

DESCRIPTION

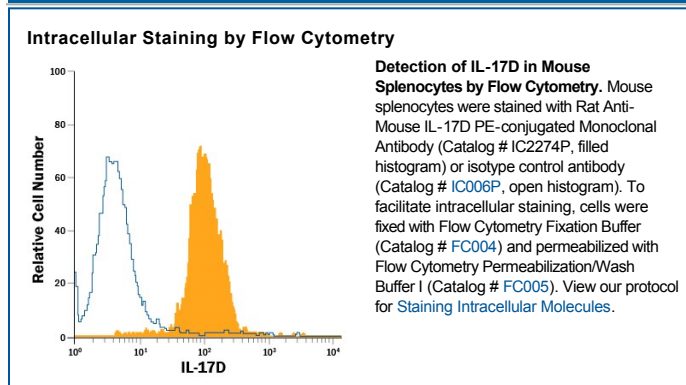
Species Reactivity	Mouse
Specificity	Detects mouse IL-17D in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human IL-17D, recombinant mouse (rm) IL-17, rmlL-17B, rmlL-17C, rmlL-17E, or rmlL-17F is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 312724
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant mouse IL-17D Ala25-Arg205 Accession # NP_665836
Conjugate	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 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 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	10 µL/10 ⁶ cells	See Below

DATA



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

The Interleukin 17 (IL-17) family proteins, comprising six members (IL-17, IL-17B through IL-17F), are secreted, structurally related proteins that share a conserved cysteine-knot fold near the C-terminus, but have considerable sequence divergence at the N-terminus (1, 2, 6). With the exception of IL-17B, which exists as a non-covalently linked dimer, all IL-17 family members are disulfide-linked dimers (3). IL-17 family proteins are pro-inflammatory cytokines that induce local cytokine production and are involved in the regulation of immune functions (1, 2, 6). Five receptors (IL-17 RA through RE), which are activated by IL-17 family members, have been identified. Mouse IL-17D is synthesized as a 205 amino acid (aa) precursor that contains a putative 24 aa signal peptide and a 181 aa mature segment. The mature region contains two potential N-linked glycosylation sites and eight cysteines, four of which are involved in the formation of a modified cysteine-knot motif (5). The molecule is reported to exist as a 53 kDa disulfide-linked homodimer (2, 5). Given that its predicted homodimeric molecular weight is 40 kDa, the molecule is presumably glycosylated. In the mature region, mouse IL-17D is 88% aa identical to human IL-17D. There is less than 30% aa identity between mouse IL-17D and other members of the mouse IL-17 family. IL-17D is expressed in skeletal muscle, adipose tissue, fetal liver, and heart, plus resting CD4⁺ T cells and CD19⁺ B cells (1). IL-17D is known to induce the production of IL-8, IL-6 and GM-CSF (5).

References:

1. Song, X. et al. (2016) Cell. Mol. Immunol. **13**:418.
2. Moseley, T.A. et al. (2003) Cytokine & Growth Factor Rev. **14**:155.
3. Hymowitz, S.G. et al. (2001) EMBO J. **20**:5332.
4. Haudenschild, D. et al. (2002) J. Biol. Chem. **277**:4309.
5. Starnes, T. et al. (2002) J. Immunol. **169**:642.
6. Kolls, J.K. and A. Linden (2004) Immunity **21**:467.