

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse IL-3 Rβ in ELISAs. In sandwich immunoassays, no cross-reactivity or interference with recombinant mouse IL-3 Rα or recombinant human IL-3 Rα is observed. Cross-reactivity with AIC2B was not tested.
Source	Monoclonal Rat IgG _{2A} Clone # 130710
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse IL-3 Rβ His23-Trp440 Accession # P26954
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 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.

ELISA Capture (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.
ELISA Detection (Matched Antibody Pair)	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

Interleukin 3 (IL-3) is a pleiotropic cytokine produced primarily by activated T cells or mast cells. IL-3 stimulates the proliferation and differentiation of hemopoietic cells including the pluripotent hematopoietic stem cells as well as various lineage-committed cells. The biological effects of IL-3 on the various cell types are mediated by the binding of IL-3 to specific cell surface receptor complexes. The functional high-affinity IL-3 receptor is a heterodimer consisting of a ligand binding α subunit and the β subunit. The α subunit alone binds IL-3 with low affinity. The β subunit is required for the high-affinity binding of IL-3 to the heterodimeric receptor complex. The β subunit has also been found to be a component of the high-affinity receptor complex for IL-5 and GM-CSF and is also referred to as the β common (βc) chain. In the mouse, there are two IL-3 Rβ proteins. The first identified mouse IL-3 Rβ was also called AIC2A and binds IL-3 with low affinity (1). The second mIL-3 Rβ was referred to as AIC2B (2). AIC2B doesn't bind IL-3 and is the homolog of the human IL-3 Rβ. AIC2A was found to be the result of a gene duplication event. Both the α and the β subunits are members of the cytokine receptor superfamily (3).

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