

DESCRIPTION

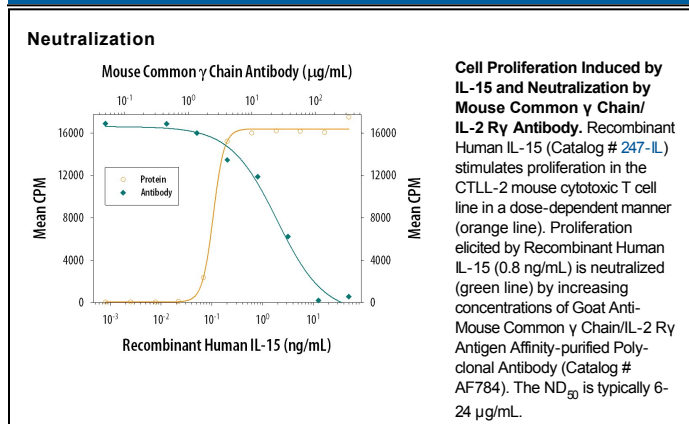
Species Reactivity	Mouse
Specificity	Detects mouse Common γ Chain/IL-2 R γ in direct ELISAs and Western blots. In Western blots, approximately 5% cross-reactivity with recombinant human (rh) IL-2 R γ is observed and less than 1% cross-reactivity with rhIL-2 R α , recombinant mouse IL-2 R β , and rhIL-15 R is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant mouse Common γ Chain/IL-2 R γ Ser25-Ala263 Accession # Q3UPA9
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 as a 0.2 μ m filtered solution in PBS.

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.

	Recommended Concentration	Sample
Western Blot	0.1 μ g/mL	Recombinant Mouse Common γ Chain/IL-2 R γ Fc Chimera (Catalog # 784-MR)
Neutralization		Measured by its ability to neutralize IL-15-induced proliferation in the CTLL-2 mouse cytotoxic T cell line. The Neutralization Dose (ND ₅₀) is typically 6-24 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

The γ chain of the high affinity functional mouse IL-2 receptor complex belongs to the hematopoietin receptor family. Mouse Common gamma Chain is a 369 amino acid residue protein consisting of a 22 residue signal sequence, a 241 residue extracellular domain, a 21 residue transmembrane domain and an 85 residue cytoplasmic domain. Although Common gamma Chain by itself does not bind IL-2 with any appreciable affinity, it is required for IL-2 receptor signaling. Besides IL-2, the γ chain has been shown to be a component of the functional receptor complexes for IL-4, IL-7, IL-9 and IL-15. IL-2 R γ is also designated the common γ chain (γ_c) (1, 2). The site of molecular defects in human X-linked SCID (severe combined immunodeficiency) has been mapped to the human common gamma gene.

References:

1. Minami, Y. *et al.* (1993) *Annu. Rev. Immunol.* **11**:245.
2. Noguchi, M. *et al.* (1993) *Science* **262**:1877.