PE Mouse anti-SLP-76

**Material Number:** 560058
**Size:** 50 Tests
**Vol. per Test:** 20 µl
**Clone:** H3
**Immunogen:** Human SLP-76 SH2 domain Recombinant Protein
**Isotype:** Mouse (BALB/c) IgG2a, κ
**Reactivity:** QC Testing: Human

**Storage Buffer:** Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

**Description**
SLP-76 (SH2 domain-containing Leukocyte Protein of 76 kDa) is a tyrosine phosphoprotein that is involved in the T cell receptor (TCR)-mediated intracellular signaling pathway. It may be involved in the signaling pathways of other peripheral blood leukocytes, thymic/splenic cells; and in human T, B, and monocyctic cell lines. SLP-76 consists of several motifs that signify its importance in protein-protein interactions involved in intracellular signaling pathways, such as the SH2 domain in the C-terminus, the three amino-terminus 17-amino acid repeats with conserved tyrosine and acidic residues (DYE(S/P)P), and a proline rich region. SLP-76 has been shown to associate with Gads, Grb2, PLCγ1, SLAP-130, and Vav, all of which are part of the signaling cascade in T lymphocytes. An early event in the T cell activation pathway is the phosphorylation, by the Syk-family kinase ZAP-70, of SLP-76 at the three conserved tyrosine motifs, which then mediate interactions with downstream effectors.

The H3 monoclonal antibody recognizes SLP-76, regardless of phosphorylation status.

Analysis of SLP-76 in human peripheral blood lymphocytes. Human whole blood was lysed and fixed with 1X BD Phosflow™ Lyse/Fix Buffer (Cat. No. 558049) for 10-15 minutes at 37°C, permeabilized (BD Phosflow™ Perm Buffer II, Cat. No. 558052) on ice for 30 minutes, stained with Alexa Fluor® 647 Mouse Anti-Human CD3 mAb UCHT1 (Cat. No. 557706), PerCP-Cy5.5 anti-human CD20 mAb H1(FB1) (Cat. No. 558021), and either PE Mouse anti-SLP-76 (Cat. No. 560058, solid-line histograms) or PE Mouse IgG2a, κ Isotype control mAb MOPC-173 (Cat. No. 558595, dashed-line histograms). The figures show lymphocyte subpopulations that were selected by their scatter profile and surface antigen expression. SLP-76 expression on CD3-positive CD20-negative T lymphocytes (left panel), CD20-positive CD3-negative B lymphocytes (center panel), and CD20-negative CD3-negative NK cells (right panel) are displayed. There was no detectable expression of SLP-76 in the monocyte/granulocyte population (not shown). Flow cytometry was performed on a BD FACSCalibur™ flow cytometry system.

**Preparation and Storage**
Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

**Application Notes**

**Application**

| Intracellular staining (flow cytometry) | Routinely Tested |
Suggested Companion Products

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Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10^6 cells in a 100-µl experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.

References

Bonilla FA, Fujita RM, Pimciouk VI, Chan AC, Geha RS. Adapter proteins SLP-76 and BLNK both are expressed by murine macrophages and are linked to signaling via Fc receptors I and II/III. Proc Natl Acad Sci U S A. 2000; 97(4):1725-1730. (Clone-specific: Immunoprecipitation)