

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse IL-17/IL-17A in direct ELISAs.
Source	Monoclonal Rat IgG _{2B} Clone # 881309
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant mouse IL-17/IL-17A Thr22-Ala158 Accession # Q62386
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
Formulation	Supplied 0.2 mg/mL 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	0.25-1 µg/10 ⁶ cells	Mouse splenocytes stimulated to induce Th17 cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005)

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. <ul style="list-style-type: none"> ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Interleukin 17 (also known as CTLA-8) is a T cell-expressed pleiotropic cytokine that exhibits a high degree of homology to a protein encoded by the ORF13 gene of herpes virus Saimiri. cDNA clones encoding IL-17 have been isolated from activated rat, mouse and human T cells. Mouse IL-17 cDNA encodes a 158 amino acid (aa) residue precursor protein with a 21 amino acid residue signal peptide that is cleaved to yield the 137 aa residue mature IL-17. Both recombinant and natural IL-17 have been shown to exist as disulfide linked homodimers. At the amino acid level, mouse IL-17 shows 57% and 87% sequence identity with herpes virus and rat IL-17, respectively. An IL-17 specific mouse cell surface receptor (IL-17 R) has been cloned. While the expression of IL-17 mRNA is restricted to activated alpha beta TCR⁺CD4⁺CD8⁻ T cells, the expression of mouse IL-17 R mRNA has been detected in virtually all cells and tissues tested. 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-κB and costimulation of T cell proliferation.

References:

1. Kennedy, J. *et al.* (1996) *J. Interferon Cytokine Res.* **16**:611.
2. Yao, Z. *et al.* (1995) *J. Immunol.* **155**:5483.
3. Yao, Z. *et al.* (1995) *Immunity* **3**:811.
4. Rouvier, E. *et al.* (1993) *J. Immunol.* **150**:5445.

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