Human IL-1 RII Fluorescein-conjugated Antibody

Monoclonal Mouse IgG_1 Clone # 34141

Catalog Number: FAB663F

100 TESTS

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-1 RII in direct ELSAs 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.
Source	Monoclonal Mouse IgG_1 Clone # 34141
Purification	Protein A or G purified from ascites
Immunogen	*S. frugiperda* insect ovarian cell line *Sf* 21-derived recombinant human IL−1 RII Phe14-Glu343 (Ser56Gly and Glu297Gly) Accession # P27930
Conjugate	Fluorescein Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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.

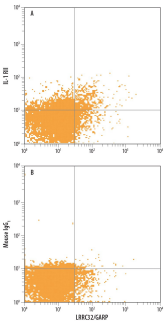
APPLICATIONS

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
Flow Cytometry	10 µL/10^6 cells	See Below

DATA

Flow Cytometry



Detection of IL-1 RII in Human PBMCs stimulated to induce Tregs by Flow Cytometry. Human peripheral blood mononuclear cells (PBMCs), stimulated to induce Regulatory T Cells (Tregs) and gated on $CD4^+$, were treated with 10 ug/mL Anti-CD3, 5 ug/mL Anti-CD28, 10 ng/mL Recombinant Human TGF-β1 (Catalog # 240-B), and 20 ng/mL Recombinant Human IL-2 (Catalog # 202-IL) for 48 hours and stained with Rat Anti-Human LRRC32/GARP APC-conjugated Monoclonal Antibody and either (A) Mouse Anti-Human IL-1 RII Fluorescein-conjugated Monoclonal Antibody (Catalog # FAB663F) or (B) Mouse IgG_1 Fluorescein Isotype Control (Catalog # IC002F). View our protocol for Staining Membrane-associated Proteins.

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-1α and IL-1β 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-1α or IL-1β, 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.