

DESCRIPTION

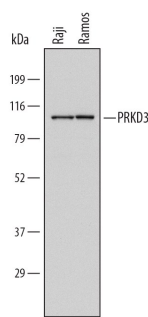
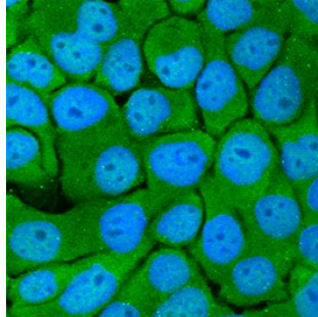
Species Reactivity	Human
Specificity	Detects human PRKD3/nPKCv in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human PRKD3/nPKCv Ile465-Val559 Accession # O94806
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human PRKD3/nPKCv by Western Blot. Western blot shows lysates of Raji human Burkitt's lymphoma cell line and Ramos human Burkitt's lymphoma cell line. PVDF Membrane was probed with 1 µg/mL of Sheep Anti-Human PRKD3/nPKCv Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6478) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for PRKD3/nPKCv at approximately 105 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunocytochemistry</p>  <p>PRKD3/nPKCv in MCF-7 Human Cell Line. PRKD3/nPKCv was detected in immersion fixed MCF-7 human breast cancer cell line using Sheep Anti-Human PRKD3/nPKCv Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6478) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 493-conjugated Anti-Sheep IgG Secondary Antibody (green; Catalog # NL012) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm and nuclei. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>
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PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

PKCv (Protein kinase C- ν ; also PKD3 and PRKD3) is a 105-110 kDa member of the PKD subfamily, CAMK Ser/Thr protein kinase family of enzymes. It is expressed in highly diverse cell types such as pancreatic aciner cells, skeletal muscle cells, B cells and sensory neurons, and it is activated by PKC-mediated phosphorylation. Active PKCv associates with membrane compartments, and appears to participate with VAMP2 in cargo transport and vesicular trafficking. It also acts on class II HDACs in the nucleus, resulting in gene transcription. Human PKCv is 890 amino acids (aa) in length. It contains two DAG-type zinc finger regions (aa 154-204 and 271-321), one PH domain (aa 416-532) and a large protein kinase domain (aa 576-832). There are at least 25 utilized Ser/Thr phosphorylation sites that span the length of the molecule. PKCv possesses one potential splice variant that shows a 17 aa substitution for aa 595-890. Over aa 465-559, human PKCv is 92% aa identical to mouse PKCv.