

PE anti-SLP76 Phospho (Ser376)

Catalog # / Size: 3935520 / 100 tests
3935515 / 25 tests

Clone: A18001A

Isotype: Mouse IgG1, κ

Immunogen: Synthetic human SLP76 peptide containing phosphorylated Ser376

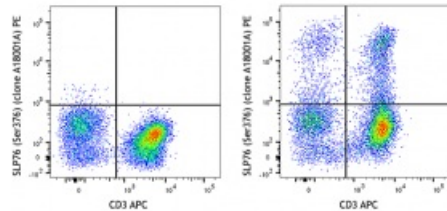
Reactivity: Human, Mouse

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).

Workshop Number: V CD01.01

Concentration: Lot-specific



Human peripheral blood lymphocytes were treated with (right) or without (left) Hydrogen Peroxide for 5 minutes, fixed with Fixation Buffer (Cat No. 2704005), permeabilized with True-Phos™ Perm Buffer (Cat No. 2727005), then surfaced stained with CD3 APC and intracellularly stained with anti-SLP76 Phospho (Ser376) (clone A18001A) PE.

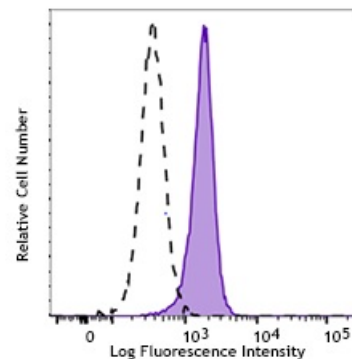
Applications:

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.

Application Notes: This clone was tested for ICC on PFA-fixed and methanol permeabilized Jurkat cells treated with or without H₂O₂ and produced nuclear staining that was not responsive to the treatment. We therefore do not recommend this clone for ICC.

†cross-reactivity to Mouse confirmed based on Western blot testing.



Human peripheral blood lymphocytes were treated with (filled histogram) or without (open histogram) cross-linked anti-human CD3 plus anti-human CD28 (10 µg/ml each, 2 min), fixed with Fixation Buffer (Cat No. 2704005), permeabilized with Intracellular Permeabilization Wash Buffer (Cat No. 2705010), then surface stained with CD3 and CD20 and intracellularly stained with anti-SLP76 Phospho (Ser376) (clone A18001A) PE. Cells were gated on CD3+CD20-.

**Application
References:**

1. Kishimoto T, et al. 1997. *Leucocyte Typing VI:White Cell Differentiation Antigens*. Garland Publishing Inc.
 2. Wang R, et al. 2012. *J. Leukoc Biol.* 91:299. [PubMed](#)
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Description: SLP76 is a cytosolic adapter protein that functions as a substrate in the T cell receptor (TCR) activation pathway. Upon TCR engagement, SLP76 is phosphorylated on multiple residues, resulting in the protein being translocated to the plasma membrane and facilitating the assembly of a multi-subunit complex comprised of Vav1, Nck, ITK, and PLCγ1. SLP76 also plays an essential role in normal T cell development.

SLP76 also represents a negative regulatory node in the TCR activation pathway. Following TCR engagement, SLP76 is phosphorylated at Ser376 by the hematopoietic progenitor kinase (HPK1). This modification promotes an interaction between SLP76 and the scaffolding protein 14-3-3ε, resulting in dissociation of the TCR signaling complex and a diminution of TCR signaling.

**Antigen
References:**

1. Sauer K, et al. 2001. *J Biol Chem.* 276:45207.
2. Koretzky GA, et al.. 2006. *Nat Rev Immunol.* 6:67.
3. Di Bartolo V, et al. 2007. *J Exp Med.* 204:681.
4. Lasserre, et al. 2011. *J Cell Biol.* 195:839.