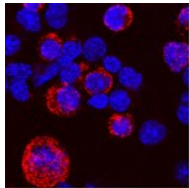
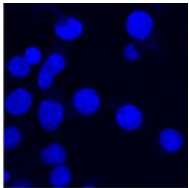


DESCRIPTION	
Species Reactivity	Mouse
Specificity	Detects mouse IL-17F in ELISAs and Western blots. In sandwich immunoassays, less than 0.1% cross-reactivity with recombinant human IL-17F, recombinant mouse (rm) IL-17, rmlL-17B, rmlL-17C, rmlL-17D, and rmlL-17E is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse IL-17F Arg29-Ala153 Accession # NP_665855
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 as a 0.2 µm filtered solution in PBS.

APPLICATIONS	
Please Note: Optimal dilutions should be determined by each laboratory for each application. <i>General Protocols</i> are available in the <i>Technical Information</i> section on our website.	
	Recommended Concentration
	Sample
Western Blot	0.1 µg/mL Recombinant Mouse IL-17F (Catalog # 2057-IL)
Immunocytochemistry	5-15 µg/mL See Below
Mouse IL-17F Sandwich Immunoassay	Reagent
ELISA Capture	0.2-0.8 µg/mL Mouse IL-17F Antibody (Catalog # AF2057)
ELISA Detection	0.1-0.4 µg/mL Mouse IL-17F Biotinylated Antibody (Catalog # BAF2057)
Standard	Recombinant Mouse IL-17F (Catalog # 2057-IL)

DATA	
<p>Immunocytochemistry</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Treated</p> </div> <div style="text-align: center;">  <p>Untreated (control)</p> </div> </div>	<p>IL-17F in Mouse Th17 Cells. IL-17F was detected in immersion fixed mouse T helper 17 (Th17) cells stimulated with PMA and calcium ionomycin using Goat Anti-Mouse IL-17F Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2057) at 15 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Non-adherent Cells.</p>

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. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 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, comprised of six members (IL-17 and 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. With the exception of IL-17B, which exists as a non-covalently linked dimer, all IL-17 family members are disulfide-linked dimers. IL-17 family proteins are pro-inflammatory cytokines that induce local cytokine production and are involved in the regulation of immune functions (1, 2).

Mouse IL-17F cDNA encodes a 153 amino acid (aa) protein with a putative 20 aa signal peptide. Among IL-17 family members, IL-17F is most closely related to IL-17 sharing approximately 46% aa sequence identity. Mouse and human IL-17F share 55% sequence identity. IL-17F is expressed in activated CD4⁺ T cells and activated monocytes. 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 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, 2, 5). The functions for IL-17 RC, D, and E are not known. Purified IL-17 R and IL-17B R do not bind IL-17F with high-affinity *in vitro*. However, binding of IL-17F is detected in cells transfected with IL-17 R, raising the possibility that a co-receptor may be required for IL-17F signaling through IL-17 R (4). The biological activities mediated by IL-17F are similar to those of IL-17. IL-17F stimulates production of IL-6, IL-8, G-CSF, and regulates cartilage matrix turnover by increasing matrix release and inhibiting new matrix synthesis (4). IL-17F also inhibits angiogenesis and induces production of IL-2, TGF- β , and monocyte chemoattractant protein-1 in endothelial cells (3).

References:

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