

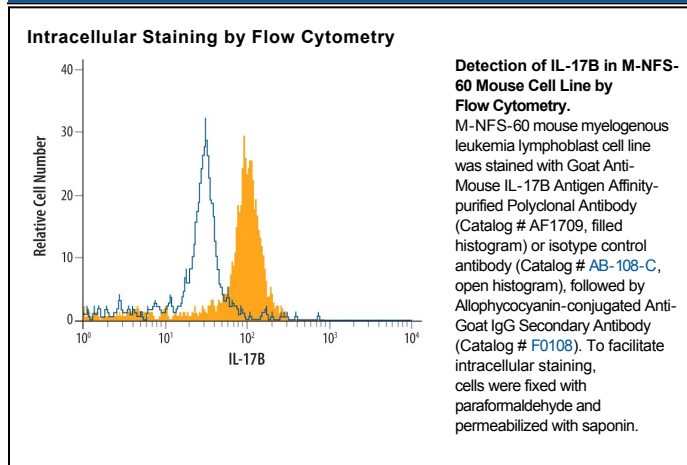
DESCRIPTION	
<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse IL-17B in ELISAs and Western blots. In sandwich immunoassays, approximately 40% cross-reactivity with recombinant human IL-17B is observed and less than 0.3% cross-reactivity with recombinant mouse (rm) IL-17, rmIL-17C, rmIL-17D, rmIL-17E, and rmIL-17F is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant mouse IL-17B His21-Phe180 Accession # Q9QXT6
<b>Endotoxin Level</b>	<0.10 EU per 1 µg of the antibody by the LAL method.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

**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
<b>Western Blot</b>	0.1 µg/mL	Recombinant Mouse IL-17B (Catalog # 1709-ML)
<b>Intracellular Staining by Flow Cytometry</b>	2.5 µg/10 <sup>6</sup> cells	See Below
<b>Mouse IL-17B Sandwich Immunoassay</b>		<b>Reagent</b>
<b>ELISA Capture</b>	0.2-0.8 µg/mL	Mouse IL-17B Antibody (Catalog # AF1709)
<b>ELISA Detection Standard</b>	0.1-0.4 µg/mL	Mouse IL-17B Biotinylated Antibody (Catalog # BAF1709) Recombinant Mouse IL-17B (Catalog # 1709-ML)
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	
<b>Blockade of Receptor-ligand Interaction</b>	In a functional ELISA, 0.4 - 2 µg/mL of this antibody will block 50% of the binding of 10 µg/mL of biotinylated Recombinant Mouse IL-17βR Fc Chimera to immobilized Recombinant Mouse IL-17B (Catalog # 1709-ML) coated at 2 µg/mL (100 µL/well). At 30 µg/mL, this antibody will block >90% of the binding.	

**DATA**



PREPARATION AND STORAGE	
<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**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 cystine-knot fold near the C-terminus, but have considerable sequence divergence at the N-terminus (1, 2). 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). Two receptors (IL-17 R and IL-17B R), which are activated by IL-17 family members have been identified. In addition, at least three additional orphan type I transmembrane receptors with homology to IL-17 R, including IL-17 RL (IL-17 RC), IL-17 RD, and IL-17 RE, have also been reported (1-4). Mouse IL-17B cDNA encodes a 180 amino acid residue (aa) protein with a putative 20 aa signal peptide (5). Mouse and human IL-17B share 88% aa sequence identity. Among IL-17 family members, mouse IL-17B is most closely related to mouse IL-17D, sharing 33% aa sequence homology. IL-17B is expressed highly in spinal cord, and at lower levels in brain, kidney, lung, small intestine, prostate, testes, pancreas, adrenal gland and trachea (5-7). Expression of IL-17B has also been detected in chondrocytes in articular cartilage (2). IL-17B binds the IL-17B receptor but not IL-17 R and exhibits bioactivities distinct from those of IL-17 (5, 6).

**References:**

1. Aggarwal, S. and A.L. Gurney (2002) *J. Leukoc. Biol.* **71**:1.
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. Shi, Y. *et al.* (2000) *J. Biol. Chem.* **275**:19167.
6. Li, H. *et al.* (2000) *Proc. Natl. Acad. Sci. USA* **97**:773.