

**BACKGROUND**

Interleukin 11 (IL-11) is a pleotropic cytokine closely related to IL-6 in function, but is overall one of the lesser characterized interleukins. In hematopoietic cell populations, IL-11 is thought to induce megakaryocyte differentiation. In non-hematopoietic populations, IL-11 is thought to be able to stimulate hepatic acute-phase proteins. Human IL-11 can stimulate murine cells.

Recombinant human IL-11 is a non-glycosylated protein, containing 179 amino acids and having a molecular mass of 19.3 kDa.

**Alternative Names:**

AGIF (Adipogenesis Inhibitory Factor), oprelvekin

**Amino Acid Sequence:**

MPGPPPGPPR VSPDPRAELD STVLLTRSLL ADTRQLAAQL  
RDKFPADGDH NLDSLPTLAM SAGALGALQL PGVLTRLRAD  
LLSYLRHVQW LRRAGGSSLK TLEPELGTQ ARLDRLLRRL  
QLLMSRLALP QPPDPAPP LAPPSSAWGG IRAAHAILGG  
LHLTLDWAVR GLLLLKTRL

**TECHNICAL INFORMATION**

**Source:** *E.coli*

**Physical Appearance:**

Sterile Filtered white lyophilized (freeze-dried) powder.

**Formulation:**

Recombinant human IL-11 is lyophilized with no additives.

**Stability:**

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

**Reconstitution:**

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

**Protein Content and Purity determined by:**

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

**Endotoxin Level:**

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

**Biological Activity:**

The activity is determined by the dose-dependent proliferation of T11 cells, was found to be less than 2 ng/ml.

*Products are for research use only. They are not intended for human, animal, or diagnostic applications.*

