



## Product Datasheet

|                     |  |
|---------------------|--|
| <b>Product Name</b> | Recombinant Human Interleukin-11                         |
| <b>Cata No</b>      | CB500116   |
| <b>Source</b>       | <i>Escherichia Coli</i> .                                |
| <b>Synonyms</b>     | AGIF, Adipogenesis inhibitory factor, Oprelvekin, IL-11. |

### Description

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. 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.

### Biological Activity

The ED50 as determined by the dose-dependant stimulation of the proliferation of murine 7TD1 was found to be < 10ng/ml, corresponding to a Specific Activity of  $1 \times 10^5$  IU/mg.

### Purity

Greater than 98.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

### Formulation

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

### Reconstitution

It is recommended to reconstitute the lyophilized Interferon-11 in sterile 18MΩ-cm H<sub>2</sub>O 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.**

### Sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Gly-Pro-Pro-Gly.N-terminal methionine has been completely removed enzymatically.