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PIM2 Antibody

Rabbit mAb
Catalog # AP92469

Product Information

Application	WB, IF, ICC, IP
Primary Accession	Q9P1W9
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	PIM2; Pim2h;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	34190

Additional Information

Dilution	WB 1:500~1:2000 ICC/IF 1:50~1:200 IP 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human PIM2
Description	Promotes cell survival in response to a variety of proliferative signals via positive regulation of the I-kappaB kinase/NF-kappaB cascade; this process requires phosphorylation of MAP3K8/COT. Prevents apoptosis induced by growth factor withdrawal via inhibition of caspase-3 activation, and via phosphorylation of pro-apoptotic proteins.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

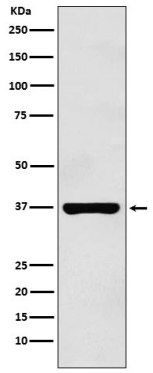
Name	PIM2
Function	Proto-oncogene with serine/threonine kinase activity involved in cell survival and cell proliferation. Exerts its oncogenic activity through: the regulation of MYC transcriptional activity, the regulation of cell cycle progression, the regulation of cap-dependent protein translation 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

Images



Western blot analysis of PIM2 expression in Raji cell lysate.