Interleukin-5 Human E. coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Human
Other names: IL-5, T-cell replacing factor, Eosinophil differentiation factor, B cell differentiation factor I, T cell replacing factor, colony-stimulating factor

Cat. No.:

RBG10005002	(2 µg)
RBG10005010	(10 µg)
RBG10005100	(100 µg)

Description

IL-5 is a hematopoietic growth factor that stimulates the proliferation and activation of eosinophils. Produced by mast cells, T cells, and eosinophils, IL-5 plays an important role in inducing cell-mediated immunity against parasitic infections and certain tumors. Elevated levels of IL-5 lead to Eosinophilia, which may result in the induction of asthma and other allergic diseases. Human and murine IL-5 is cross-species reactive. Recombinant Human IL-5 is a 26.5 kDa disulfide-linked homodimeric protein containing two 116 amino acid chains.

Introduction to the Molecule

IL-5 is produced by lymphocytes as a glycosylated, disulfide-linked homodimer. Inflammation-induced and locally produced IL-5 may act on the bone marrow in a cooperative manner.

Research topic

Animal studies, Cytokines and chemokines and related molecules

Amino Acid Sequence

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MIPTEIPTSA LVKETLALLS THRTLLIANE TLRIPVPVHK NHQLCTEEIF QGIGTLESQT VQGGTVERLF KNLSLIKKYI
DGQKKKCGEE RRRVNQFLDY LQEFLGVMNT EWIIES
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Source

E. coli

Purity

98%

Biological Activity

The ED_{50} as determined by the dose-dependent proliferation of TF-1 cells was ? 0.15 ng/ml, corresponding to a specific activity of ? 6.6×10^{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. This solution can be stored at 2-8°C for up to 1 week. 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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