PKN1/PRK1 Antibody

Catalog No: #35295

Package Size: #35295-1 50ul #35295-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

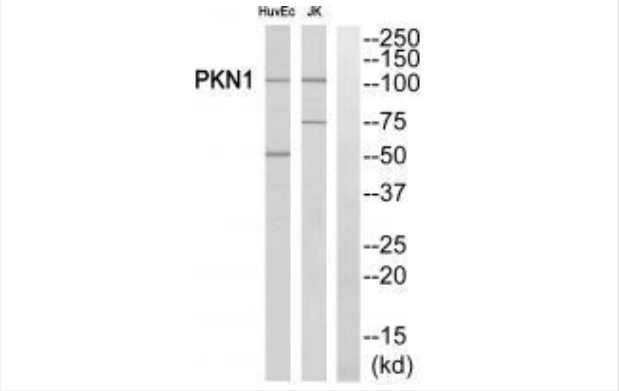
Description

Product Name	PKN1/PRK1 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	WB
Species Reactivity	Hu
Specificity	The antibody detects endogenous levels of total PKN1/PRK1 protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from Internal of human PKN1/PRK1.
Target Name	PKN1/PRK1
Other Names	DBK; MGC46204; PAK1; PKN; PKN-ALPHA
Accession No.	Swiss-Prot: Q16512NCBI Gene ID: 5585
Uniprot	Q16512
GeneID	5585;
SDS-PAGE MW	104kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

Western blotting: 1:500~1:3000

Images



Western blot analysis of extracts from Jurkat/HuvEc cells, using PKN1/PRK1 antibody #35295.

Background

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. 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 (ANDR)-dependent transcription, by being recruited to ANDR 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.

Mukai H., Biochem. Biophys. Res. Commun. 199:897-904(1994).
Palmer R.H., Eur. J. Biochem. 227:344-351(1995).
Grimwood J., Nature 428:529-535(2004).

Note: This product is for in vitro research use only