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Anti-PKN1/2 (pT774/816) Antibody
Catalog # AP54005

Specification

Anti-PKN1/2 (pT774/816) Antibody - Product Information

Application	**WB**
Primary Accession	Q16512
Other Accession	Q16513
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**103932**

Anti-PKN1/2 (pT774/816) Antibody - Additional Information

Gene ID 5585

Other Names
PKN1; PAK1; PKN; PRK1; PRKCL1; Serine/threonine-protein kinase N1; Protease-activated kinase 1; PAK-1; Protein kinase C-like 1; Protein kinase C-like PKN; Protein kinase PKN-alpha; Protein-kinase C-related kinase 1; Serine-threonine protein kinase N; PKN2; PRK2; PRKCL2; Serine/threonine-protein kinase N2; PKN gamma; Protein kinase C-like 2; Protein-kinase C-related kinase 2

Target/Specificity
Recognizes endogenous levels of PKN1/2 (pT774/816) protein.

Dilution
WB~~1/500 - 1/1000

Format
Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage
Store at -20 °C.Stable for 12 months from date of receipt

Anti-PKN1/2 (pT774/816) Antibody - 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}

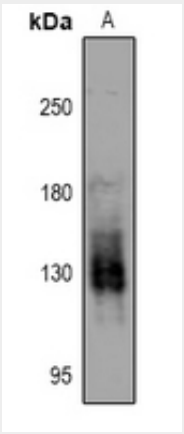
Tissue Location
Found ubiquitously. Expressed in heart, brain, placenta, lung, skeletal muscle, kidney and pancreas. Expressed in numerous tumor cell lines, especially in breast tumor cells

Anti-PKN1/2 (pT774/816) 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 Cytomety
- Cell Culture

Anti-PKN1/2 (pT774/816) Antibody - Images



Western blot analysis of PKN1/2 (pT774/816) expression in HCT116 (A) whole cell lysates.

Anti-PKN1/2 (pT774/816) Antibody - Background

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Rabbit polyclonal antibody to PKN1/2 (pT774/816)