

## IL-2R (NYRmIL-2R): sc-73315

### BACKGROUND

The IL-2 receptor is a multicomponent complex consisting of three subunits,  $\alpha$ ,  $\beta$  and  $\gamma$ , each of which is required for high-affinity binding of IL-2. The  $\alpha$  chain functions primarily in binding IL-2, whereas the  $\beta$  and  $\gamma$  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 $\gamma$  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 $\alpha$  and IL-7R $\alpha$ , respectively, while the common subunit is referred to as  $\gamma_c$ . Although the common  $\gamma$  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  $\gamma_c$  chain is also a subunit of IL-13R.

### REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: Il2rb (mouse) mapping to 15 E1.

### SOURCE

IL-2R (NYRmIL-2R) is a rat monoclonal antibody raised against Con A-activated T cells of mouse origin.

### PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>1</sub> in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

### APPLICATIONS

IL-2R (NYRmIL-2R) is recommended for detection of IL-2R of mouse origin by flow cytometry (1  $\mu$ g per 1 x 10<sup>6</sup> cells).

### STORAGE

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

### RESEARCH USE

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

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.