

Rabbit Anti-PIM3 antibody

SL20023R

Product Name:	PIM3
Chinese Name:	丝氨酸/苏氨酸蛋白激酶PIM3抗体
Alias:	ABP1; Actin-binding protein 1; Cervical mucin associated protein; Cervical mucin-associated protein; Cervical SH3P7; CMAP; Dbnl; PIM3_HUMAN; DBNL_HUMAN; Drebrin F; drebrin like; Drebrin like protein; Drebrin-F; Drebrin-like protein; HIP 55; HIP-55; HPK1 interacting protein of 55 kDa; HPK1-interacting protein of 55 kDa; SH3 domain containing protein 7; SH3 domain-containing protein 7; SH3P7; Src Homology 3 Domain Containing Protein; src homology 3 domain containing protein HIP.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Mouse,Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	36kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PIM3:1-100/326
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	Preservative: 15mM Sodium Azide, Constituents: 1% BSA, 0.01M PBS, pH 7.4
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. 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.
PubMed:	<u>PubMed</u>
Product Detail:	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.

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.

Subunit:

Interacts with BAD. Interacts with PPP2CA; this interaction promotes dephosphorylation of PIM3, ubiquitination and proteasomal degradation. Interacts with SOCS6.

Subcellular Location:

Cytoplasm.

Tissue Specificity:

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.

Post-translational modifications:

Ubiquitinated, leading to proteasomal degradation.

Phosphorylated. Interaction with PPP2CA promotes dephosphorylation.

Similarity:

Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. PIM subfamily.

Contains 1 protein kinase domain.

SWISS:

Q86V86

Gene ID:

223775

Database links:

Entrez Gene: 415116Human

Entrez Gene: 223775 Mouse

Omim: 610580Human

SwissProt: Q86V86Human

SwissProt: P58750Mouse

Unigene: 530381Human

Unigene: Hs.530381Human

Unigene: 400129 Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.