylation of a pro- apoptotic protein, BAD. Phosphorylation of MYC leads to an increase of MYC protein stability and thereby an increase transcriptional activity. The stabilization of MYC exerted by PIM2 might explain partly the strong synergism between these 2 oncogenes in tumorigenesis. Regulates cap-dependent protein translation in a mammalian target of rapamycin complex 1 (mTORC1)-independent manner and in parallel to the PI3K-Akt pathway. Mediates survival signaling through phosphorylation of BAD, which induces release of the anti-apoptotic protein Bcl-X(L)/BCL2L1. Promotes cell survival in response to a variety of proliferative signals via positive regulation of the I-kappa-B kinase/NF-kappa-B cascade; this process requires phosphorylation of MAP3K8/COT. Promotes growth factor-independent proliferation by phosphorylation of cell cycle factors such as CDKN1A and CDKN1B. Involved in the positive regulation of chondrocyte survival and autophagy in the epiphyseal growth plate.

Tissue Location

Highly expressed in hematopoietic tissues, in leukemic and lymphoma cell lines, testis, small intestine, colon and colorectal adenocarcinoma cells. Weakly expressed in normal liver, but highly expressed in hepatocellular carcinoma tissues

PIM2 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides