

PIN1 Rabbit mAb
Catalog # AP75913**Specification****PIN1 Rabbit mAb - Product Information**

Application	WB, IHC, IF, IP
Primary Accession	Q13526
Reactivity	Human, Mouse, Rat, Hamster
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	18243

PIN1 Rabbit mAb - Additional Information

Gene ID 5300

Other Names

PIN1

Dilution

WB~~1/500-1/1000

IHC~~1/50-1/100

IF~~1/50-1/200

IP~~1/20

Format

Liquid

PIN1 Rabbit mAb - 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](http://www.uniprot.org/citations/21497122), PubMed: [23623683](http://www.uniprot.org/citations/23623683), PubMed: [29686383](http://www.uniprot.org/citations/29686383)). By inducing conformational changes in a subset of phosphorylated proteins, acts as a molecular switch in multiple cellular processes (PubMed: [21497122](http://www.uniprot.org/citations/21497122), PubMed: [22033920](http://www.uniprot.org/citations/22033920), PubMed: [23623683](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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: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). Catalyzes cis-trans isomerization of phosphorylated phosphoglycerate kinase PGK1 under hypoxic conditions to promote its binding to the TOM complex and targeting to the mitochondrion (PubMed:26942675).

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 Rabbit mAb - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PIN1 Rabbit mAb - Images





