

**Anti-PIN1 [RABBIT] Antibody**  
**PIN1 Antibody**  
**Catalog # ASR5400****Specification**

---

**Anti-PIN1 [RABBIT] Antibody - Product Information**

Host	Rabbit
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human
Clonality	Polyclonal
Application	WB, IHC, E, IP, I, LCI
Application Note	This affinity purified antibody has been tested for use in ELISA, Immunohistochemistry, and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 18 kDa in size corresponding to Pin1 by western blotting in the appropriate cell lysate or extract. Lysates from 3T3, Jurkat, 293 or HeLa cells, as well as HeLa nuclear extract, are recommended for use as positive controls.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal sequence of human Pin1.
Preservative	0.01% (w/v) Sodium Azide

**Anti-PIN1 [RABBIT] Antibody - Additional Information****Gene ID** 5300**Other Names**  
5300**Purity**

This affinity purified antibody is directed against human Pin1. The product was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest cross-reactivity with Pin1 from human, dog, bovine and monkey based on a 100% homology with the immunizing sequence. Expect partial reactivity with Pin1 from mouse and rat sources based on 92% sequence homologies. Reactivity against homologues from other sources is not known.

**Storage Condition**

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

### Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

## Anti-PIN1 [RABBIT] Antibody - 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:<a href="http://www.uniprot.org/citations/21497122" target="\_blank">21497122</a>, PubMed:<a href="http://www.uniprot.org/citations/23623683" target="\_blank">23623683</a>, PubMed:<a href="http://www.uniprot.org/citations/29686383" target="\_blank">29686383</a>). By inducing conformational changes in a subset of phosphorylated proteins, acts as a molecular switch in multiple cellular processes (PubMed:<a href="http://www.uniprot.org/citations/21497122" target="\_blank">21497122</a>, PubMed:<a href="http://www.uniprot.org/citations/22033920" target="\_blank">22033920</a>, PubMed:<a href="http://www.uniprot.org/citations/23623683" target="\_blank">23623683</a>). 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:<a href="http://www.uniprot.org/citations/16644721" target="\_blank">16644721</a>). 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:<a href="http://www.uniprot.org/citations/15664191" target="\_blank">15664191</a>). Binds and targets PML and BCL6 for degradation in a phosphorylation-dependent manner (PubMed:<a href="http://www.uniprot.org/citations/17828269" target="\_blank">17828269</a>). 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:<a href="http://www.uniprot.org/citations/22608923" target="\_blank">22608923</a>). 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:<a href="http://www.uniprot.org/citations/23623683" target="\_blank">23623683</a>, PubMed:<a href="http://www.uniprot.org/citations/27561354" target="\_blank">27561354</a>). 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:<a href="http://www.uniprot.org/citations/29686383" target="\_blank">29686383</a>). 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:<a href="http://www.uniprot.org/citations/26942675" target="\_blank">26942675</a>).

### 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

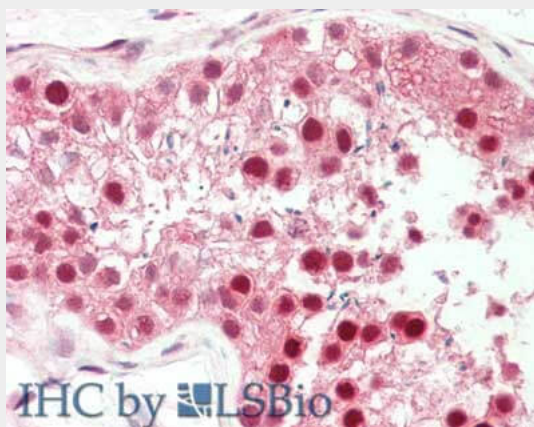
Expressed in immune cells in the lung (at protein level) (PubMed:29686383). The phosphorylated form at Ser-71 is expressed in normal breast tissue cells but not in breast cancer cells

### Anti-PIN1 [RABBIT] Antibody - 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](#)

### Anti-PIN1 [RABBIT] Antibody - Images



Immunohistochemistry of rabbit anti-PIN1 antibody. Tissue: testis. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Anti-PIN1 at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: PIN-1 as precipitated red signal with hematoxylin purple nuclear counterstain.

### Anti-PIN1 [RABBIT] Antibody - Background

Pin1 (peptidylprolyl cis/trans isomerase NIMA-interacting 1 protein) is an essential peptidylprolyl isomerase that regulates mitosis, presumably by interacting with NIMA and attenuating its mitosis-promoting activity. Pin1 displays a preference for an acidic residue N-terminal to the isomerized proline bond and also catalyzes pSer/Thr-Pro cis/trans isomerizations. Pin1 shows a nuclear localization.