Mouse IL-17 RB Antibody

Monoclonal Rat IgG_{2B} Clone # 152316

Catalog Number: MAB1040

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse IL-17 RB in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human (rh) IL-17 RA/IL-17 R, recombinant mouse IL-17 RA/IL-17 R, or rhIL-17 RB is observed.
Source	Monoclonal Rat IgG_{2B} Clone # 152316
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse IL-17 RB Arg18-Gly286 (predicted) Accession # Q9JIP3
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 either lyophilized or 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	1 µg/mL	Recombinant Mouse IL-17 RB Fc Chimera (Catalog # 1040-BR)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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.

BACKGROUND

The Interleukin 17 (IL-17) family of cytokines, comprising six members (IL-17, IL-17B through IL-17F), are structurally related proteins with a conserved cysteine-knot structure. These proinflammatory cytokines can induce local cytokine production and are involved in the regulation of the immune response. The cognate receptors activated by some of these cytokines have been identified (1, 2). Interleukin-17 Receptor B (IL-17 RB), also known as IL-17 Rh1, IL-17E R and EVI27, represents the second receptor of the IL-17 family cytokines to be recognized (2-4). Mouse IL17 RB cDNA encodes a 499 amino acid (aa) type I membrane protein with a putative 17 aa signal peptide, a 269 aa extracellular domain, a 21 aa transmembrane domain and a 192 aa cytoplasmic tail. As a result of alternative splicing, a secreted variant of IL-17B R also exists (4). Human and mouse IL-17 RB share 76% aa sequence identity. IL-17 RB is aproximately 20% identical to the human and mouse IL-17 RA/IL-17 R. However, the receptors share many conserved cysteine residues within their extracellular domains as well as additional conserved elements within their cytoplasmic domains. At least three additional type I transmembrane receptors with homology to IL-17 RA/IL-17 R, including IL-17 RL (IL-17 RC), IL-17 RD, and IL-17 RE, have been reported (2, 6). By Northern blot analysis, mouse IL-17 RB is highly expressed in liver and testes and is expressed at lower levels in kidney and lung. It is also expressed in some hematopoietic cell lines, including selected T cell, B cell, and myeloid cell lines (2-4). The expression of IL-17 RB is significantly upregulated under inflammatory conditions (7). IL-17 RB binds strongly to IL-17E and weakly to IL-17B. It does not bind IL-17 or IL-17F. Activation of IL-17 RB by its ligands results in the activation of nuclear factor kappa-B (2-4).

References:

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6. Haudenschild, D. *et al.* (2002) J. Biol. Chem. **277**:4309.
7. Hurst, S.D. *et al.* (2002) J. Immunol. **169**:443.

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