

## DESCRIPTION

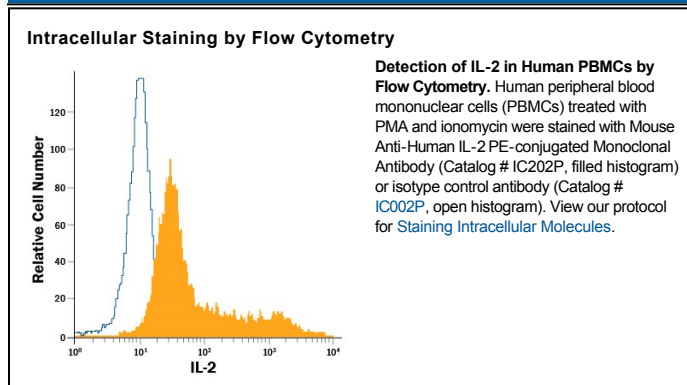
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human IL-2 in direct ELISAs. Does not cross-react with recombinant IL-2 from mouse, rat, pig, or cotton rat.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 5334
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human IL-2 Ala21-Thr153 Accession # NP_000577
<b>Conjugate</b>	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
<b>Formulation</b>	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 µL/10 <sup>6</sup> cells	See Below

## DATA



## PREPARATION AND STORAGE

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

## BACKGROUND

IL-2 is a 15-19 kDa secreted O-glycosylated polypeptide that belongs to the  $\gamma_c$ -receptor utilizing family of molecules. It is a monomer that is expressed by a limited number of cell types, including CD4<sup>+</sup> and CD8<sup>+</sup> 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<sup>+</sup> T cell proliferation, and promote NK cell and CD8<sup>+</sup> T cell effector activity. IL-2 also appears to drive CD4<sup>+</sup> Fox P3<sup>-</sup> thymocytes into mature FoxP3<sup>+</sup> Tregs, and to direct the conversion of CD4<sup>+</sup> T cells into induced Tregs. Finally, IL-2 induces  $\gamma\delta$  T cells to secrete IFN- $\gamma$ , and endothelial cells to upregulate endocytic activity. Human and mouse IL-2 share 56 % amino acid sequence identity.