Human IL-17D Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF1504

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-17D in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 5% cross-reactivity with recombinant human (rh) IL-17, rhIL-17B, rhIL-17C, rhIL-17E and rhIL-17F is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human IL-17D Ala18-Pro202 Accession # Q8TAD2
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

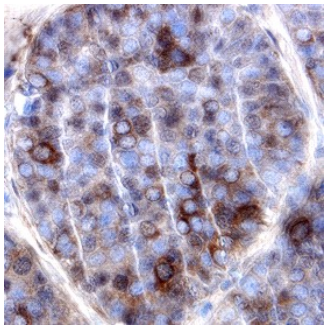
APPLICATIONS

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.*

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Human IL-17D (Catalog # 1504-IL)
Immunohistochemistry	5-15 µg/mL	See Below

DATA

Immunohistochemistry



IL-17D in Human Breast. IL-17D was detected in immersion fixed paraffin-embedded sections of human breast using Goat Anti-Human IL-17D Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1504) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific labeling was localized to the cytoplasm of epithelial cells. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

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.
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 from date of receipt, 2 to 8 °C, reconstituted. ● 6 months from date of receipt, -20 to -70 °C, reconstituted.

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 cysteine-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-17D cDNA encodes a 202 amino acid (aa) residues protein with a putative 17 aa signal peptide (5). Human and mouse IL-17D share 78% sequence identity. Among IL-17 family members, IL-17D is most closely related to IL-17B, sharing 27% aa sequence homology (5, 6). IL-17D is expressed preferentially in skeletal muscle, heart, adipose tissue, lung, pancreas, and nervous system (1, 5). Like other IL-17 family members, IL-17D modulates immune responses indirectly by stimulating the production of myeloid growth factors and chemokines including IL-6, IL-8, and GM-CSF (5). IL-17D has also been shown to suppress the proliferation of myeloid progenitors in colony formation assays. The receptor of IL-17D has not yet been identified. However, stimulation of IL-8 production by IL-17D is mediated through the activation of nuclear factor kappa-B (5). The IL-17D preparations from R&D Systems have been found to bind immobilized recombinant IL17B R/Fc in a functional ELISA.

References:

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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. Starnes, T. *et al.* (2002) J. Immunol. **169**:642.
6. Li, H. *et al.* (2000) Proc. Natl. Acad. Sci. USA **97**:773.