Mouse Common γ Chain/IL-2 Rγ Antibody
Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF784

DESCRIPTION
Species Reactivity  Mouse
Specificity  Detects mouse Common γ Chain/IL-2 Rγ in direct ELISAs and Western blots. In Western blots, approximately 5% cross-reactivity with recombinant human (rh) IL-2 Rγ is observed and less than 1% cross-reactivity with rhIL-2 Rδ, recombinant mouse IL-2 Rδ, and rhIL-15 R is observed.
Source  Polyclonal Goat IgG
Purification  Antigen Affinity-purified
Immunogen  S. frugiperda insect ovarian cell line SF 21-derived recombinant mouse Common γ Chain/IL-2 Rγ Ser25-Ala263 Accession # Q3UPA9
Endotoxin Level  <0.10 EU per 1 μg of the antibody by the LAL method.
Formulation  Lyophilized from a 0.2 μg/mL filtered solution in PBS with Trehalose. See Certificate of Analysis for details.
*Small pack size (SP) is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

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 μg/mL  Recombinant Mouse Common γ Chain/IL-2 Rγ 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 (ND50) is typically 6-24 μg/mL in the presence of 0.8 ng/mL Recombinant Human IL-15.

DATA
Neutralization

Cell Proliferation Induced by IL-15 and Neutralization by Mouse Common γ Chain/IL-2 Rγ Antibody. Recombinant Human IL-15 (Catalog # 247-IL) stimulates proliferation in the CTLL-2 mouse cytotoxic T cell line in a dose-dependent manner (orange line). Proliferation elicited by Recombinant Human IL-15 (0.6 ng/mL) is neutralized (green line) by increasing concentrations of Goat Anti-Mouse Common γ Chain/IL-2 Rγ Antigen Affinity-purified Polyclonal Antibody (Catalog # AF784). The ND50 is typically 6-24 μg/mL.

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.
- 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 Rγ is also designated the common γ chain (γc) (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: