

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human IL-17 in direct ELISAs. In direct ELISAs, approximately 12% cross-reactivity with recombinant canine IL-17 is observed and 25%-50% reactivity with recombinant human (rh) IL-17A/IL-17F heterodimer is observed. No cross-reactivity with recombinant mouse IL-17, rhIL-17B, rhIL-17C, rhIL-17D, rhIL-17E, or rhIL-17F is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 41809
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human IL-17 Ile20-Ala155 Accession # Q16552
<b>Conjugate</b>	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
<b>Formulation</b>	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 Sheet (SDS) for additional information and handling instructions.

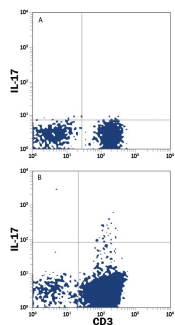
## APPLICATIONS

**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 Concentration	Sample
Intracellular Staining by Flow Cytometry	5 $\mu$ L/10 <sup>6</sup> cells	See Below

## DATA

### Intracellular Staining by Flow Cytometry



**Detection of IL-17/IL-17A in Human PBMCs by Flow Cytometry.** Human peripheral blood mononuclear cells (PBMCs) either (A) untreated or (B) stimulated to induce Th17 cells were stained with Mouse Anti-Human IL-17/IL-17A Alexa Fluor® 488-conjugated Monoclonal Antibody (Catalog # IC317G) and Mouse Anti-Human CD3 $\epsilon$  APC-conjugated Monoclonal Antibody (Catalog # FAB100A). Quadrant markers were set based on control antibody staining (Catalog # IC0041G). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005). View our protocol for [Staining Intracellular Molecules](#).

## PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul>

## BACKGROUND

Interleukin 17, also known as IL-17A and CTLA-8, is a 20-22 kDa, secreted pleiotropic cytokine that exhibits a high degree of homology to a protein encoded by the ORF13 gene of herpesvirus Saimiri. Human IL-17 cDNA encodes a 155 amino acid (aa) residue precursor protein with a 23 amino acid residue signal peptide that is cleaved to yield the 132 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 20-24 kDa IL-17F. At the amino acid level, hIL-17 shows 62% aa sequence identity with mouse IL-17. 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 mast cells, LTI cells, B cells,  $\gamma\delta$  T cells, CD4<sup>+</sup> Th17 cells, iNKT cells, neutrophils, intestinal Paneth cells, Type I ILCs and CD8<sup>+</sup> T<sub>C</sub>17 cells. IL-17 exhibits multiple biological activities on a variety of cells, including: the induction of IL-6 and IL-8 production by fibroblasts, the enhancement of surface expression of ICAM-1 on fibroblasts, activation of NF- $\kappa$ B and costimulation of T cell proliferation, the preservation of intestinal mucosal integrity via claudin synthesis, and the induction of antimicrobial peptides by epithelium.

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