Interleukin-7 Rat E. coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Rat
Other names: IL-7, Lymphopoietin-1, pre-B-cell growth factor

Cat. No.:

RBG30007002	(2 µg)
RBG30007010	(10 µg)
RBG30007100	(100 µg)

Description

IL-7 is a hematopoietic growth factor that primarily affects early B and T cells. Produced by thymic stromal cells, spleen cells and keratinocytes, IL-7 can also co-stimulate the proliferation of mature T cells in combination with other factors, such as ConA and IL-2. Human and murine IL-7 is cross-species reactive. Recombinant Rat IL-7 is a 15.0 kDa protein containing 130 amino acid residues.

Introduction to the Molecule

Interleukin-7 (IL-7) is a pleiotropic cytokine with a variety of activities. IL-7 supports differentiation of cytotoxic T-lymphocytes and promotes the generation of lymphokine-activated killer-cells. IL-7 is further responsible for the upregulation of the production of pro-inflammatory cytokines and the stimulation of the tumoricidal activity of monocytes/macrophages.

Research topic

Cytokines and chemokines and related molecules, Oncology

Amino Acid Sequence

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MDCHIKDKDG KAFGSVLMIS INQLDKMTGT DSDCPNNEPN FFKKHLCDDT KEAAFLNRAA RKLRQFLKMN ISEEFNDHLL
RVSDGTQTLV NCTSKEEKTI KEQKKNDPCF LKRLLREIKT CWNKILKGSI
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Source

E. coli

Purity

98%

Biological Activity

The ED_{50} was determined by the dose-dependent stimulation of the proliferation of murine 2E8 cells is < 2.0 ng/ml, corresponding to a specific activity of > 5×10^6 units/mg.

Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Storage, Stability/Shelf Life

-20°C

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