

Rabbit anti-Human, Mouse PIM1 Monoclonal Antibody | anti-PIM1 antibody

Anti-PIM1 Rabbit Monoclonal Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA47032	Rabbit	Human, Mouse	Western Blot, Immunocytochemistry, Immunohistochemistry, Immunofluorescence

PRODUCT SYNONYMS

PIM1; Monoclonal Antibody; Anti-PIM1 Rabbit Monoclonal Antibody; Serine/threonine-protein kinase pim-1; 2.7.11.1; anti-PIM1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Monoclonal
Purity/Purification	Affinity-chromatography
Form/Format	Liquid
Sequence Length	313
Applicable Applications for anti-PIM1 antibody	WB (Western Blot), ICC (Immunocytochemistry), IHC (Immunohistochemistry), IF (Immunofluorescence)
Immunogen	A synthesized peptide derived from human PIM1
Subcellular Localization	Isoform 2: Cytoplasm. Nucleus.
Tissue Specificity	Expressed primarily in cells of the hematopoietic and germline lineages. Isoform 1 and isoform 2 are both expressed in prostate cancer cell lines.
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



WB (Western Blot)

Western blot analysis of PIM1 expression in Jurkat cell lysate (AAA47032). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PIM1 monoclonal antibody overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for PIM1.



IHC (Immunohistochemistry)

Immunohistochemical analysis of paraffin-embedded human prostate carcinoma, using PIM1 Antibody (AAA47032). PIM1 was detected in paraffin-embedded tissue section. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PIM1 Antibody (AAA47032) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

ADDITIONAL INFORMATION

Related Product Information for anti-PIM1 antibody	Proto-oncogene with serine/threonine kinase activity involved in cell survival and cell proliferation and thus providing a selective advantage in tumorigenesis. Exerts its oncogenic activity through: the regulation of MYC transcriptional activity, the regulation of cell cycle progression and by phosphorylation and inhibition of proapoptotic proteins (BAD, MAP3K5, FOXO3). Phosphorylation of MYC leads to an increase of MYC protein stability and thereby an increase of transcriptional activity. The stabilization of MYC exerted by PIM1 might explain partly the strong synergism between these two oncogenes in tumorigenesis. Mediates survival signaling through phosphorylation of BAD, which induces release of the anti-apoptotic protein Bcl- X(L)/BCL2L1. Phosphorylation of MAP3K5, an other proapoptotic protein, by PIM1, significantly decreases MAP3K5 kinase activity and inhibits MAP3K5-mediated phosphorylation of JNK and JNK/p38MAPK subsequently reducing caspase-3 activation and cell apoptosis. Stimulates cell cycle progression at the G1-S and G2-M transitions by phosphorylation of CDC25A and CDC25C. Phosphorylation of CDKN1A, a regulator of cell cycle progression at G1, results in the relocation of CDKN1A to the cytoplasm and enhanced CDKN1A protein stability. Promote cell cycle progression and tumorigenesis by down-regulating expression of a regulator of cell cycle progression, CDKN1B, at both transcriptional and post- translational levels. Phosphorylation of CDKN1B, induces 14-3-3- proteins binding, nuclear export and proteasome-dependent degradation. May affect the structure or silencing of chromatin by phosphorylating HP1 gamma/CBX3. Acts also as a regulator of homing and migration of bone marrow cells involving functional interaction with the CXCL12-CXCR4 signaling axis.
Product Categories/Family for anti-PIM1 antibody	Signal Transduction; Protein Phosphorylation; SER/THR Kinases; Other Kinases; Stem Cells; Hematopoietic Progenitors; Intracellular molecules; Epigenetics and Nuclear Signaling; Chromatin Remodeling; polycomb silencing; Cancer; Serine/Threonine Kinases; On

NCBI AND UNIPROT INFORMATION

NCBI GI #	342307046
NCBI GeneID	5292
NCBI Accession #	NP_001230115.1
NCBI GenBank Nucleotide #	NM_001243186.1
UniProt Accession #	P11309; Q38RT9; Q5T7H7; Q96RG3
Molecular Weight	45412 MW
NCBI Official Full Name	serine/threonine-protein kinase pim-1 isoform 1
NCBI Official Synonym Full Names	Pim-1 proto-oncogene, serine/threonine kinase
NCBI Official Symbol	PIM1
NCBI Official Synonym Symbols	PIM
NCBI Protein Information	serine/threonine-protein kinase pim-1
UniProt Protein Name	Serine/threonine-protein kinase pim-1
UniProt Gene Name	PIM1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/pim1-antibody-western-blot-immunocytochemistry-immunohistochemistry-immunofluorescence-elisa/47032>