Mouse IL-1 RI Fluorescein-conjugated Antibody

Monoclonal Rat IgG_{2B} Clone # 129304

Catalog Number: FAB7712F

100 TESTS, 25 TESTS

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse IL-1 RI in direct ELISAs and Western blots.
Source	Monoclonal Rat IgG_{2B} Clone # 129304
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse IL-1 RI Leu20-Lys338 Accession # P13504
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.

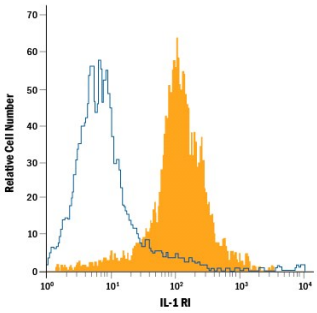
APPLICATIONS

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 RI in B220+ Mouse Splenocytes by Flow Cytometry. B220+ mouse splenocytes were stained with Rat Anti-Mouse IL-1 RI Fluorescein-conjugated Monoclonal Antibody (Catalog # FAB7712F, filled histogram) or isotype control antibody (Catalog # IC013F, open histogram). 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

The type I IL-1 receptor (IL-1 RI, designated IL-1 R1 and CD121a) is one of at least nine members of the IL-1 R family within the Toll/IL-1 R (TIR) superfamily. IL−1 RI is an ~80 kDa type I transmembrane (TM) protein that binds the pleiotropic cytokines IL-1α and IL-1β, plus the IL-1 Receptor antagonist (IL-1 Ra). Signal transduction requires complex formation with the IL-1 R accessory protein (IL-1 R AcP/IL-1 R3), another type I TM protein. This complex recruits the adaptor protein MyD88 to initiate signaling in the NFκB pathway. Mouse IL-1 RI cDNA encodes a 576 amino acid (aa) protein that contains a 19 aa signal sequence, a 319 aa extracellular domain (ECD) with three C2-type Ig-like domains, a 21 aa TM domain and a 217 aa cytoplasmic region with a TIR domain. Mouse IL-1 RI shares 64%, 83%, 60%, 61% and 55% aa identity with human, rat, canine, equine and bovine IL-1 RI, respectively. The role of IL-1 in inflammation is under several levels of control, including expression and activation of IL-1α and IL-1β, expression of IL-1 RI and its accessory and adaptor proteins, and negative regulators such as the IL−receptor family member, IL-1 RII/IL-1 R2. IL-1 RI is expressed predominantly by T cells, fibroblasts, and endothelial cells and mediates acute phase inflammatory responses including fever.