

**DESCRIPTION**

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse IL-17 RA/IL-17 R in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human IL-17 RA, recombinant mouse (rm) IL-17B R, rmlIL-17 RD, or rmlIL-17 RC is observed. In Western blots, less than 10% cross-reactivity with recombinant human (rh) IL-17 RA or rhlIL-17B R is observed.
<b>Source</b>	Monoclonal Rat IgG <sub>2A</sub> Clone # 657603
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse IL-17 RA/IL-17 R Ser32-Trp322 Accession # Q60943
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

**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>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	2.5 µg/10 <sup>6</sup> cells	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	
<b>Neutralization</b>	Measured by its ability to neutralize IL-17-induced IL-6 secretion in the NIH-3T3 mouse embryonic fibroblast cell line. Yao, Z. <i>et al.</i> (1995) <i>Immunity</i> 3:811. The Neutralization Dose (ND <sub>50</sub> ) is typically 0.2-0.8 µg/mL in the presence of 10 ng/mL Recombinant Mouse IL-17.	

**DATA**

**Flow Cytometry**

**Detection of IL-17 RA/IL-17 R in EL-4 Mouse Cell Line by Flow Cytometry.** EL-4 mouse lymphoblast cell line was stained with Rat Anti-Mouse IL-17 RA/IL-17 R Monoclonal Antibody (Catalog # MAB4481, filled histogram) or isotype control antibody (Catalog # MAB006, open histogram), followed by Allophycocyanin-conjugated Anti-Rat IgG Secondary Antibody (Catalog # F0113).

**Neutralization**

**IL-6 secretion Induced by IL-17 and Neutralization by Mouse IL-17 RA/IL-17 R Antibody.** Recombinant Mouse IL-17 (Catalog # 421-ML) induces 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 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 RA/IL-17 R Monoclonal Antibody (Catalog # MAB4481). The ND<sub>50</sub> is typically 0.2-0.8 µg/mL.

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

IL-17 receptor alpha subunit (IL-17 RA), also known as IL-17 R, is a widely expressed 120 kDa glycosylated type I transmembrane protein that plays a central role in inflammatory responses. IL-17 RA associates with IL-17 RC to form a signaling receptor complex for IL-17 and IL-17F. IL-17 RA ligation promotes T cell activation and the production of IL-6, G-CSF, SCF, and multiple proinflammatory chemokines. Within the ECD, mouse IL-17 RA shares 84% and 72% aa sequence identity with rat and human IL17 RA, respectively.