



RayBiotech, Inc.

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Certificate of Analysis and Data Sheet Recombinant Human Interleukin-11 (IL-11)

Catalog No.
228-10859

Source:
Escherichia Coli.

Synonyms:

AGIF, Adipogenesis inhibitory factor, Oprelvekin, IL-11.

Introduction:

IL11 is a member of the gp130 family of cytokines. These cytokines drive the assembly of multi-subunit 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 E.Coli is a single, non-glycosylated polypeptide chain containing 179 amino acids and having a molecular mass of 19256.29 Dalton.
The IL-11 is purified by proprietary chromatographic techniques.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation

The protein was lyophilized from a concentrated (1 mg/ml) solution with no additives.

Solubility

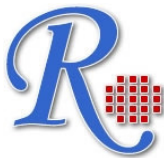
It is recommended to reconstitute the lyophilized Interleukin 11 in sterile 18MΩ-cm H₂O not less than 100μg/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized Interleukin-11 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL11 should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).
Please prevent freeze-thaw cycles.

**The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.**



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Purity:

Greater than 98.0% 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. N-terminal methionine has been completely removed enzymatically.

Biological Activity

The ED50 as determined by the dose-dependent stimulation of the proliferation of murine 7TD1 was found to be < 10 ng/ml, corresponding to a Specific Activity of 100,000 IU/mg.

Protein Content

Protein quantitation was carried out by two independent methods:

1. UV spectroscopy at 280 nm using the absorbency value of 0.95 as the extinction coefficient for a 0.1% (1 mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics).
2. Analysis by RP-HPLC, using a calibrated solution of IL-11 as a Reference Standard.

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