Interleukin-11, Pichia, human recombinant (rHuIL-11-Pichia)

Catalog No: 97491
Lot No: XXXXX
Source: *Pichia pastoris*
Synonyms: Interleukin-11, IL-11, Adipogenesis inhibitory factor, AGIF, Oprelvekin, IL11

Background

IL11 is a member of the gp130 family of cytokines. These cytokines drive the assembly of multisubunit receptor complexes, all of which contain at least one molecule of the transmembrane signaling receptor IL6ST (gp130). IL-11 is shown to stimulate the T-cell-dependent development of immunoglobulin-producing B cells. It is also found to support the proliferation of hematopoietic stem cells and megakaryocyte progenitor cells.

Description

Interleukin-11 human recombinant produced in *Pichia pastoris* is a single, non-glycosylated, polypeptide chain containing 177 amino acids (it differs from the 178 amino acid length of the native IL11 only in lack of the N-terminal praline residue) and having a molecular mass of 19 kDa. IL-11 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

IL-11 was lyophilized after extensive dialysis against 20 mM PB, pH 7.0 and 2% glycine buffer.

Solubility

It is recommended to reconstitute the lyophilized Interleukin-11 in sterile 18 MΩ-cm H_2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized IL-11, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL-11 should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.

Purity

Greater than 95.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

Amino Acid Sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Gly-Pro-Pro-Pro-Gly.

Activity

The ED50 as determined by the dose-dependent stimulation of the proliferation of murine 7TD1 was found to be less then 0.2 ng/ml, corresponding to a specific activity of 8,000,000 IU/ mg.

Usage

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