Human IL-2 Antibody

Monoclonal Mouse IgG_1 Clone # 5334R

Catalog Number: MAB202R

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-2 in direct ELISAs.
Source	Monoclonal Mouse IgG_1 Clone # 5334R
Purification	Protein A or G purified from cell culture supernatant
Immunogen	*E. coli*-derived recombinant human IL-2 Ala21-Thr153 Accession # NP_000577
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.

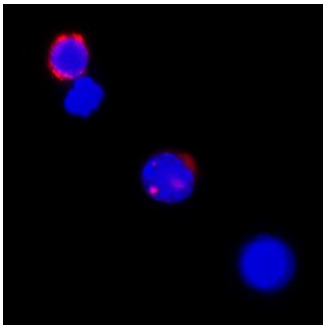
APPLICATIONS

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
Immunocytochemistry	5-25 µg/mL	See Below
Intracellular Staining by Flow Cytometry	0.25 µg/10^6 cells	Human peripheral blood mononuclear cells (PBMCs) treated with Cell Activation Cocktail 500x (Catalog # 5476) for 5 hours, fixed and permeabilized using FlowX FoxP3/Transcription Factor Fixation & Perm Buffer Kit (Catalog # FC012)
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. et al. (eds): IRL Press. 276. The Neutralization Dose (ND_{50}) is typically 0.015-0.03 µg/mL in the presence of 2 ng/mL Recombinant Human IL-2.	

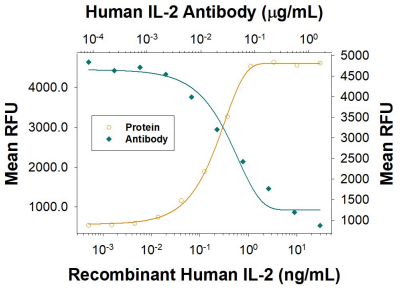
DATA

Immunocytochemistry



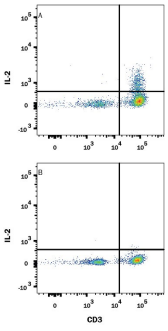
IL-2 in Human PBMCs. IL-2 was detected in immersion fixed human peripheral blood mononuclear cells (PBMCs) treated with calcium ionomycin and PMA using Mouse Anti-Human IL-2 Monoclonal Antibody (Catalog # MAB202R) at 25 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Non-adherent Cells.

Neutralization



Cell Proliferation Induced by IL-2 and Neutralization by Human IL-2 Antibody. Recombinant Human IL-2 (Catalog # Catalog # 202-IL) stimulates proliferation in the CTLL-2 mouse cytotoxic T cell line in a dose-dependent manner (orange line). 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 # MAB202). The ND_{50} is typically 0.015-0.03 µg/mL.

Intracellular Staining by Flow Cytometry



Detection of IL-2 in Human PBMCs by Flow Cytometry. Human peripheral blood mononuclear cells (PBMCs) (A) treated with Cell Activation Cocktail 500x (Catalog # 5476) for 5 hours or (B) resting were stained with Mouse Anti-Human IL-2 Monoclonal Antibody (Catalog # MAB202R) followed by Goat anti-Mouse IgG APC-conjugated Secondary Antibody (Catalog # F0101B) and Mouse anti-Human CD3 PE-conjugated Monoclonal Antibody (Catalog # FAB100P). Quadrant markers were set based on Mouse IgG1 isotype control antibody (Catalog # MAB002) . To facilitate intracellular staining, cells were fixed and permeabilized using FlowX FoxP3/Transcription Factor Fixation & Perm Buffer Kit (Catalog # FC012). Staining was performed using our Staining Intracellular Molecules protocol.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449

Human IL-2 Antibody

Monoclonal Mouse IgG_1 Clone # 5334R

Catalog Number: MAB202R

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.

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.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 **Canada** TEL 855 668 8722 **China** TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449