

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Spi-B in direct ELISAs. In direct ELISAs, less than 2% cross-reactivity with recombinant human Spi-B is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse Spi-B Tyr18-Glu167 (Tyr110Phe) Accession # O35906
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

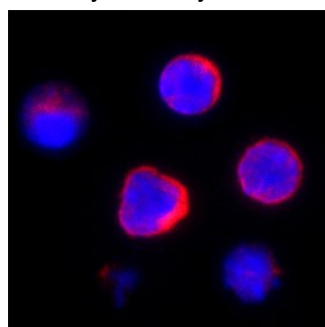
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Immunocytochemistry	5-15 µg/mL	See Below
Intracellular Staining by Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

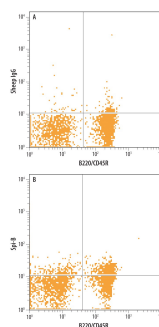
DATA

Immunocytochemistry



Spi-B in Mouse Splenocytes. Spi-B was detected in immersion fixed mouse splenocytes using Sheep Anti-Mouse Spi-B Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7204) at 15 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI (blue). Specific staining was localized to plasma membranes and cytoplasm. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

Intracellular Staining by Flow Cytometry



Detection of SPI-B in Mouse Splenocytes by Flow Cytometry. Mouse splenocytes were stained with Sheep Anti-Mouse Spi-B Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7204) followed by Allophycocyanin-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # F0127) and Rat Anti-Mouse B220/CD45R PE-conjugated Monoclonal Antibody (Catalog # FAB1217P). Quadrant markers were set based on control antibody staining (Catalog # 5-001-A). To facilitate intracellular staining, cells were fixed with paraformaldehyde and permeabilized with saponin.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Spi-B (Transcription factor Spi-B) is a 33-45 kDa member of the ets family of transcription factors. It is found in hematopoietic cells such as B cells and plasmacytoid dendritic cells (DC). In transitional B cells, Spi-B promotes their differentiation into follicular (naïve) B cells. In hematopoietic stem cells, Spi-B stimulates the generation of IFN-producing plasmacytoid DC at the expense of T, B and NK cell development. Mouse Spi-B is 267 amino acids (aa) in length. It contains a dual transactivation region (aa 1-62), plus a PEST domain (aa 110-170) and an Ets DNA-binding domain (aa 174-257). There are two isoform variants. One shows a nine aa substitution for aa 1-8, while a second possesses an 18 aa insertion after Leu17. Over aa 18-167, mouse Spi-B shares 91% and 74% aa identity with rat and human Spi-B, respectively.