

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-15 Rα in direct ELISAs and Western blots. In direct ELISAs, less than 10% cross-reactivity with recombinant human IL-2 Rγ is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human IL-15 Rα Ile31-Thr172 Accession # EAW86418
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.

CyTOF-ready	Optimal dilution of this antibody should be experimentally determined.
Neutralization	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Flow Cytometry	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	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 15 receptor alpha (IL-15 Rα) is a high affinity receptor that specifically binds IL-15 with high affinity and associates as a heterotrimer with the IL-2 receptors beta and gamma subunits to initiate signal transduction. IL-15 Rα is expressed on a wide variety of T cells and B cells as well as non-lymphoid cells. IL-15 Rα is a 58-60 kDa protein that shares structural similarities to the IL-2 Rα protein. IL-15 Rα and IL-2 Rα genes also share similar intron-exon organization and are closely linked on human chromosome 10p14-p15. Human IL-15 Rα shares 45% amino acid (aa) homology with the mouse form of the receptor. Eight isoforms of IL-15 Rα mRNA have been identified resulting from alternative splicing events involving different exons. The exclusion of exon 2 results in an IL-15 Rα isoform that does not bind IL-15. Human IL-15 Rα DE3 cDNA encodes a 267 amino acid (aa) protein that contains a 30 aa signal sequence, a 175 aa extracellular region containing one N-linked glycosylation site, a 21 aa transmembrane domain, and a 41 aa cytoplasmic tail. Signaling of IL-15 can occur in one of three ways; through the heterotrimeric complex of IL-15 Rα, IL-2 Rβ, and IL-2 Rγ_C, through the heterodimeric complex of IL-2 receptors beta and gamma common, through a novel 60-65 kDa IL-15 RX subunit found on mast cells. The binding of IL-15 to IL-15 Rα has been reported to antagonize the TNF-α-mediated apoptosis in fibroblasts by competing with TNF RI for TRAF2 binding.

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