

PE anti-PLCy1 Phospho (Tyr783)

Catalog # / Size: 3662015 / 25 tests
3662020 / 100 tests

Clone: A17025A

Isotype: Mouse IgG1, κ

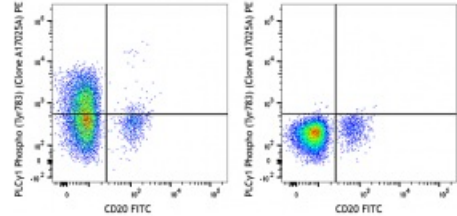
Immunogen: Synthetic peptide from human plcy1 phosphorylated at Try783 emulsified in CFA

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific

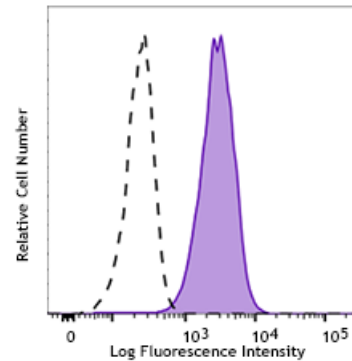


Human peripheral blood lymphocytes were treated with (left), or without (right) Hydrogen Peroxide for 5 minutes, fixed with Fixation Buffer (Cat No. 420801), permeabilized with True-Phos™ Perm Buffer (Cat No. 425401), then surfaced stained with CD20 FITC and intracellularly stained with anti-PLCy1 Phospho (Tyr783) (clone A17025A) PE.

Applications:

Applications: Intracellular Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.



Human T lymphoblastic leukemia cell line, Jurkat, was stimulated with (filled histogram) or without (open histogram) Hydrogen Peroxide for 5 minutes, fixed with Fixation Buffer (Cat No. 420801), permeabilized with True-Phos™ Perm Buffer (Cat No. 425401), and intracellularly stained with anti-PLCy1 Phospho (Tyr783) (clone A17025A) PE.

Application References:

Description: Phospholipase C (PLC) enzymes cleave the phospholipid phosphatidylinositol 4,5-bisphosphate (PIP2) into second messenger molecules inositol 1,4,5-trisphosphate (IP3) and diacylglycerol (DAG) in response to extracellular stimuli. IP3 causes the release of calcium from the endoplasmic reticulum to begin an intracellular signaling cascade, while DAG activates Protein Kinase C.

There are four families of PLCs. PLC gamma (PLC γ) uniquely contains SRC domains SH2 and SH3. Receptor tyrosine kinases interact with these SRC domains to enzymatically activate PLC γ 1 via phosphorylation at Tyr 783. PLC γ 1 is essential for cell proliferation, differentiation, and motility. Overexpression or activation of PLC γ 1 has been implicated in breast and prostate cancers, as well as cancer cell invasion.

**Antigen
References:**

1. Brady-Kalnay, *et al.* 2011. *J Cell Biochem.* 112:39.
2. Schlessinger, *et al.* 2009. *Cell.* 138:514.
3. Harden, *et al.* 2012. *Subcell Biochem.* 58:61.
4. Wang Z, *et al.* 1998. *Mol Cell Biol.* 18:590.
5. Rhee, *et al.* 1991. *Cell.* 65:435.