

DESCRIPTION

Species Reactivity	Mouse
Specificity	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, rmlL-17 RD, or rmlL-17 RC is observed. In Western blots, less than 10% cross-reactivity with recombinant human (rh) IL-17 RA or rhlL-17B R is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 657603
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse IL-17 RA/IL-17 R Ser32-Trp322 Accession # Q60943
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. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	
Neutralization	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 ₅₀) 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 ND₅₀ is typically 0.2-0.8 µg/mL.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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. <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

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.