

Polyclonal Anti- IL7 Picoband™ Antibody

Catalog Number: PB9521

Description

Gene Name	interleukin 7
Recommended Protein Name	Interleukin-7
Lot No.	0951512Da382165
Size	100µg/vial
Form	lyophilized
Ig type	Rabbit IgG
Specificity	No cross reactivity with other proteins.
Purification	Immunogen affinity purified.
Species	Reacts with: human
Immunogen	E. coli-derived human IL7 recombinant protein (Position: D26-H177). Human IL7 shares 56.4% and 57% amino acid (aa) sequence identity with mouse and rat IL7, respectively.
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .

Application

	Concentration	Tested Species	Antigen Retrieval
Western blot	0.1-0.5µg/ml	Hu	-
ELISA	0.1-0.5µg/ml	Hu	-

Tested Species: In-house tested species with positive results.

Other applications have not been tested.

Optimal dilutions should be determined by end users.

Preparation and storage

Reconstitution: 0.2ml of distilled water will yield a concentration of 500µg/ml.

Storage: At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time.

Avoid repeated freezing and thawing.

Relevant detection systems

Boster provides a series of assays reacted with primary antibodies. Antibody can be supported by chemiluminescence kit EK1002 in WB.

Background

IL-7, Interleukin 7, is a protein that in humans is encoded by the IL-7 gene. IL-7 a hematopoietic growth factor secreted by stromal cells in the red marrow and thymus. It is also produced by keratinocytes, dendritic cells, hepatocytes, neurons, and epithelial cells but is not produced by lymphocytes. By the combination of approaches, IL-7 is located on 8q12-q13. IL-7 is critical for early T-cell development and homeostasis of naive and memory CD8-positive T cells. It signals through the IL-7 receptor complex, which consists of the IL7R-alpha chain and the common IL2R-gamma chain is critical for early T-cell development and homeostasis of naive and memory CD8 -positive T cells. It signals through the IL-7 receptor complex, which consists of the IL7R-alpha chain and the common IL2R-gamma chain.

Reference

1. O'Connor, A. M., Crawley, A. M., Angel, J. B. Interleukin-7 enhances memory CD8+ T-cell recall responses in health but its activity is impaired in human immunodeficiency virus infection. *Immunology* 131: 525-536, 2010.
2. Sutherland, G. R., Baker, E., Fernandez, K. E. W., Callen, D. F., Goodwin, R. G., Lupton, S., Namen, A. E., Shannon, M. F., Vadas, M. A. The gene for human interleukin 7 (IL7) is at 8q12-13. *Hum. Genet.* 82: 371-372, 1989.
3. Watanabe, M., Ueno, Y., Yajima, T., Iwao, Y., Tsuchiya, M., Ishikawa, H., Aiso, S., Hibi, T., Ishii, H. Interleukin 7 is produced by human intestinal epithelial cells and regulates the proliferation of intestinal mucosal lymphocytes. *J. Clin. Invest.* 95: 2945-2953, 1995.