

## DESCRIPTION

|                                                                                                                                                                                                         |                                                                                                                                                                                                                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Mouse                                                                                                                                                                                                                                                      |
| <b>Specificity</b>                                                                                                                                                                                      | 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-1 |
| <b>Source</b>                                                                                                                                                                                           | Polyclonal Goat IgG                                                                                                                                                                                                                                        |
| <b>Purification</b>                                                                                                                                                                                     | Antigen Affinity-purified                                                                                                                                                                                                                                  |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant mouse IL-17B<br>His21-Phe180<br>Accession # Q9QXT6                                                                                                                                                                     |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 700<br>Excitation Wavelength: 675-700 nm<br>Emission Wavelength: 723 nm                                                                                                                                                                        |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                                                                                                                                                                                               |
| *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |                                                                                                                                                                                                                                                            |

## 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.

|                                                 |                                                                        |
|-------------------------------------------------|------------------------------------------------------------------------|
| <b>CyTOF-ready</b>                              | Optimal dilution of this antibody should be experimentally determined. |
| <b>ELISA Capture (Matched Antibody Pair)</b>    | Optimal dilution of this antibody should be experimentally determined. |
| <b>ELISA Detection (Matched Antibody Pair)</b>  | Optimal dilution of this antibody should be experimentally determined. |
| <b>Western Blot</b>                             | Optimal dilution of this antibody should be experimentally determined. |
| <b>Blockade of Receptor-ligand Interaction</b>  | Optimal dilution of this antibody should be experimentally determined. |
| <b>Intracellular Staining by Flow Cytometry</b> | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## 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).

## PRODUCT SPECIFIC NOTICES

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