

DESCRIPTION

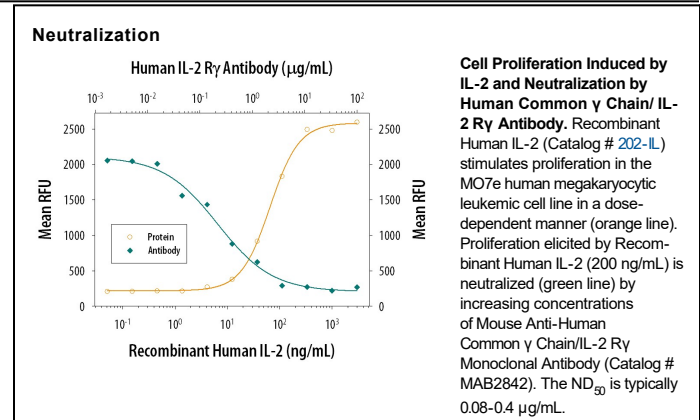
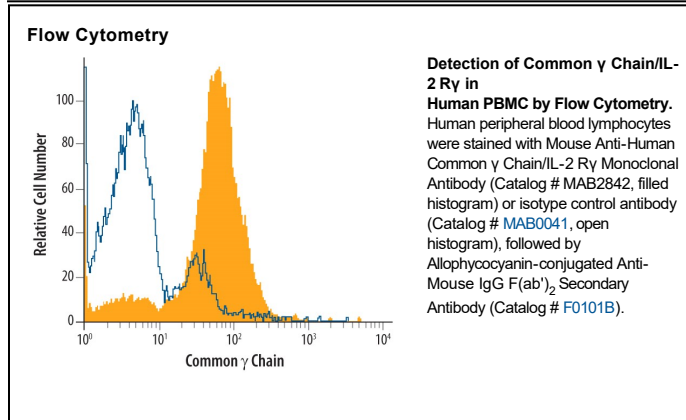
Species Reactivity	Human
Specificity	Detects human Common γ Chain/IL-2 R γ in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human (rh) IL-2 R α , rhIL-2 R β , rhIL-15 R α , recombinant mouse IL-2 R γ , or recombinant canine IL-2 R α is observed. In Western blots, approximately 80% cross-reactivity with recombinant human IL-2 R β , 50% cross-reactivity with rhIL-15 R α and recombinant mouse IL-2 R α , and no cross-reactivity with rhIL-2 R α is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 633162
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf21-derived recombinant human Common γ Chain/IL-2 γ Leu23-Asn254 Accession # P31785
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. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Flow Cytometry	2.5 μ g/10 ⁶ cells	See Below
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-2-induced proliferation in the MO7e human megakaryocytic leukemic cell line. Avanzi, G. <i>et al.</i> (1988) Br. J. Haematol. 69 :359. The Neutralization Dose (ND ₅₀) is typically 0.08-0.4 μ g/mL in the presence of 200 ng/mL Recombinant Human IL-2.	

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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 human IL-2 receptor complex belongs to the hematopoietin receptor family. IL-2 R γ is a 369 amino acid protein consisting of a 22 aa signal sequence, a 232 aa extracellular domain, a 29 aa transmembrane domain and an 86 aa cytoplasmic domain. Although IL-2 R γ 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 has been designated the common γ chain (γ_c). The site of molecular defects in X-linked SCID (severe combined immunodeficiency) has been mapped to the IL-2 R γ gene.

References:

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