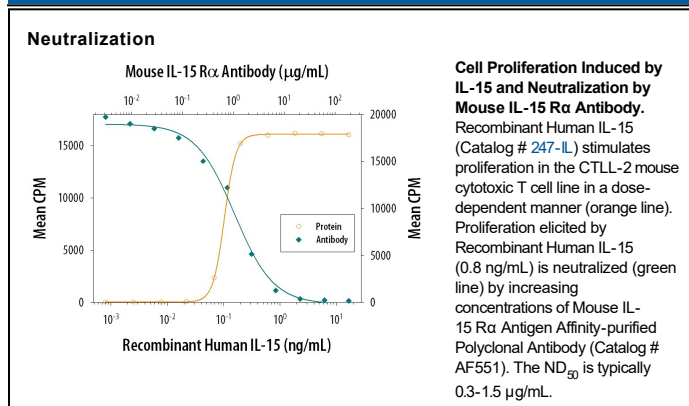


DESCRIPTION	
Species Reactivity	Mouse
Specificity	Detects mouse IL-15 R α in direct ELISAs and Western blots. In direct ELISAs, approximately 5% cross-reactivity with recombinant human (rh) IL-15 R α is observed and less than 1% cross-reactivity with rhIL-2 R α , recombinant mouse (rm) IL-2 R β , and rmIL-2 R γ is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse IL-15 R α Gly33-Lys205 Accession # Q60819
Endotoxin Level	<0.10 EU per 1 μ g of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μ m filtered solution in PBS.

APPLICATIONS	
Please Note: Optimal dilutions should be determined by each laboratory for each application. <i>General Protocols</i> are available in the <i>Technical Information</i> section on our website.	
	Recommended Concentration Sample
Western Blot	0.1 μ g/mL Recombinant Mouse IL-15 R α Fc Chimera (Catalog # 551-MR)
Flow Cytometry	2.5 μ g/10 ⁶ cells EL-4 mouse lymphoblast cell line
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.
Neutralization	Measured by its ability to neutralize IL-15-induced proliferation in the CTLL-2 mouse cytotoxic T cell line. Gearing, A.J.H. and C.B. Bird (1987) in <i>Lymphokines and Interferons, A Practical Approach</i> . Clemens, M.J. <i>et al.</i> (eds): IRL Press. 276. The Neutralization Dose (ND ₅₀) is typically 0.3-1.5 μ g/mL in the presence of 0.8 ng/mL Recombinant Human IL-15.

DATA



PREPARATION AND STORAGE	
Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Interleukin 15 receptor alpha (IL-15 R α) 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 R α is expressed on a wide variety of T cells and B cells as well as non-lymphoid cells. IL-15 R α is a 58-60 kDa protein that shares structural similarities to the IL-2 R α protein. IL-15 R α and IL-2 R α genes also share similar intron-exon organization and are closely linked on human chromosome 10p14-p15. Human IL-15 R α shares 45% amino acid (aa) homology with the mouse form of the receptor. Signaling of IL-15 can occur in one of three ways; through the heterotrimeric complex of IL-15 R α , IL-2 R β , and IL-2 R γ , 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 R α has been reported to antagonize the TNF- α -mediated apoptosis in fibroblasts by competing with TNF RI for TRAF2 binding.

References:

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