# Data Sheet (Cat.No.TMAC-03354)

## Anti-PKN1 Antibody (9Q867)

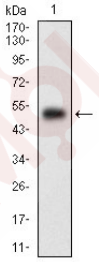
### Product Details

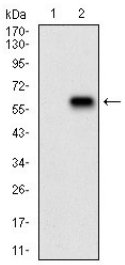
| | |
|---|---|
| Reactivity: | Human |
| Conjugation: | Unconjugated |
| Molecular Weight: | Theoretical: 104 kDa. |
| Clone: | 9Q867 |
| Purification: | ProA affinity purified |

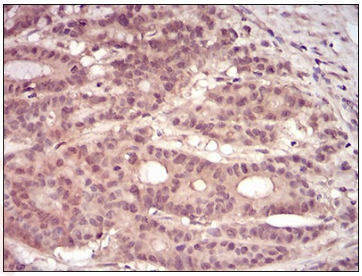
### Applications

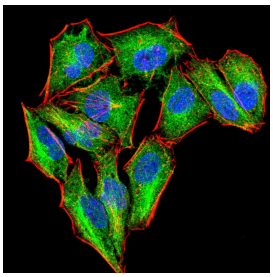
Verified Activity:

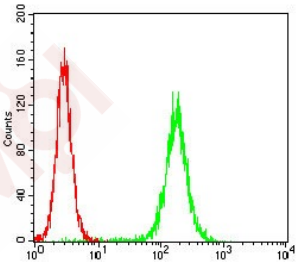
1. Western blot analysis of PKN1 on human PKN1 recombinant protein using anti-PKN1 antibody at 1/1,000 dilution.
2. Western blot analysis of PKN1 on HEK293 (1) and PKN1-hIgGFc transfected HEK293 (2) cell lysate using anti-PKN1 antibody at 1/1,000 dilution.
3. Immunohistochemical analysis of paraffin-embedded human colon cancer tissue using anti-PKN1 antibody. Counter stained with hematoxylin.
4. ICC staining PKN1 (green) and Actin filaments (red) in Hela cells. The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.
5. Flow cytometric analysis of Hela cells with PKN1 antibody at 1/100 dilution (green) compared with an unlabelled control (cells without incubation with primary antibody; red).








Application: FCM,ICC,IHC,WB

Recommended: WB: 1:500-2000; IHC: 1:50-200; ICC: 1:50-200; FCM: 1:50-100

## Properties

Stability & Storage: Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.

Shipping: Shipping with blue ice.

## Antigen Details

Immunogen: Recombinant Protein

Uniprot ID: Q16512

Synonyms: Protein-kinase C-related kinase 1;Protease-activated kinase 1 (PAK-1);Serine/threonine-protein kinase N1;PAK1;PRK1;Protein kinase C-like PKN;Protein kinase C-like 1;Protein kinase PKN-alpha;Serine-threonine protein kinase N;PKN;PKN1;PRKCL1

## Research Background

Rho, the Ras-related small GTPase, is responsible for the regulation of actin-based cytoskeletal structures including stress fibers, focal adhesions and the contractile ring apparatus. Rho proteins act as molecular switches which are able to turn cytokinesis on and off. Although little is know about signaling downstream of Rho, several proteins have been implicated as Rho effectors. Protein kinase N (PKN) is a fatty acid-activated serine/threonine kinase whose catalytic domain exhibits homology with that of the PKC family. PKN associates with Rho via its amino terminus, is activated in a GTP-dependent manner and phosphorylates the head-rod domain of neurofilament protein. A second protein, rhophilin, exhibits 40% sequence identity with the amino terminal Rho binding domain. The enzymatic activity of rhophilin has not been demonstrated and it is possible that it acts through the recruitment of cytoskeletal components that initiate a kinase signaling cascade. Citron interacts specifically with active Rho and Rac1 but not Cdc42. Citron exhibits a distinctive protein organization and little homology with the Rho binding domains of PKN and rhophilin.



Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481