

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse IL-1 RI in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human (rh) IL-1 RI, recombinant mouse (rm) IL-1 RII, rhIL-1 RAcP, rmIL-18 R, recombinant rat IL-1 Rrp2, rmIL-18 Rβ, or rhIL-1 R
Source	Monoclonal Rat IgG _{2B} Clone # 129301
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	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

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 (1 - 3). 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 RAcP/IL-1 R3), another type I TM protein (1, 2). This complex recruits the adaptor protein MyD88, to initiate signaling in the NFκB pathway (4, 5). 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-1RII/IL-1R2 (1 - 5). IL-1 RI is expressed predominantly by T cells, fibroblasts, and endothelial cells and mediates acute phase inflammatory responses including fever (1, 2, 5, 6).

PRODUCT SPECIFIC NOTICES

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