

# Polyclonal Anti-human IL7 Antibody

Catalog Number: RP1013

## Description

<b>Gene Name</b>	interleukin 7
<b>Recommended Protein Name</b>	Interleukin-7
<b>Lot No.</b>	0101212011321
<b>Size</b>	100µg/vial
<b>Form</b>	lyophilized
<b>Ig type</b>	Rabbit IgG
<b>Specificity</b>	No cross reactivity with other proteins.
<b>Purification</b>	Immunogen affinity purified.
<b>Species</b>	Human
<b>Immunogen</b>	E. coli-derived human IL7 recombinant protein (Position: D26-H177).
<b>Contents</b>	Each vial contains 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg NaN <sub>3</sub> .

## Application

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

*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.