

---

**anti- IL-2R beta**

Cat #: HM1187  
Rabbit polyclonal IgG  
0.2 µg/µl, store at 4 °C

For research use only

**BACKGROUND**

The interleukin 2 receptor, which is involved in T cell-mediated immune responses, is present in 3 forms with respect to ability to bind interleukin 2. The low affinity form is a monomer of the alpha subunit and is not involved in signal transduction. The intermediate affinity form consists of an alpha/beta subunit heterodimer, while the high affinity form consists of an alpha/beta/gamma subunit heterotrimer. Both the intermediate and high affinity forms of the receptor are involved in receptor-mediated endocytosis and transduction of mitogenic signals from interleukin 2. The gamma chain is also an important signaling component of other interleukin receptors (IL4, IL7, IL9 and IL15), is thus referred to as the common gamma chain. Mutations in this X-chromosome-linked gene cause X-linked severe combined immunodeficiency (XSCID).

**SPECIFICITY**

This antibody specifically reacts with IL-2R beta of human, mouse and rat origin.

The antibody can be used in Western blotting, immunoprecipitation and immunohistochemistry.

**IMMUNOGEN**

A synthetic peptide derived from N-terminus of human IL-2R beta protein.

**STORAGE**

This antibody is stable for 12 months when stored at 2-8° C.

**REFERENCES**

1. Leonard, W.J., Depper, J.M., Crabtree, G.R., Rudikoff, S., et al. (1984) Molecular cloning and expression of cDNAs for the human interleukin-2 receptor. *Nature* 311, 626-631.
2. Hatakeyama, M., Tsudo, M., Minamoto, S., Kono, T., Doi, T., Miyata, T., Miyasaka, M. and Taniguchi, T. (1989) Interleukin-2 receptor beta chain gene: generation of three receptor forms by cloned human alpha and beta chain cDNA's. *Science* 244, 551-556.
3. Takeshita, T., Asao, H., Ohtani, K., Ishii, N., Kumaki, S., Tanaka, N., Munakata, H., Nakamura, M., and Sugamura, K. 1992. Cloning of the gamma chain of the human IL-2 receptor. *Science* 257: 379-382.
4. Cao, X., Kozak, C.A., Liu, Y.-J., Noguchi, M., O'Connell, E., and Leonard, W.J. 1993. Characterization of cDNAs encoding the murine interleukin 2 receptor (IL-2R) gamma chain: chromosomal mapping and tissue specificity of IL-2R gamma chain expression. *Proc. Natl. Acad. Sci. USA* 90: 8464-8468.
5. Minami, Y., Kono, T., Miyazaki, T., and Taniguchi, T. 1993. The IL-2 receptor complex: its structure, function and target genes. *Ann. Rev. Immunol.* 11: 245-268.

6. Russell, S.M., Keegan, A.D., Harada, N., Nakamura, Y., Noguchi, M., Leland, P., Friedmann, M.C., Miyajima, A., Puri, R.K., Paul, W.E., and Leonard, W.J. 1993. Interleukin-2 receptor gamma chain: a functional component of the interleukin-4 receptor. *Science* 262: 1880-1883.
7. Kondo, M., Takeshita, T., Ishii, N., Nakamura, M., Watanabe, S., Arai, K.-I., and Sugamura, K. 1993. Sharing of the interleukin-2 (IL-2) receptor  $\gamma$  chain between receptors for IL-2 and IL-4. *Science* 262: 1874-1877.
8. He, Y.-W., Adkins, B., Furse, R.K., and Malek, T.R. 1995. Expression and function of the  $\gamma$  c subunit of the IL-2, IL-4, and IL-7 receptors. *J. Immunol.* 154: 1596-1605.

**PRODUCTS FROM HYPROMATRIX, INC.****A. AntibodyArray™s:**

1. Signal Transduction AntibodyArray™  
Catalog Number HM3000
2. Apoptosis AntibodyArray™  
Catalog Number HM4000
3. Cell Cycle AntibodyArray™  
Catalog Number HM5000

**B. Staining AntibodyArray™s**

1. Staining AntibodyArray™ I  
Catalog Number HM8100
2. AntibodyArray Staining Apparatus  
Catalog Number HM8000

**C. Antibodies****1. HRP-conjugated antibodies**

- anti-phosphotyrosine  
Catalog Number HM2040
- anti-phosphoserine  
Catalog Number HM2070
- anti-phosphothreonine  
Catalog Number HM2090

and more...

**2. Primary antibodies**

Hypromatrix offers a variety of high quality antibodies. For a complete list of antibodies and their specificities, please visit our web site at [www.hypromatrix.com](http://www.hypromatrix.com).

**CONTACT**

**Hypromatrix, Inc.**  
100 Barber Avenue  
Worcester, MA 01606  
USA

Tel: 508-856-7900  
Fax: 508-302-0748  
Email: [contact@hypromatrix.com](mailto:contact@hypromatrix.com)  
Web: [www.hypromatrix.com](http://www.hypromatrix.com)