Anti-Pin1 antibody

Description	Rabbit polyclonal to Pin1.

Model	STJ95095
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IF, IHC
Immunogen	Synthesized peptide derived from human Pin1 around the non-phosphorylation site of S16.
Immunogen Region	1-80 aa
Gene ID	5300
Gene Symbol	PIN1
Dilution range	IHC 1:100-1:300IF 1:200-1:1000ELISA 1:5000
Specificity	Pin1 Polyclonal Antibody detects endogenous levels of Pin1 protein.
Tissue Specificity	The phosphorylated form at Ser-71 is expressed in normal breast tissue cells but not in breast cancer cells.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Peptidyl-prolyl cis-trans isomerase NIMA-interacting 1 Peptidyl-prolyl cis-trans isomerase Pin1 PPIase Pin1 Rotamase Pin1
Molecular Weight	18 kDa

Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:8988OMIM:601052
Alternative Names	Peptidyl-prolyl cis-trans isomerase NIMA-interacting 1 Peptidyl-prolyl cis-trans isomerase Pin1 PPIase Pin1 Rotamase Pin1
Function	Peptidyl-prolyl cis/trans isomerase (PPIase) that binds to and isomerizes specific phosphorylated Ser/Thr-Pro (pSer/Thr-Pro) motifs. By inducing conformational changes in a subset of phosphorylated proteins, acts as a molecular switch in multiple cellular processes . 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 . 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 . Binds and targets PML and BCL6 for degradation in a phosphorylation-dependent manner . 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 . 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) .
Sequence and Domain Family	The WW domain is required for the interaction with STIL and KIF20B.
Cellular Localization	Nucleus Nucleus speckle Cytoplasm. Colocalizes with NEK6 in the nucleus . Mainly localized in the nucleus but phosphorylation at Ser-71 by DAPK1 results in inhibition of its nuclear localization .
Post-translational Modifications	Phosphorylation at Ser-71 by DAPK1 results in inhibition of its catalytic activity, nuclear localization, and its ability to induce centrosome amplification, chromosome instability and cell transformation.