

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-12 Rβ1 in direct ELISAs and Western blots. In these formats, less than 2% cross-reactivity with recombinant mouse IL-12 Rβ1 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human IL-12 Rβ1 Cys24-Glu540 Accession # P42701
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 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

Interleukin 12 (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 membrane 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) residue protein with a putative 23 aa residue signal peptide that is cleaved to generate the mature protein with a 522 aa residue extracellular domain, a 25 aa residue transmembrane domain and a 92 aa residue cytoplasmic region. Expression of IL-12 Rβ1 has been 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.

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