Human IL-17B Biotinylated Antibody

Monoclonal Mouse IgG_1 Clone # 174106

Catalog Number: BAM12481

DESCRIPTION

Species Reactivity	Human
Specificity	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.
Source	Monoclonal Mouse IgG_1 Clone # 174106
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant human IL-17B Gln21-Phe180 Accession # Q9UHF5
Formulation	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**
ELISA Capture	2-8 µg/mL	Human IL-17B Antibody (Catalog # MAB1248)
ELISA Detection	0.5-2.0 µg/mL	Human IL-17B Biotinylated Antibody (Catalog # BAM12481)
Standard		Recombinant Human IL-17B (Catalog # 1248-IB)

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.
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 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:

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.
7. Moore, E.E. *et al.* (2002) Neuromuscul. Disord. **12**:141.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449