

Recombinant Mouse IL-11 Protein

Product Information

Product Name	Cat#	Size
Recombinant Mouse IL-11 Protein	90150ES10	10 µg
	90150ES60	100 µg
	90150ES76	500 µg

Product Description

IL-11 is a pleiotropic cytokine in the IL-6 family, which also includes LIF, CNTF, Oncostatin M, Cardiotrophin-1, IL-27 and IL-31. IL11 is also known under the names adipogenesis inhibitory factor (AGIF) and oprelvekin. The mouse IL-11 cDNA encodes a 199 amino acid (aa) precursor, which generates a 178 aa, 19 kDa mature unglycosylated protein. It is found in the plasma mainly during inflammation, and is considered to be primarily anti-inflammatory. It stimulates hematopoiesis and thrombopoiesis, regulates macrophage differentiation, and confers mucosal protection in the intestine. It has also been found to enhance T cell polarization toward Th2, promote B cell IgG production, increase osteoclast bone absorption, protect endothelial cells from oxidative stress, and regulate epithelial proliferation and apoptosis. IL-11 synergizes with several other cytokines to produce these effects, and its effects overlap with those of IL-6. IL-11 stimulates the growth of certain lymphocytes and, in the murine model, stimulates an increase in the cortical thickness and strength of long bones. As a signaling molecule, IL-11 has a variety of functions associated with its receptor interleukin 11 receptor alpha; such functions include placentation and to some extent of decidualization.

Product Properties

Synonyms	AGIF
Accession	P47873
GeneID	16156
Source	E.coli-derived Mouse IL-11, Pro22-Leut199, with an N-terminal Met.
Molecular Weight	Approximately 19.1 kDa.
AA Sequence	MPGPPAGSPR VSSDPRADLD SAVLLTRSLD ADTRQLAAQM RDKFPADGDH SLDSLPTLAM SAGTLGSLQL PGVLTRLRVD LMSYLRHVQW LRRAGGPSLK TLEPELGALQ ARLERLLRRL QLMSRLALP QAAPDQPVIP LGPPASAWGS IRAAHAILGG LHLTLDWAVR GLLLLKTRL
Tag	None
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	> 97% by SDS-PAGE and HPLC analyses.
Biological Activity	The ED ₅₀ as determined by a cell proliferation assay using murine T11 cells is less than 2 ng/mL, corresponding to a specific activity of > 5.0 × 10 ⁵ IU/mg. Fully biologically active when compared to standard.
Endotoxin	< 1.0 EU per 1µg of the protein by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS, pH 7.4. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.
Reconstitution	Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.

Shipping and Storage

The products are shipped with ice pack and can be stored at -20 °C for 1 year.

1 month, 2 to 8 °C under sterile conditions after reconstitution.

3 months, -20 °C under sterile conditions after reconstitution.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only.

