

## 12-4269: Phospho-PKCa (Thr497) (Clone: F1) rabbit mAb PE Conjugate

|                                |   |
|--------------------------------|---|
| <b>Clonality :</b>             | Monoclonal  |
| <b>Clone Name :</b>            | PKCaT497-F1   |
| <b>Application :</b>           | FACS  |
| <b>Reactivity :</b>            | Human, Mouse, Rat   |
| <b>Conjugate :</b>             | PE  |
| <b>Format :</b>                | Conjugated  |
| <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>            | 10 Tests / 100 Tests                                   |
| <b>Content :</b>           | 1X PBS, 0.09% NaN <sub>3</sub> , 0.2% BSA              |
| <b>Storage condition :</b> | Store at 2-8°C. Avoid repeated freeze and thaw cycles. |

### Application Note

For flow cytometric staining, the suggested use of this reagent is 5  $\mu$ L per million cells or 5  $\mu$ L per 100  $\mu$ L of staining volume. It is recommended that the reagent be titrated for optimal performance for each application. See product image legends for additional information.

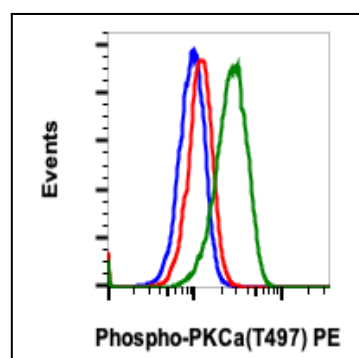


Fig-1: Flow cytometric analysis of NIH3T3 cells treated with imatinib and unstained as negative control (blue) or treated with imatinib (red) or treated with pervanadate (green) and stained using PKCa (T497) antibody PKCaT497-F1 PE conjugate.