Human IL-10 Rα Antibody

Monoclonal Mouse IgG_{2B} Clone # 714212

Catalog Number: MAB2742

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-10 Rα in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant mouse IL-10 R alpha or recombinant human (rh) IL-10 R beta is observed. In Western blots, no cross-reactivity with rhIL-10 R beta is observed.
Source	Monoclonal Mouse IgG_{2B} Clone # 714212
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived and *S. frugiperda* insect ovarian cell line *Sf* 21-derived recombinant human IL-10 Rα His22-Asn235 Accession # Q13651
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.

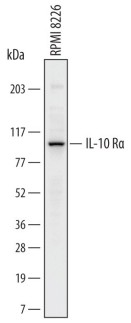
APPLICATIONS

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
Western Blot	0.5 µg/mL	See Below
Flow Cytometry	2.5 µg/10^6 cells	See Below

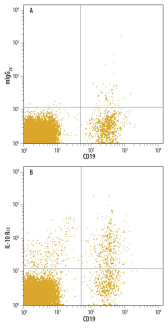
DATA

Western Blot



Detection of Human IL-10 Rα by Western Blot. Western blot shows lysates of RPMI 8226 human multiple myeloma cell line. PVDF membrane was probed with 0.5 µg/mL of Mouse Anti-Human IL-10 Rα Monoclonal Antibody (Catalog # MAB2742) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for IL-10 Rα at approximately 100 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Flow Cytometry



Detection of IL-10 Rα in Human Blood Lymphocytes by Flow Cytometry. Human peripheral blood lymphocytes were stained with Mouse Anti-Human IL-10 Rα Monoclonal Antibody (Catalog # MAB2742) followed by Phycoerythrin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0102B) and Mouse Anti-Human CD19 APC-conjugated Monoclonal Antibody (Catalog # FAB4867A). Quadrant markers were set based on control antibody staining (Catalog # MAB0041).

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.** ● 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-10, initially designated cytokine synthesis inhibitory factor (CSIF), is a potent immunosuppressant of macrophage functions. IL-10 is also a pleiotropic cytokine with multiple immunostimulatory as well as immunosuppressive effects on a variety of other cell types. IL-10 binds specifically and with high affinity to cell-surface receptors. Mouse and human cDNA clones encoding the ligand-binding IL-10 receptor (IL-10 R) have been isolated. The IL-10 R mRNA has been detected in all cell types that are known to respond to IL-10. Human and mouse IL-10 receptors are structurally related to the IFN-γ receptor. These receptors are members of the class II subgroup of the cytokine receptor superfamily. The deduced amino acid sequence of human IL-10 R is approximately 60% identical to mouse IL-10 R. Although human IL-10 has cross-species activities and is active on mouse cells, mouse IL-10 is species-specific in its actions and does not bind to the human IL-10 receptor. The human IL-10 R gene has been mapped to chromosome 11q23.3. Recombinant IL-10 soluble receptor, consisting of the extracellular domain of IL-10 R, binds IL-10 with high affinity in solution and is a potent IL-10 antagonist.