

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human IL-17B in ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant human (rh) IL-17, rhIL-17C, D, E, F, or recombinant mouse IL-17B is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 174106
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human IL-17B Gln21-Phe180 Accession # Q9UHF5
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

## 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.

Human IL-17B Sandwich Immunoassay		Reagent
<b>ELISA Capture</b>	2-8 µg/mL	Human IL-17B Antibody (Catalog # <a href="#">MAB1248</a> )
<b>ELISA Detection</b>	0.5-2.0 µg/mL	Human IL-17B Biotinylated Antibody (Catalog # <a href="#">BAM12481</a> )
<b>Standard</b>		Recombinant Human IL-17B (Catalog # <a href="#">1248-IB</a> )

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 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.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <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). The functions of IL-17 RC, D, and E are not known.

Human IL-17B cDNA encodes a 180 aa protein with a putative 20 aa signal peptide (5, 6). Human and mouse IL-17B share 88% amino acid sequence identity. Among IL-17 family members, IL-17B is most closely related to IL-17D, sharing 27% 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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2. Moseley, T.A. *et al.* (2003) *Cytokine & Growth Factor Rev.* **14**:155.
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4. Haudenschild, D. *et al.* (2002) *J. Biol. Chem.* **277**:4309.
5. Shi, Y. *et al.* (2000) *J. Biol. Chem.* **275**:19167.
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7. Moore, E.E. *et al.* (2002) *Neuromuscul. Disord.* **12**:141.