

Anti-PKN1 Antibody (Internal)
Rabbit Anti Human Polyclonal Antibody
Catalog # ALS17411**Specification**

Anti-PKN1 Antibody (Internal) - Product Information

Application	WB, IHC-P, IF, ICC
Primary Accession Predicted	O16512 Human, Mouse, Monkey, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	103932

Anti-PKN1 Antibody (Internal) - Additional Information**Gene ID 5585**Alias Symbol **PKN1****Other Names**

PKN1, PKN, Protein kinase C-like PKN, Protein kinase N1, PRK1, PRKCL1, Serine-threonine kinase N, Pknalpha, Protease-activated kinase 1, Protein kinase PKN-alpha, DBK, PAK-1, PKN-ALPHA, Protein kinase C-like 1

Target/Specificity

Recognizes endogenous levels of PKN1 protein.

Reconstitution & Storage

PBS, pH 7.3, 0.01% sodium azide, 30% glycerol. Store at -20°C. Aliquot to avoid freeze/thaw cycles.

Precautions

Anti-PKN1 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-PKN1 Antibody (Internal) - Protein Information**Name** PKN1**Synonyms** PAK1, PKN, PRK1, PRKCL1

Function

PKC-related serine/threonine-protein kinase involved in various processes such as regulation of the intermediate filaments of the actin cytoskeleton, cell migration, tumor cell invasion and transcription regulation. Part of a signaling cascade that begins with the activation of the adrenergic receptor ADRA1B and leads to the activation of MAPK14. Regulates the cytoskeletal network by phosphorylating proteins such as VIM and neurofilament proteins NEFH, NEFL and NEFM, leading to inhibit their polymerization. Phosphorylates 'Ser-575', 'Ser-637' and 'Ser-669' of MAPT/Tau, lowering its ability to bind to microtubules, resulting in disruption of tubulin assembly. Acts as a key coactivator of androgen receptor (AR)-dependent transcription, by being recruited to AR target genes and specifically mediating phosphorylation of 'Thr-11' of histone H3 (H3T11ph), a specific tag for epigenetic transcriptional activation that promotes demethylation of histone H3 'Lys-9' (H3K9me) by KDM4C/JMJD2C. Phosphorylates HDAC5, HDAC7 and HDAC9, leading to impair their import in the nucleus. Phosphorylates 'Thr-38' of PPP1R14A, 'Ser-159', 'Ser-163' and 'Ser-170' of MARCKS, and GFAP. Able to phosphorylate RPS6 in vitro.

Cellular Location

Cytoplasm. Nucleus Endosome. Cell membrane
{ECO:0000250|UniProtKB:Q63433};
Peripheral membrane protein
{ECO:0000250|UniProtKB:Q63433}.
Cleavage furrow. Midbody Note=Associates with chromatin in a ligand-dependent manner Localization to endosomes is mediated via its interaction with RHOB Association to the cell membrane is dependent on Ser-377 phosphorylation. Accumulates during telophase at the cleavage furrow and finally concentrates around the midbody in cytokinesis
{ECO:0000250|UniProtKB:Q63433,
ECO:0000269|PubMed:17332740}

Tissue Location

Found ubiquitously. Expressed in heart, brain, placenta, lung, skeletal muscle, kidney and pancreas. Expressed in numerous tumor cell lines, especially in breast tumor cells

Anti-PKN1 Antibody (Internal) - 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](#)