

## 12-4268: Phospho-PKCa (Thr497) (Clone: F1) rabbit mAb

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	PKCaT497-F1
<b>Application :</b>	FACS, WB
<b>Reactivity :</b>	Human, Mouse, Rat
<b>Conjugate :</b>	Unconjugated
<b>Format :</b>	Purified
<b>Alternative Name :</b>	Protein kinase C alpha type, PKC-alpha, PRKCA, PKCA, PRKACA
<b>Isotype :</b>	Rabbit IgG1k
<b>Immunogen Information :</b>	A synthetic phospho-peptide corresponding to residues surrounding Thr497 of human phospho PKC alpha

### Description

PKC alpha is a calcium-dependent isozyme of the PKC family that phosphorylates serine/threonine residues in apoptosis and cellular proliferation and differentiation pathways, including the MAPK cascade. PKC alpha directly phosphorylated Raf-1, inducing survival genes. An increase in PKC alpha is associated with multi-drug resistance in cancer cell lines, and increased expression in breast cancers is noted as causing a particularly malignant phenotype. Thus PKC alpha has been the target of novel cancer therapeutics, with some promising developments in microRNA inhibitors. PKC alpha is itself phosphorylated by mTOR. PKC alpha also plays an important role in water regulator and solute absorption in the cell, where it regulates aquaporin 2 by initiating AQP2 ubiquitination and lysosomal degradation.

### Product Info

<b>Amount :</b>	20 µl / 200 µl
<b>Content :</b>	1X PBS, 0.02% NaN <sub>3</sub> , 50% Glycerol, 0.1% BSA
<b>Storage condition :</b>	Store at -20°C. Avoid repeated freeze and thaw cycles.

### Application Note

1 µg/mL - 0.001 µg/mL. It is recommended that the reagent be titrated for optimal performance for each application. See product image legends for additional information. (0.5mg/ml, more than 200 western blots)

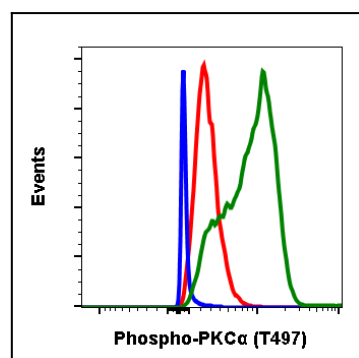


Fig-1: Flow cytometric analysis of K562 cells secondary antibody only negative control (blue) or untreated (red) or treated with EGF + pervanadate (green) using PKCa (T497) antibody PKCaT497-F1 at 0.1 µg/mL.

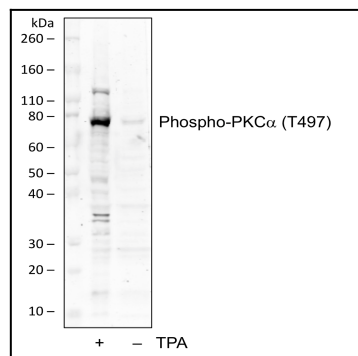


Fig 2 : Western blot analysis of HT1080 cell extract, untreated or treated with TPA using 0.05 µg/mL Phospho-PKCα (Thr497) antibody AWBPKCAT497-F1.

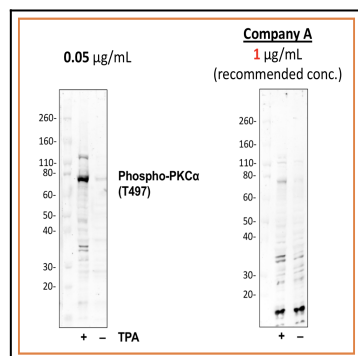


Fig-3: Western blot analysis of HT1080 cell extract untreated or treated with TPA using 0.05 µg/mL Phospho-PKCα (Thr497) antibody PKCaT497-F1 or Company A antibody at 1 µg/mL (manufacturer's recommended concentration) developed using the same exposure.

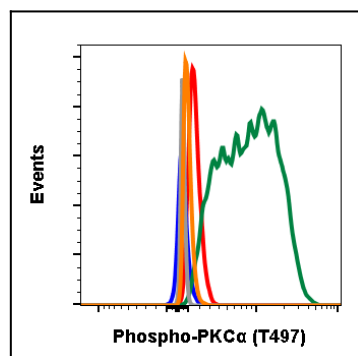


Fig-4: Flow cytometric analysis of 3T3 cells, secondary antibody only negative control (blue) or treated with imatinib (grey) or with pervanadate (orange) using 0.1 µg/mL isotype control or imatinib (red) or pervanadate (green) using PKCα (T497) antibody PKCaT497-F1 at 0.1 µg/mL.

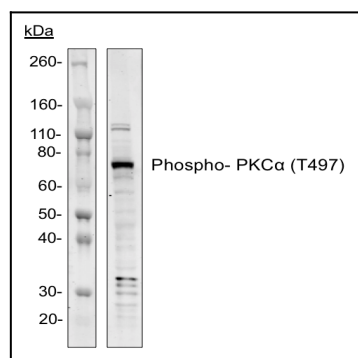


Fig-5: Western blot analysis of C6 cell extract treated with Anisomycin using 0.1 µg/mL PKCα (T497) antibody PKCaT497-F1.