

## DESCRIPTION

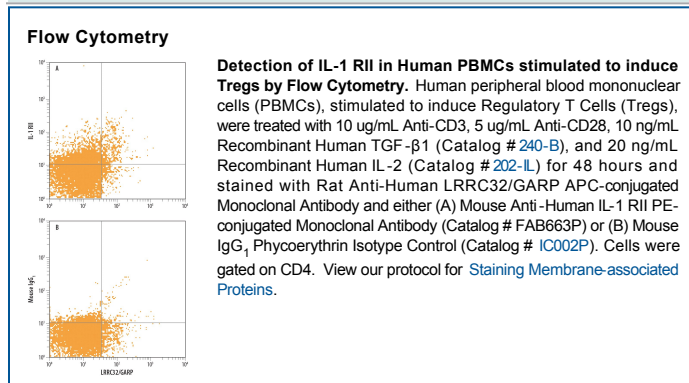
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human IL-1 RII in direct ELISAs and Western blots. When used in combination with the biotinylated human IL-1 RII affinity purified polyclonal detection antibody (Catalog # BAF263) in sandwich ELISAs, no significant cross-reactivity or interference was observed with recombinant human (rh) IL-1ra, rhIL-1 RI, recombinant mouse IL-1ra, or recombinant rat IL-1ra.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 34141
<b>Purification</b>	Protein A or G purified from ascites
<b>Immunogen</b>	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human IL-1 RII Phe14-Glu343 (Ser56Gly and Glu297Gly) Accession # P27930
<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
<b>Flow Cytometry</b>	10 $\mu$ L/10 <sup>6</sup> 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.**

- 12 months from date of receipt, 2 to 8 °C as supplied.

## BACKGROUND

Two distinct types of receptors that bind the pleiotropic cytokines IL-1 $\alpha$  and IL-1 $\beta$  have been described. The IL-1 receptor type I is an 80 kDa transmembrane protein that is expressed predominantly by T cells, fibroblasts, and endothelial cells. IL-1 receptor type II is a 68 kDa transmembrane protein found on B lymphocytes, neutrophils, monocytes, large granular leukocytes, and endothelial cells. Both receptors are members of the immunoglobulin superfamily and show approximately 28% sequence similarity in their extracellular domains. The two receptor types do not heterodimerize in a receptor complex. An IL-1 receptor accessory protein that can heterodimerize with the type I receptor in the presence of IL-1 $\alpha$  or IL-1 $\beta$ , but not IL-1ra, was identified (1). This type I receptor complex appears to mediate all the known IL-1 biological responses. The receptor type II has a short cytoplasmic domain and does not transduce IL-1 signals. In addition to the membrane-bound form of IL-1 RII, a naturally-occurring soluble form of IL-1 RII has been described. It has been suggested that the type II receptor, either as the membrane-bound or as the soluble form, serves as a decoy for IL-1 and inhibits IL-1 action by blocking the binding of IL-1 to the signaling type I receptor complex. Recombinant IL-1 soluble receptor type II is a potent antagonist of IL-1 action.

## References:

1. Greenfeder, S. *et al.* (1995) *J. Biol. Chem.* **270**:13757.