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PIN1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP8959C

Specification

PIN1 Antibody (Center) - Product Information

Application	IF, WB, IHC-P, FC,E
Primary Accession	Q13526
Other Accession	Q4R383
Reactivity	Human
Predicted	Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Calculated MW	18243
Antigen Region	30-56

PIN1 Antibody (Center) - Additional Information

Gene ID 5300

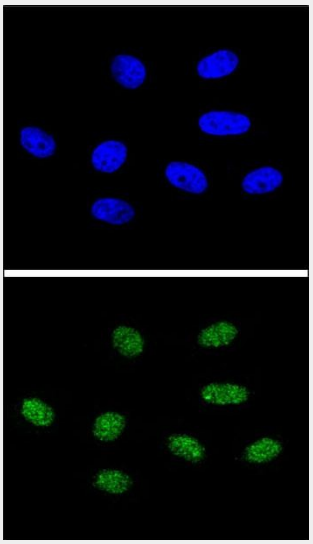
Other Names
Peptidyl-prolyl cis-trans isomerase NIMA-interacting 1, Peptidyl-prolyl cis-trans isomerase Pin1, PPIase Pin1, Rotamase Pin1, PIN1

Target/Specificity
This PIN1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 30-56 amino acids from the Central region of human PIN1.

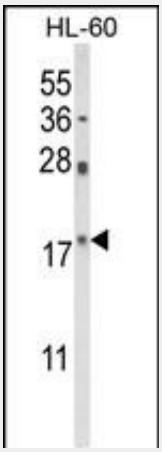
Dilution
IF~~1:10~50
WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C



Confocal immunofluorescent analysis of PIN1 Antibody (Center) (Cat. #AP8959c) with 293 cell followed by Alexa Fluor® 488-conjugated goat anti-rabbit IgG (green).DAPI was used to stain the cell nuclear (blue).



Western blot analysis of PIN1 Antibody (Center) (Cat. #AP8959c) in HL-60 cell line lysates (35ug/lane). PIN1 (arrow) was detected using the purified Pab.

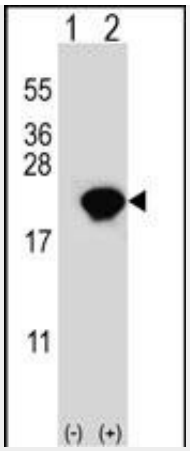
in small aliquots to prevent freeze-thaw cycles.

Precautions
PIN1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

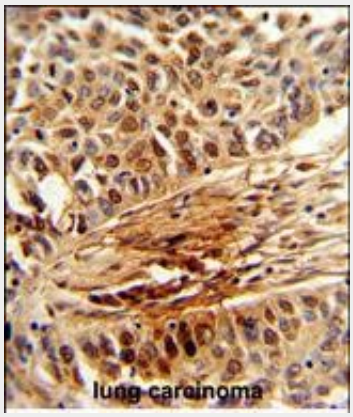
PIN1 Antibody (Center) - Protein Information

Name PIN1

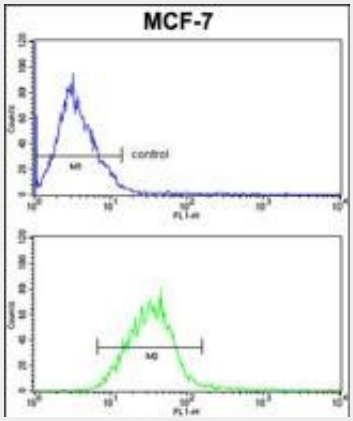
Function
Peptidyl-prolyl cis/trans isomerase (PPIase) that binds to and isomerizes specific phosphorylated Ser/Thr-Pro (pSer/Thr-Pro) motifs (PubMed:21497122, PubMed:23623683, PubMed:29686383). By inducing conformational changes in a subset of phosphorylated proteins, acts as a molecular switch in multiple cellular processes (PubMed:21497122, PubMed:22033920, PubMed:23623683). Displays a preference for acidic residues located N-terminally to the proline bond to be isomerized. Regulates mitosis presumably by interacting with NIMA and attenuating its mitosis-promoting activity. Down-regulates kinase activity of BTK (PubMed:16644721). Can transactivate multiple oncogenes and induce centrosome amplification, chromosome instability and cell transformation. Required for the efficient dephosphorylation and recycling of RAF1 after mitogen activation (PubMed:15664191). Binds and targets PML and BCL6 for degradation in a phosphorylation-dependent manner (PubMed:<a href="http://www.uniprot.org/c



Western blot analysis of PIN1 (arrow) using rabbit polyclonal PIN1 Antibody (Center) (Cat. #AP8959c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the PIN1 gene.



Formalin-fixed and paraffin-embedded human lung carcinoma reacted with PIN1 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



itations/17828269" target="_blank">17828269). Acts as a regulator of JNK cascade by binding to phosphorylated FBXW7, disrupting FBXW7 dimerization and promoting FBXW7 autoubiquitination and degradation: degradation of FBXW7 leads to subsequent stabilization of JUN (PubMed:22608923). May facilitate the ubiquitination and proteasomal degradation of RBBP8/CtIP through CUL3/KLHL15 E3 ubiquitin-protein ligase complex, hence favors DNA double-strand repair through error-prone non-homologous end joining (NHEJ) over error-free, RBBP8-mediated homologous recombination (HR) (PubMed:23623683, PubMed:27561354). Upon IL33-induced lung inflammation, catalyzes cis-trans isomerization of phosphorylated IRAK3/IRAK-M, inducing IRAK3 stabilization, nuclear translocation and expression of pro-inflammatory genes in dendritic cells (PubMed:29686383).

Cellular Location
Nucleus. Nucleus speckle. Cytoplasm Note=Colocalizes with NEK6 in the nucleus (PubMed:16476580). Mainly localized in the nucleus but phosphorylation at Ser-71 by DAPK1 results in inhibition of its nuclear localization (PubMed:21497122)

Tissue Location
Expressed in immune cells in the lung (at protein level) (PubMed:29686383). The phosphorylated form at Ser-71 is expressed in normal breast tissue cells but not in breast cancer cells

PIN1 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot

PIN1 Antibody (Center) (Cat.#AP8959c) FC analysis of MCF-7 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

PIN1 Antibody (Center) - Background

PIN1 is an essential nuclear peptidylprolyl cis-trans isomerase (PPIase; EC 5.2.1.8) involved in regulation of mitosis.

PIN1 Antibody (Center) - References

Lu,K.P., et.al., Nature 380 (6574), 544-547 (1996) Campbell,H.D., et.al., Genomics 44 (2), 157-162 (1997)

- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture