

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-2 in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 5343
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human IL-2 Ala21-Thr153 Accession # NP_000577
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.

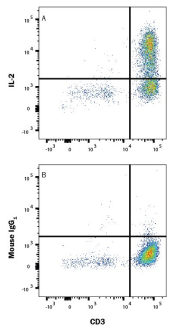
APPLICATIONS

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	0.25 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-2-induced proliferation in the CTLL-2 mouse cytotoxic T cell line. Gearing, A.J.H. and C.B. Bird (1987) in Lymphokines and Interferons, A Practical Approach. Clemens, M.J. <i>et al.</i> (eds): IRL Press. 276. The Neutralization Dose (ND ₅₀) is typically 0.05-0.5 µg/mL in the presence of 2 ng/mL Recombinant Human IL-2.	

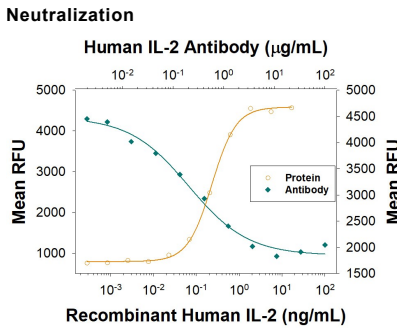
DATA

Intracellular Staining by Flow Cytometry



Detection of IL-2 in Human PBMCs by Flow Cytometry. Human peripheral blood mononuclear cells (PBMCs) treated with Cell Activation Cocktail 500x (Catalog # Catalog # 5476) for 5 hours were stained with (A) Mouse Anti-Human IL-2 Monoclonal Antibody (Catalog # MAB10442) or (B) Mouse IgG1 isotype control antibody (Catalog # Catalog # MAB002) followed by Anti-Mouse IgG APC-conjugated Secondary Antibody (Catalog # Catalog # F0101B) and Mouse anti-Human CD3 PE-conjugated Monoclonal Antibody (Catalog # Catalog # FAB100P). To facilitate intracellular staining, cells were fixed and permeabilized using FlowX FoxP3/Transcription Factor Fixation & Perm Buffer Kit (Catalog # Catalog # FC012). View our protocol for [Staining Intracellular Molecules](#).

Neutralization



Cell Proliferation Induced by IL-2 and Neutralization by Human IL-2 Antibody. Recombinant Human IL-2 (Catalog # 202-IL) stimulates proliferation in the CTLL-2 mouse cytotoxic T cell line in a dose-dependent manner (orange line) as measured by Resazurin (Catalog # AR002). Proliferation elicited by Recombinant Human IL-2 (2 ng/mL) is neutralized (green line) by increasing concentrations of Mouse Anti-Human IL-2 Monoclonal Antibody (Catalog # MAB10442). The ND₅₀ is typically 0.05-0.5 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

Interleukin 2 (IL-2) is a cytokine that stimulates the growth and differentiation of B cells, T cells, NK cells, and monocyte/macrophages. It functions through the heterotrimeric IL-2 receptor comprising α, β, and γ chains.