Mouse IL-17B Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF1709

DESCRIPTION

Species Reactivity	Mouse
Specificity	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.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant mouse IL-17B His21-Phe180 Accession # Q9QXT6
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	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.

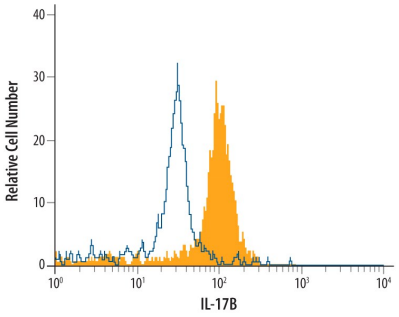
APPLICATIONS

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
Western Blot	0.1 µg/mL	Recombinant Mouse IL-17B (Catalog # 1709-ML)
Intracellular Staining by Flow Cytometry	2.5 µg/10^6 cells	See Below
Mouse IL-17B Sandwich Immunoassay		**Reagent**
ELISA Capture	0.2-0.8 µg/mL	Mouse IL-17B Antibody (Catalog # AF1709)
ELISA Detection	0.1-0.4 µg/mL	Mouse IL-17B Biotinylated Antibody (Catalog # BAF1709)
Standard		Recombinant Mouse IL-17B (Catalog # 1709-ML)
Blockade of Receptor-ligand Interaction	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

Intracellular Staining by Flow Cytometry



Detection of IL-17B in M-NFS-60 Mouse Cell Line by Flow Cytometry. M-NFS-60 mouse myelogenous leukemia lymphoblast cell line was stained with Goat Anti-Mouse IL-17B Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1709, filled histogram) or isotype control antibody (Catalog # AB-108-C, open histogram), followed by Allophycocyanin-conjugated Anti-Goat IgG Secondary Antibody (Catalog # F0108). To facilitate intracellular staining, cells were fixed with paraformaldehyde and permeabilized with saponin.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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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:

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