

Phospho-PKCa (Thr497) (F1) rabbit mAb APC Conjugate

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#2339

Store at: 2-8°C

For Research Use Only. Not For Use In Diagnostic Procedures.

Applications	Detection	Clonality	Isotype
Flow Cytometry	N/A	Monoclonal	Rabbit IgGk

Format: APC

Cross Reactivity: Predicted to work with mouse, rat and other homologues.

Formulation: 1X PBS, 0.09% NaN₃, 0.2% BSA

Preparation: Protein A+G

Reactivity: Human, Mouse, Rat

Recommended

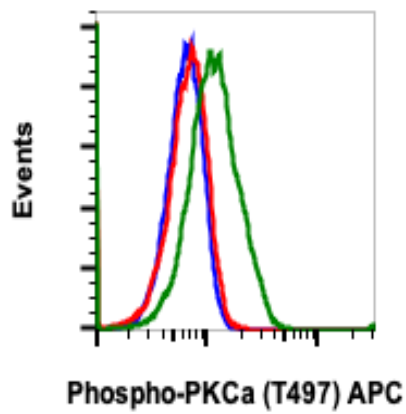
Usage: For flow cytometric staining, the suggested use of this reagent is 5 µL per million cells or 5 µL per 100 µL of staining volume. It is recommended that the reagent be titrated for optimal performance for each application. See product image legends for additional information.

Immunogen: A synthetic phospho-peptide corresponding to residues surrounding Thr497 of human phospho PKC?

Description: PKC ϵ 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 ϵ directly phosphorylated Raf-1, inducing survival genes. An increase in PKC ϵ 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 ϵ has been the target of novel cancer therapeutics, with some promising developments in microRNA inhibitors. PKC ϵ is itself phosphorylated by mTOR. PKC ϵ 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.

References:

Blobe GC, et al., (1993) JBC. 268:658-664.
Sim JH, et al., (2014) PLoS One. 9:e101753.
Martin EC, et al. (2012) Molecular Carcinogenesis. 53:38-48.



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 PKC α (T497) antibody PKC α T497-F1 APC conjugate. Cat. #2339.