

Interleukin-10 Human E. coli

Product Data Sheet

Type: Recombinant	Cat. No.:	
Source: E. coli	RBG10010002	(2 µg)
Species: Human	RBG10010010	(10 µg)
Other names: IL-10, Cytokine synthesis inhibitory factor, B cell derived T cell growth factor, Mast cell growth factor III	RBG10010100	(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 Human IL-10 is an 18.6 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

MSPGQGTQSE NSCTHFPGNL PNMLRDLRDA FSRVKTFFQM KDQLDNLLLK ESLEDFKGY LGCQALSEMI QFYLEEVMPQ
AENQDPDIKA HVNSLGENLK TLRLRLRRCH RFLPCENKSK AVEQVKNAFN KLQEKGIYKA MSEFDIFINY IEAYMTMKIR N

Source

E. coli

Purity

98%

Biological Activity

Determined by the dose-dependent co-stimulation (with human IL-4) of MC/9 cells. The ED₅₀ was found to be ? 2.0 ng/ml, corresponding to a specific activity of ? 5×10⁵ units/mg.

Endotoxin

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

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in 5 mM Sodium Phosphate, pH 7.2 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

HEADQUARTERS: BioVendor Laboratorní medicína, a.s.	Karasek 1767/1	621 00 Brno CZECH REPUBLIC	Phone: +420-549-124-185 Fax: +420-549-211-460	E-mail: info@biovendor.com sales@biovendor.com Web: www.biovendor.com
AUSTRIA: BioVendor GesmbH	Nußdorfer Straße 20/10	1090 Vienna AUSTRIA	Phone: +43-1-89090-25 Fax: +43-1-89090-2515	E-mail: infoAustria@biovendor.com
GERMANY, SWITZERLAND: BioVendor GmbH	Otto-Hahn-Straße 16	34123 Kassel GERMANY	Phone: +49-6221-433-9100 Fax: +49-6221-433-9111	E-mail: infoEU@biovendor.com
USA, CANADA AND MEXICO: BioVendor LLC	128 Bingham Rd. Suite 1300	Asheville, NC 28806 USA	Phone: +1-828-575-9250 +1-800-404-7807 Fax: +1-828-575-9251	E-mail: infoUSA@biovendor.com