

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-10 R β in direct ELISAs and Western blots. In direct ELISAs and Western blots, ~10% cross-reactivity with recombinant human (rh) IL-10 R and rhIFN- α/β R1 is observed and no cross-reactivity with rhIFN- γ R1 and rhIFN- γ R2
Source	Monoclonal Mouse IgG ₁ Clone # 90227
Purification	Protein A or G purified from ascites
Immunogen	Mouse myeloma cell line NS0-derived recombinant human IL-10 R β Met20-Ser220 Accession # Q08334
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

IL-10 R β , also known as IL-10 R2, mediates its biological activities *via* binding to a heteromeric receptor complex consisting of two distinct type II cytokine receptor subunits, the ligand binding IL-10 R α and the IL-10 R β which does not bind IL-10 by itself but is required for signal transduction. The cDNA for human IL-10 R β encodes a 325 amino acid (aa) residue type I transmembrane precursor protein with a 20 aa signal sequence, a 200 aa extracellular region, a 29 aa transmembrane segment and a short 76 aa cytoplasmic domain. Within the extracellular region, there are two 100 aa subdomains that resemble the constant region of immunoglobulins. This structural motif is responsible for the alternative designation of IL-10 R β as CRF2-4 (the 4th member of the cytokine receptor family class II/2). Human and mouse IL-10 R β share approximately 69% aa sequence identity. Binding of the non-covalent IL-10 dimer to two IL-10 R α chains recruits two IL-10 R β chains resulting in the activation and phosphorylation of the signaling cascade involving JAK1, TYK2, and STAT3. IL-10 R β is expressed ubiquitously. IL-10 R β is also a component of the IL-22 receptor complex consisting of the IL-10 R β chain and IL-22 R, another type II cytokine receptor family member.

PRODUCT SPECIFIC NOTICES

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