

Recombinant Human Interleukin-11 (rh IL-11)

Synonyms: AGIF, Adipogenesis Inhibitory Factor, Oprelvekin

Introduction: IL-11 is a member of the Glycoprotein-130 family (gp130) of cytokines. These cytokines drive the assembly of multisubunit receptor complexes which all contain at least one molecule of the transmembrane signaling receptor gp130 (IL-6ST). 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: Recombinant human IL-11 produced in *E.Coli* is a single, non-glycosylated polypeptide chain containing 179 amino acids and having a molecular mass of 19.25 kDa. The rh IL-11 is purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*.

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a 0.22 µm filtered solution in sodium phosphate pH7.5. The aliquotes of 1µg and 2µg contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized rh IL-11 in sterile H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rh IL-11 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rh IL-11 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.

Purity: Greater than 95.0% as determined by SDS-PAGE.

Endotoxicity: The endotoxin level is less than 1 EU / µg determined by LAL method.

Amino acid sequence: GPPPGPPRVS PDPRAELDST VLLTRSLAD TRQLAAQLRD KFPADGDHNL
DSLPTLAMSA GALGALQLPG VLTRLRADLL SYLRHVQWLR RAGGSSKTL EPELGTQLQAR LDRLLRRLQL
LMSRLALPQP PPDPPAPPLA PPSSAWGGIR AAHAILGGLH LTLDWAVRGL LLLKTRL

Biological Activity: The ED₅₀ as determined by the dose-dependant stimulation of the proliferation of murine hybridoma cell line was found to be less than 10 ng/ml, corresponding to a specific activity of ≥ 1x 10⁵ IU/mg

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	2 µg	Cat.N°	11340112
<i>medium</i>	10 µg	Cat.N°	11340113
<i>large</i>	50 µg	Cat.N°	11340115
<i>x-large</i>	250 µg	Cat.N°	11340117
<i>xx-large</i>	1000 µg	Cat.N°	11340118

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