

# Mouse IL-17/IL-17A PerCP-conjugated Antibody

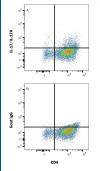
Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: IC421C 100 Tests

| DESCRIPTION        |   |  |  |
|--------------------|---|--|--|
| Species Reactivity | Mouse   |  |  |
| Specificity        | Detects mouse IL-17 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 10% cross-reactivity with recombinant human IL-17A and recombinant mouse (rm) IL-17F is observed and less than 1% cross-reactivity with rmIL-17B, rmIL-17C, rmIL-17D, and rmIL-17E is observed. |  |  |
| Source             | Polyclonal Goat IgG   |  |  |
| Purification       | Antigen Affinity-purified   |  |  |
| Immunogen          | <i>E. coli</i> -derived recombinant mouse IL-17<br>Thr22-Ala158<br>Accession # Q62386   |  |  |
| Conjugate          | PerCP (Peridinin-chlorophyll Protein Complex) Excitation Wavelength: 482 and 564 nm Emission Wavelength: 675 nm   |  |  |
| Formulation        | Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.   |  |  |
|                    | *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Shee (SDS) for additional information and handling instructions.  |  |  |

| 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<br>Concentration | Sample    |  |  |
| Intracellular Staining by Flow Cytometry  | 10 μL/10 <sup>6</sup> cells  | See Below |  |  |

### DATA

# Intracellular Staining by Flow Cytometry



Detection of IL-17/IL-17A in Mouse splenocytes by Flow Cytometry. Mouse splenocytes differentiated to Th17 cells with platebound Rat anti-mouse CD3 Monoclonal antibody (10 µg/ml; Catalog # MAB484), Goat anti-mouse CD28 Polyclonal Antibody (5 μg/mL; Catalog # AF483), TGF-B (10 ng/mL; Catalog # 100-B), Recombinant Mouse IL-23 (20 ng/mL; Catalog # 1887-ML), Recombinant Mouse IL-6 (40 ng/mL; Catalog # 406-ML), and Recombinant MouseIL-1β (10 ng/mL; Catalog # 401-ML) for 6 days were stained with (A) Goat Anti-Mouse IL-17/IL-17A PerCPconjugated Antigen Affinity-purified Polyclonal Antibody (Catalog # IC421C) or (B) control antibody (Catalog # IC108C) and Rat anti-Mouse CD4 PE-conjugated Monoclonal Antibody (Catalog # FAB554P). To facilitate intracellular staining, cells were fixed and permeabilized with FlowX FoxP3/Transcription Factor Fixation & Perm Kit (Catalog # FC012). Staining was performed using our Staining Intracellular Molecules protocol.

# Intracellular Staining by Flow Cytometry De Ce EL. with this contained to the contained to

IL-17/IL-17A

Detection of IL-17/IL-17A in EL-4 Mouse Cell Line by Flow Cytometry. LPS activated EL-4 mouse lymphoblast cell line was stained with Goat Anti-Mouse IL-17/IL-17A PerCP-conjugated Antigen Affinity-purified Polyclonal Antibody (Catalog # IC421C, filled histogram) or isotype control antibody (Catalog # Catalog # Catalog were fixed with Flow Cytometry Fixation Buffer (Catalog # Catalog # Catalog # Catalog # Catalog # Coulon # FC004) and permeabilization/Wash Buffer I (Catalog # Catalog # Catalog # Coulon FC05). View our protocol for Staining Intracellular Molecules.

# PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

# Stability & Storage

### Protect from light. Do not freeze.

• 12 months from date of receipt, 2 to 8 °C as supplied

# BACKGROUND

Interleukin 17, also known as IL-17A and CTLA-8, was initially identified as a 17 kDa, secreted T cell-expressed pleiotropic cytokine that exhibits a high degree of homology to a protein encoded by the ORF13 gene of herpesvirus Saimiri. Mouse IL-17 cDNA encodes a 158 amino acid (aa) residue precursor protein with a 25 amino acid residue signal peptide that is cleaved to yield the 133 aa residue mature IL-17. Both recombinant and natural IL-17 have been shown to exist as disulfide linked homodimers. IL-17 is also known to form a heterodimer with IL-17F. At the amino acid level, mIL-17 shows 62% and 87% aa sequence identity with human and rat IL-17, respectively. The receptor for the IL-17A homodimer and IL-17A:F heterodimer is reported to be a combination of IL-17 RA and IL-17 RC, with a possible contribution by IL-17 RD. The expression of IL-17 is widespread, and found associated with LTi cells, B cells,  $\gamma$  T cells, CD4 $^+$  Th17 cells, iNKT cells, neutrophils, intestinal Paneth cells, Type I ILCs and CD8 $^+$  T $_c$ 17 cells. IL-17 exhibits multiple biological activities on a variety of cells including: the induction of IL-6 and IL-8 production in fibroblasts, the enhancement of surface expression of ICAM-1 in fibroblasts, activation of NF-kB and costimulation of T cell proliferation, the preservation of intestinal mucosal integrity, and the induction of antimicrobial peptides by epithelium.

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