

IL-2R γ (H-300): sc-20751

BACKGROUND

The IL-2 receptor is a multicomponent complex consisting of three subunits, α , β and γ , each of which is required for high affinity binding of IL-2. The α chain functions primarily in binding IL-2, whereas the β and γ chains contribute to IL-2 binding and are essential to IL-2-induced activation of signaling pathways leading to T cell growth. Both IL-4R and IL-7R were initially described as single chain high affinity ligand binding cytokine receptors. However, it is now well established that the IL-2R γ chain functions as a second subunit of the high affinity IL-4R and IL-7R receptors. Consequently, the originally described subunits of these latter receptors are now referred to as IL-4R α and IL-7R α respectively, while the common subunit is referred to as γ c. Although the common γ chain enhances ligand binding in these three cytokine receptors, it has no capacity to bind these ligands on its own. There is evidence that the γ c chain is also a subunit of IL-13R.

CHROMOSOMAL LOCATION

Genetic locus: IL2RG (human) mapping to Xq13.1; Il2rg (mouse) mapping to X D.

SOURCE

IL-2R γ (H-300) is a rabbit polyclonal antibody raised against amino acids 70-369 of IL-2R γ of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

IL-2R γ (H-300) is recommended for detection of IL-2R γ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

IL-2R γ (H-300) is also recommended for detection of IL-2R γ in additional species, including canine.

Suitable for use as control antibody for IL-2R γ siRNA (h): sc-35653, IL-2R γ siRNA (m): sc-35656, IL-2R γ shRNA Plasmid (h): sc-35653-SH, IL-2R γ shRNA Plasmid (m): sc-35656-SH, IL-2R γ shRNA (h) Lentiviral Particles: sc-35653-V and IL-2R γ shRNA (m) Lentiviral Particles: sc-35656-V.

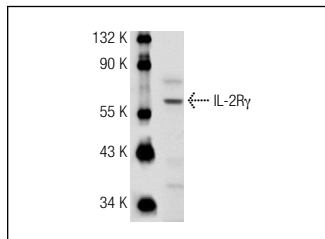
Molecular Weight of IL-2R γ : 55-60 kDa.

Positive Controls: HuT 78 whole cell lysate: sc-2208, Jurkat whole cell lysate: sc-2204 or CTLL-2 cell lysate: sc-2242.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



IL-2R γ (H-300): sc-20751. Western blot analysis of IL-2R γ expression in HuT 78 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Letavernier, E., et al. 2011. Critical role of the calpain/calpastatin balance in acute allograft rejection. *Eur. J. Immunol.* 41: 473-484.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
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Try **IL-2R γ (A-10): sc-271060** or **IL-2R γ (E-7): sc-365910**, our highly recommended monoclonal alternatives to IL-2R γ (H-300).