Human IL-12 Rβ1 PE-conjugated Antibody

Monoclonal Mouse IgG_1 Clone # 69310

Catalog Number: FAB839P

100 TESTS, 25 TESTS

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-12 Rβ1 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant mouse IL-12 Rβ1 is observed.
Source	Monoclonal Mouse IgG_1 Clone # 69310
Purification	Protein A or G purified from ascites
Immunogen	Mouse myeloma cell line NS0-derived recombinant human IL-12 Rβ1 Cys24-Glu540 Accession # P42701
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.

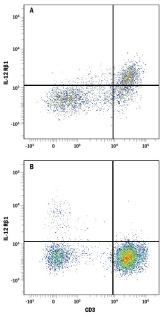
APPLICATIONS

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
Flow Cytometry	10 µL/10^6 cells	See Below

DATA

Flow Cytometry



Detection of IL-12 Rβ1 in Human PBMCs by Flow Cytometry. Human peripheral blood mononuclear cells (PBMCs) either (A) treated with 5 µg/mL PHA for 48 hours or (B) untreated were stained with Mouse Anti-Human IL-12 Rβ1 PE-conjugated Monoclonal Antibody (Catalog # FAB839P) and Mouse Anti-Human CD3ε APC-conjugated Monoclonal Antibody (Catalog # FAB100A). Quadrant markers were set based on control antibody staining (Catalog # IC002P). 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

Interleukin12 (IL-12) is a key mediator of cellular-immunity and induces the differentiation of Th1 cells from precursor T helper cells. The biological activities of IL-12 are mediated through the high-affinity receptor complex composed of two subunits designated IL-12 Rβ1 and IL-12 Rβ2. Individually, IL-12 Rβ1 and IL-12 Rβ2 bind IL−12 with low affinity. Co-expression of both subunits confers high-affinity binding and is required for IL-12 activity. Both IL-12 receptor subunits are type I transmembrane proteins that share similarities with the gp130/G-CSF R subgroup in the cytokine receptor superfamily. IL-12 Rβ1 cDNA encodes a 662 amino acid (aa) protein with a putative 23 aa signal peptide that is cleaved to generate the mature protein with a 522 aa extracellular domain, a 25 aa transmembrane domain and a 92 aa cytoplasmic region. Expression of IL-12 Rβ1 is detected in activated T cells, NK cells and B cells. The expression of IL−12 Rβ2 is more restricted and appears to be limited to Th2 cells.

References:

1. Gately, M.K. *et al*. (1998) Annu. Rev. Immunol. **16**:495.