

DESCRIPTION

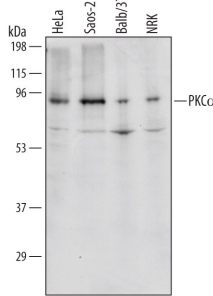
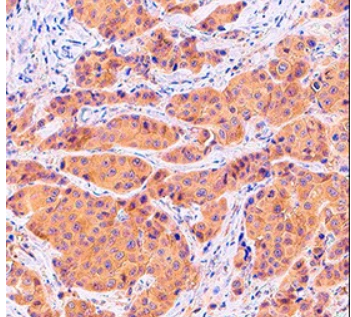
Species Reactivity	Human/Mouse/Rat
Specificity	Detects endogenous human, mouse, and rat PKC α in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human PKC α Lys604-Val672 Accession # P17252
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μ m 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 μ g/mL	See Below
Immunohistochemistry	5-15 μ g/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human/Mouse/Rat PKCα by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line, Saos-2 human osteosarcoma cell line, Balb/3T3 mouse embryonic fibroblast cell line, and NRK rat normal kidney cell line. PVDF membrane was probed with 1 μg/mL of Human/Mouse/Rat PKCα Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5340) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for PKCα at approximately 90 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p>  <p>PKCα in Human Breast Cancer Tissue. PKCα was detected in immersion fixed paraffin-embedded sections of human breast cancer tissue using Goat Anti-Human/Mouse/Rat PKCα Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5340) at 10 μg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to cancer cell cytoplasm. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
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

PKC α (Protein kinase C alpha) is an 80 kDa member of the PKC subfamily, AGC Ser/Thr protein kinase family of enzymes. It is widely expressed, and serves multiple cell-specific functions. PKC α is activated by increased diacylglycerol and intracellular calcium, and translocates to several sites such as the Golgi, nucleus and plasma membrane. Human PKC α is 672 amino acids (aa) in length. It contains two zinc finger regions (aa 36-151), a protein kinase domain (aa 339-557), and an AGC kinase region (aa 598-668). Phosphorylations on Thr497, Thr638 and Ser657 are necessary for kinase activity. Over aa 604-672, human PKC α shows 100% aa identity to mouse PKC α .