**Mouse IL-17/IL-17A Antibody**

**Monoclonal Rat IgG2A Clone # 50104**

**Catalog Number: MAB421**

### DESCRIPTION

**Species Reactivity**: Mouse

**Specificity**: Detects mouse IL-17 in direct ELISAs and Western blots. In direct ELISAs, approximately 40% reactivity with recombinant mouse (rm) IL-17A/IL-17F heterodimer is observed. No cross-reactivity with recombinant human IL-17, recombinant canine IL-17, rmIL-17B, rmIL-17C, rmIL-17D, rmIL-17E, or rmIL-17F is observed.

**Source**: Monoclonal Rat IgG2A Clone # 50104

**Purification**: Protein A or G purified from hybridoma culture supernatant

**Immunogen**: E. coli-derived recombinant mouse IL-17Thr22-Ala158 HAF005

**Accession #**: Q62386

**Endotoxin Level**: <0.10 EU per 1 μg of the antibody by the LAL method.

**Formulation**: Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

**Recommended Concentration**: See Below

**Sample**: Measured by its ability to neutralize IL-17-induced IL-6 secretion in the NIH-3T3 mouse embryonic fibroblast cell line. Yao, Z. et al. (1995) Immunity 3:811. The Neutralization Dose (ND50) is typically 0.05-0.15 μg/mL in the presence of 10 ng/mL Recombinant Mouse IL-17.

### 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.

<table>
<thead>
<tr>
<th><strong>Recommended Concentration</strong></th>
<th><strong>Sample</strong></th>
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<tbody>
<tr>
<td>Western Blot</td>
<td>1 µg/mL</td>
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<tr>
<td>Neutralization</td>
<td>See Below</td>
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</table>

**Neutralization**

Neutralization of Recombinant Mouse IL-17/IL-17A by Neutralization. Western blot shows 25 ng of Recombinant Mouse IL-17/IL-17A (Catalog # MAB421), Recombinant Human IL-17A (Catalog # 317-ILB), Recombinant Rat IL-17L/IL-17A (Catalog # 8410-L), and Recombinant Mouse IL-17F (Catalog # 3507-L). PVDF Membrane was probed with 1 µg/mL of Rat Anti-Mouse IL-17/IL-17A Monoclonal Antibody (Catalog # MAB421) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF055). A specific band was detected for IL-17L/IL-17A at approximately 15 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 3.

### DATA

#### Western Blot

Detection of Recombinant Mouse IL-17/IL-17A by Western Blot. Western blot shows 25 ng of Recombinant Mouse IL-17/IL-17A (Catalog # MAB421), Recombinant Human IL-17A (Catalog # 317-ILB), Recombinant Rat IL-17L/IL-17A (Catalog # 8410-L), and Recombinant Mouse IL-17F (Catalog # 3507-L). PVDF Membrane was probed with 1 µg/mL of Rat Anti-Mouse IL-17/IL-17A Monoclonal Antibody (Catalog # MAB421) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF055). A specific band was detected for IL-17L/IL-17A at approximately 15 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 3.

#### Neutralization

IL-6 Secretion Induced by IL-17 and Neutralization by Mouse IL-17 Antibody. Recombinant Mouse IL-17 (Catalog # 421-ML) stimulates IL-6 secretion in the NIH-3T3 mouse embryonic fibroblast cell line in a dose-dependent manner (orange line), as measured by the Mouse IL-6 Quantikine ELISA Kit (Catalog # M6000B). IL-6 secretion elicited by Recombinant Mouse IL-17 (10 ng/mL) is neutralized (green line) by increasing concentrations of Rat Anti-Mouse IL-17 Monoclonal Antibody (Catalog # MAB421). The ND50 is typically 0.05-0.15 μg/mL.

### 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. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C.

**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.
Interleukin 17 (also known as CTLA-8) is a T cell-expressed pleiotropic cytokine that exhibits a high degree of homology to a protein encoded by the ORF13 gene of herpes virus Saimiri. cDNA clones encoding IL-17 have been isolated from activated rat, mouse and human T cells. Mouse IL-17 cDNA encodes a 158 amino acid (aa) residue precursor protein with a 21 amino acid residue signal peptide that is cleaved to yield the 137 aa residue mature IL-17. Both recombinant and natural IL-17 have been shown to exist as disulfide linked homodimers. At the amino acid level, mIL-17 shows 57% and 87% sequence identity with herpesvirus and rat IL-17, respectively. An IL-17 specific mouse cell surface receptor (IL-17 R) has been cloned. While the expression of IL-17 mRNA is restricted to activated alpha beta TCR+CD4-CD8-T cells, the expression of mIL-17 R mRNA has been detected in virtually all cells and tissues tested. IL-17 exhibits multiple biological activities on a variety of cells including: the induction of IL-6 and IL-8 production in fibroblasts; the enhancement of surface expression of ICAM-1 in fibroblasts; activation of NF-kB and costimulation of T cell proliferation.

References: