

30-2875: Anti-Human IL-17A PE Mab (Clone: 9F9)

Clonality :	Monoclonal
Clone Name :	9F9
Application :	FACS
Reactivity :	Human
Conjugate :	PE
Gene :	IL17A
Gene ID :	3605
Uniprot ID :	Q16552
Alternative Name :	Interleukin 17, interleukin 17A
Isotype :	Mouse IgG1 kappa
Immunogen Information :	mammalian-derived human IL-17-IgG fusion protein, boost with recombinant human IL-17A

Description

Specificity : The mouse monoclonal antibody 9F9 recognizes human interleukin 17A (IL-17A; secreted or intracellular).

Interleukin 17A (IL-17A) is a proinflammatory cytokine produced by activated T cells. IL-17A-mediated downstream pathways induce the production of inflammatory molecules, chemokines, antimicrobial peptides, and remodeling proteins. It plays an important role in connecting T cell-mediated adaptive immunity and acute inflammatory response to destroy extracellular bacteria and fungi. It is the signature effector cytokine of Th17 cells, and in this role it primarily induces neutrophil activation and recruitment at infection and inflammatory sites. High levels of IL-17A are associated with rheumatoid arthritis, psoriasis, multiple sclerosis, and another inflammatory diseases, including lung injury during severe COVID 19. This cytokine also contributes to germinal center formation by regulating the chemotactic response of B cells to CXCL12 and CXCL13, enhancing retention of B cells within the germinal centers, B cell somatic hypermutation rate and selection toward plasma cells. It is an effector cytokine for invariant NKT cells (iNKT), and it is involved in epithelial barrier formation upon injury.

Product Info

Amount :	100 tests
Purification :	Purified antibody is conjugated with R-phycoerythrin (PE) under optimum conditions. Unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.
Content :	Storage Buffer: Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Storage condition :	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

Application Note

Flow cytometry: The reagent is designed for analysis of human blood cells using 10 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests. Intracellular staining.

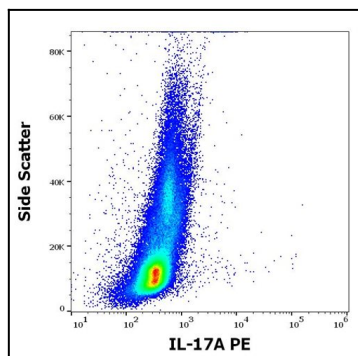


Figure 1: Flow cytometry intracellular staining pattern of PHA stimulated and Brefeldin A treated human peripheral whole blood stained using anti-human IL-17A (9F9) PE antibody (10 $\hat{1}$ /₄l reagent / 100 $\hat{1}$ /₄l of peripheral whole blood).

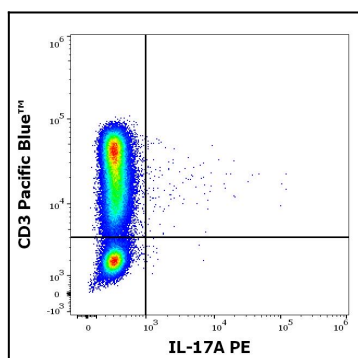


Figure 2: Flow cytometry multicolor surface staining pattern of PHA stimulated and Brefeldin A treated human lymphocytes using anti-human CD3 (UCHT1) Pacific Blue™ antibody (4 $\hat{1}$ /₄l reagent / 100 $\hat{1}$ /₄l of peripheral whole blood) and intracellular staining using anti-human IL-17A (9F9) PE antibody (10 $\hat{1}$ /₄l reagent / 100 $\hat{1}$ /₄l of peripheral whole blood).

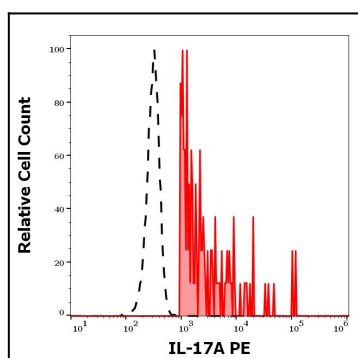


Figure 3: Separation of human CD17A positive CD3 positive lymphocytes (red-filled) from CD17A negative CD3 negative lymphocytes (black-dashed) in flow cytometry analysis (intracellular staining) of PHA stimulated and Brefeldin A treated human peripheral whole blood stained using anti-human IL-17A (9F9) PE antibody (10 $\hat{1}$ /₄l reagent / 100 $\hat{1}$ /₄l of peripheral whole blood).