**Product Name:** **KD-Validated PKN1 Recombinant Rabbit Monoclonal Antibody**
**Catalog #:** **KVAb00365**
For research use only.

## Summary

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|---|---|
| **Description** | KO&KD-Validated antibody |
| **Host** | Rabbit |
| **Application** | WB,FCM |
| **Reactivity** | Human,Mouse,Rat |
| **Conjugation** | Unconjugated |
| **Modification** | Unmodified |
| **Isotype** | Rabbit IgG |
| **Clonality** | Rabbit mAb |
| **Form** | Liquid |
| **Storage** | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles. |
| **Shipping** | Ice bags |
| **Buffer** | Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide. |
| **Purification** | Affinity purification |

## Application

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|---|---|
| **Dilution Ratio** | WB 1:1,000-1:5,000; FC 1:200-1:2,000 |
| **Molecular Weight** | Calculated MW: 103.9kDa |

## Antigen Information

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|---|---|
| **Gene Name** | PKN1 |
| **Alternative Names** | PKN1; Protein Kinase N1; PRK1; PAK1; PKN; Protein Kinase C-Like 1; PRKCL1; DBK; Serine/Threonine-Protein Kinase N1; Protease-Activated Kinase 1; Protein Kinase C-Like PKN; Protein Kinase PKN-Alpha; EC 2.7.11.13; MGC46204; PAK-1; Protein Kinase C-Related Kinase 1; Serine/Threonine Protein Kinase N; Protein-Kinase C-Related Kinase 1; Serine-Threonine Protein Kinase N; Serine-Threonine Kinase N; PKN-ALPHA; EC 2.7.11 |
| **Gene ID** | 5585.0 |
| **SwissProt ID** | Q16512 |
| **Immunogen** | A synthesized peptide derived from human PKN1 |

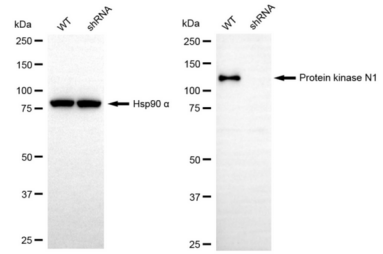
## Background

The protein encoded by this gene belongs to the protein kinase C superfamily. This kinase is activated by Rho family of small G proteins and may mediate the Rho-dependent signaling pathway. This kinase can be activated by phospholipids and by limited proteolysis. The 3-phosphoinositide dependent protein kinase-1 (PDPK1/PDK1) is reported to phosphorylate this kinase, which may mediate insulin signals to the actin cytoskeleton. The proteolytic activation of this kinase by caspase-3 or related proteases during apoptosis suggests its role in signal transduction related to apoptosis. Alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq, Jul 2008]

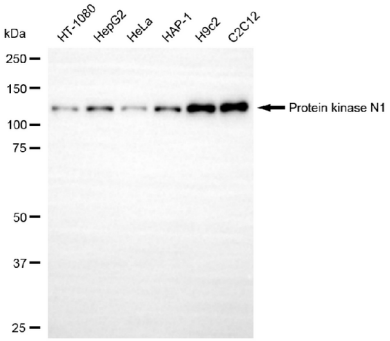
## Research Area

Signal Transduction,Epigenetics and Nuclear Signaling

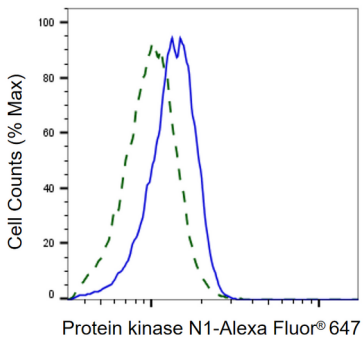
## Image Data



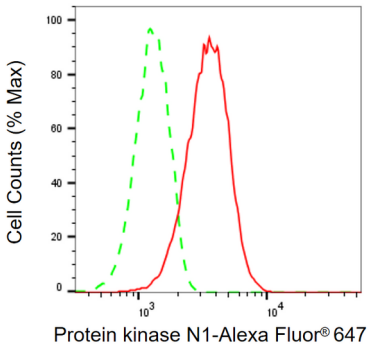

Western blotting analysis using protein kinase N1 antibody (KVAb00365). Protein kinase N1A expression in wild-type (WT) and protein kinase N1 (PKN1) shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with protein kinase N1 antibody (KVAb00365, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.




Western blotting analysis using protein kinase N1 antibody (KVAb00365). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with protein kinase N1 antibody (KVAb00365, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.




Validation of Protein kinase N1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with Protein kinase N1 antibody (KVAb00365, 1:2,000) and analyzed using BD flow cytometer.




Flow cytometric analysis of Protein kinase N1 expression in C2C12 cells using Protein kinase N1 antibody (KVAb00365, 1:2,000). Green, isotype control; red, Protein kinase N1.