Interleukin-10 Murine E. coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Murine
Other names: IL-10, Cytokine synthesis inhibitory factor, B cell derived T cell growth factor, Mast cell growth factor III

Cat. No.:

RBG20010002	(2 µg)
RBG20010010	(10 µg)
RBG20010100	(100 µg)

Description

IL-10 is an immunosuppressive cytokine produced by a variety of mammalian cell types including macrophages, monocytes, T cells, B cells and keratinocytes. IL-10 inhibits the expression of proinflammatory cytokines such as IL-1 and TNF-alpha. Like IL-4, IL-10 enhances humoral immune responses and attenuates cell-mediated immune reactions. Human IL-10 is active on murine cells, but murine IL-10 is inactive on human cells. Recombinant Murine IL-10 is an 18.7 kDa protein of 161 amino acid residues.

Introduction to the Molecule

IL-10 is an immunoregulatory protein produced by a number of cell lineages, including TH2 cells, B-cells and activated monocytes. Il-10 is an important factor in understanding autoimmunity and as a target molecule in the development of anti-rejection therapies.

Research topic

Animal studies, Cytokines and chemokines and related molecules

Amino Acid Sequence

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MSRGQYSRED NNCTHFPVGQ SHMLLELRTA FSQVKTFFQT KDQLDNILLT DSLMQDFKGY LGCQALSEMI QFYLVEVMPQ
AEKHGPEIKE HLNSLGQKLK TLRMRLRRCH RFLPCENKSK AVEQVKSDFN KLEDQGVYKA MNEFDIFINC IEAYMMIKMK S
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Source

E. coli

Purity

98%

Biological Activity

PeproTech's Murine IL-10 is fully biologically active as measured by the dose-dependent co-stimulation (with IL-4) of the proliferation of murine MC/9 cells. The ED50 was found to be < 2 ng/ml, corresponding to a specific activity of > 5×10^{5} 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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