

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human and mouse IL-5 in ELISAs. In sandwich immunoassays with BAM6051 as the detection antibody, no cross-reactivity with recombinant human (rh) IL-3, rhGM-CSF, or recombinant mouse (rm) IL-5 is observed. In sandwich ELISAs with BAM705 as the detection antibody, no cross-reactivity with rhIL-5, rmIL-3, or rmGM-CSF is observed.
Source	Monoclonal Rat IgG ₁ Clone # TRFK5
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse T cell clone-derived partially purified recombinant mouse IL-5
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. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

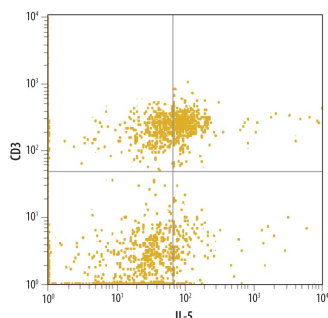
APPLICATIONS

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.

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
Mouse IL-5 Sandwich Immunoassay		Reagent
ELISA Capture	2-8 µg/mL	Human/Mouse IL-5 Antibody (Catalog # MAB405)
ELISA Detection	0.5-2.0 µg/mL	Mouse IL-5 Biotinylated Antibody (Catalog # BAM705)
Standard		Recombinant Mouse IL-5 (Catalog # 405-ML)
Human IL-5 Sandwich Immunoassay		Reagent
ELISA Capture	2-8 µg/mL	Human/Mouse IL-5 Antibody (Catalog # MAB405)
ELISA Detection	0.5-2.0 µg/mL	Human IL-5 Biotinylated Antibody (Catalog # BAM6051)
Standard		Recombinant Human IL-5 (Catalog # 205-IL)
CyTOF-reported	This clone has been commercially reported for use in CyTOF®. 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-5-induced proliferation in the TF-1 human erythroleukemic cell line. Kitamura, T. <i>et al.</i> (1989) J. Cell Physiol. 140 :323. The Neutralization Dose (ND ₅₀) is typically 0.004-0.015 µg/mL in the presence of 0.5 ng/mL Recombinant Mouse IL-5.	

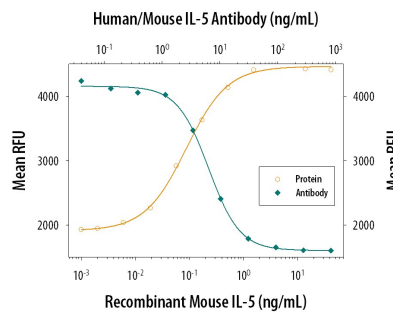
DATA

Intracellular Staining by Flow Cytometry



Detection of IL-5 in Human PBMCs by Flow Cytometry. Human peripheral blood monocytes treated with 50 ng/mL PMA and 500 ng/mL Calcium Ionomycin for 6 hours were stained with Rat Anti-Human/Mouse IL-5 Monoclonal Antibody (Catalog # MAB405) followed by Phycoerythrin-conjugated Anti-Rat IgG F(ab')₂ Secondary Antibody (Catalog # F0105B) and Human CD3ε APC-conjugated Monoclonal Antibody (Catalog # FAB100A). Quadrant markers were set based on control antibody staining (Catalog # MAB005). To facilitate intracellular staining, cells were fixed with paraformaldehyde and permeabilized with saponin.

Neutralization



Cell Proliferation Induced by IL-5 and Neutralization by Human/Mouse IL-5 Antibody. Recombinant Mouse IL-5 (Catalog # 405-ML) stimulates proliferation in the TF-1 human erythroleukemic cell line in a dose-dependent manner (orange line). Proliferation elicited by Recombinant Mouse IL-5 (0.5 ng/mL) is neutralized (green line) by increasing concentrations of Rat Anti-Human/Mouse IL-5 Monoclonal Antibody (Catalog # MAB405). The ND₅₀ is typically 0.004-0.015 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. <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-5 is a disulfide-linked homodimeric cytokine that is secreted by T cells. IL-5 promotes the proliferation, differentiation, and activation of eosinophils. It binds to a receptor complex consisting of one IL-5 specific α chain and one non-binding common β chain that is shared with the receptors for GM-CSF and IL-3.