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PIM3 Rabbit pAb

Catalog # AP100004

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q86V86
Other Accession	Q86V86
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	35891
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PIM3
Epitope Specificity	1-100/326
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. PIM subfamily. Contains 1 protein kinase domain.
SUBUNIT	Interacts with BAD. Interacts with PPP2CA; this interaction promotes dephosphorylation of PIM3, ubiquitination and proteasomal degradation. Interacts with SOCS6.
Post-translational modifications	Ubiquitinated, leading to proteasomal degradation. Phosphorylated. Interaction with PPP2CA promotes dephosphorylation.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The Pim family serine/threonine protein kinases were first identified in studies examining genes targeted for proviral insertion in murine leukemia virus-induced T lymphomas. Increased levels of Pim kinases predispose cells to lymphomagenesis and enhance the activity of mitogenic proteins such as p100, c-Myb, and Cdc25A. In addition, Pim kinases are also involved in modulation of synaptic strength in neurons and anti-apoptotic signaling in hematopoietic progenitor cells. Pim-3, a member of the proto-oncogene Pim family that expresses serine/threonine kinase activity, shares significant homology with Pim-1 serine/threonine protein kinases. Pim-3 may function as a mediator of synaptic plasticity in the brain and is presumably involved in the anti-apoptosis process and cell cycle progression as well as the proliferation of human hepatoma cell lines. The Pim-3 protein is widely expressed, however no expression is observed in the colon, thymus, or small intestine.

Additional Information

Gene ID	415116
Other Names	pim-3; Kid1; PIM3_HUMAN; PIM3; 2.7.11.1; PIM3_MOUSE; Pim-3 proto-oncogene, serine/threonine kinase; pim-3 oncogene

Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	PIM3
Function	Proto-oncogene with serine/threonine kinase activity that can prevent apoptosis, promote cell survival and protein translation. May contribute to tumorigenesis through: the delivery of survival signaling through phosphorylation of BAD which induces release of the anti- apoptotic protein Bcl-X(L), the regulation of cell cycle progression, protein synthesis and by regulation of MYC transcriptional activity. Additionally to this role on tumorigenesis, can also negatively regulate insulin secretion by inhibiting the activation of MAPK1/3 (ERK1/2), through SOCS6. Involved also in the control of energy metabolism and regulation of AMPK activity in modulating MYC and PPARGC1A protein levels and cell growth.
Cellular Location	Cytoplasm.
Tissue Location	Detected in various tissues, including the heart, brain, lung, kidney, spleen, placenta, skeletal muscle, and peripheral blood leukocytes. Not found or barely expressed in the normal adult endoderm-derived organs such as colon, thymus, liver, or small intestine. However, expression is augmented in premalignant and malignant lesions of these organs.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.