

DESCRIPTION

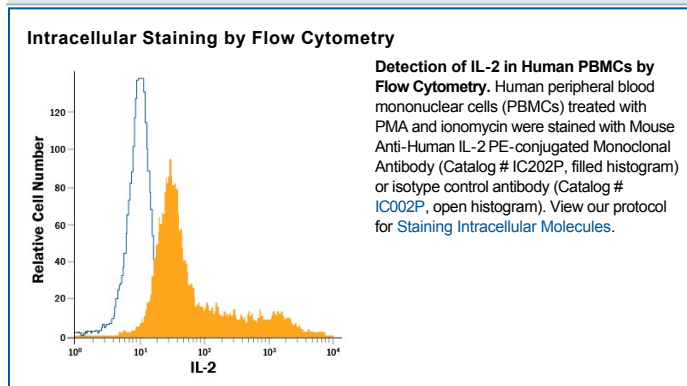
Species Reactivity	Human
Specificity	Detects human IL-2 in direct ELISAs. Does not cross-react with recombinant IL-2 from mouse, rat, pig, or cotton rat.
Source	Monoclonal Mouse IgG ₁ Clone # 5334
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human IL-2 Ala21-Thr153 Accession # NP_000577
Conjugate	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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	10 μ L/10 ⁶ cells	See Below

DATA



PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

IL-2 is a 15-19 kDa secreted O-glycosylated polypeptide that belongs to the γ_c -receptor utilizing family of molecules. It is a monomer that is expressed by a limited number of cell types, including CD4⁺ and CD8⁺ T cells, $\gamma\delta$ T cells, eosinophils and B cells. Its local concentration, plus the stoichiometry of its receptor (a two or three subunit complex) appears to determine what effects it has on its target cells. It is suggested to both induce NK and CD8⁺ T cell proliferation, and promote NK cell and CD8⁺ T cell effector activity. IL-2 also appears to drive CD4⁺ Fox P3⁺ thymocytes into mature FoxP3⁺ Tregs, and to direct the conversion of CD4⁺ T cells into induced Tregs. Finally, IL-2 induces $\gamma\delta$ T cells to secrete IFN- γ , and endothelial cells to upregulate endocytic activity. Human and mouse IL-2 share 56 % amino acid sequence identity.