

IL-11 recombinant protein

Recombinant Mouse IL-11 Protein

CATALOG # AAA283398	HOST E coli
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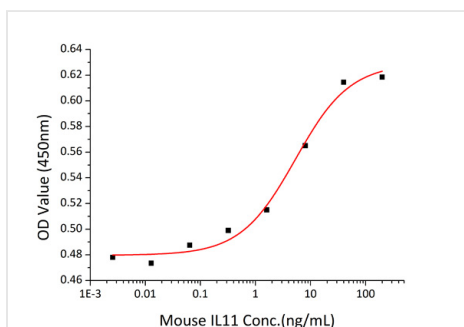
PRODUCT SYNONYMS

IL-11; Recombinant Mouse IL-11 Protein; IL11; IL-11Oprelvekin; interleukin 11; interleukin-11; Oprelvekin; IL-11 recombinant protein

PRODUCT SPECIFICATIONS

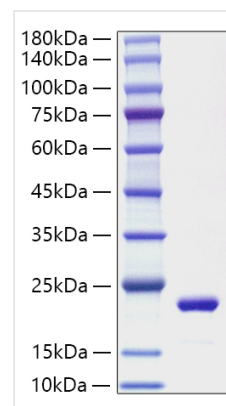
Host	E coli
Form/Format	Lyophilized from a 0.22 um filtered solution of PBS, pH7.4.
Sequence	PGPPAGSPRV SSDPRADLDS AVLLTRSLA DTRQLAAQMR DKFPADGDHS LDSLPTLAMS AGTLGSLQLP GVLTRLRVDL MSYLRHVQWL RRAGGPSLKT LEPELGALQA RLERLLRRLQ LLMSRLALPQ AAPDQPVIPL GPPASAWGSI RAAHAILGGL HLTLDWAVRG LLLLKTRL
Species	Mouse
Tag	No tag
Endotoxin	<1EU/ug
Bio-Activity	Measured in a cell proliferation assay using TF-1 Human erythroleukemic cells. The ED ₅₀ for this effect is 2.64-10.56ng/mL, corresponding to a specific activity of 9.47×10^4 ~ 3.79×10^5 units/mg.
Preparation and Storage	Store at -20 degree C. Store the lyophilized protein at -20 degree C to -80 degree C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20 degree C for 3 months, at 2-8 degree C for up to 1 week.

IMAGES



Application Data

Recombinant Mouse IL-11 promotes the proliferation assay using TF-1 Human erythroleukemic cells. The ED₅₀ for this effect is 2.64-10.56 ng/mL, corresponding to a specific activity of 9.47×10^4 ~ 3.79×10^5 units/mg.



SDS-PAGE

Recombinant Mouse IL-11 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 15-25 kDa.

ADDITIONAL INFORMATION

Related Product Information for IL-11 recombinant protein	IL-11 (Interleukin 11) is a pleiotropic cytokine in the IL-6 family, which also includes LIF, CNTF, Oncostatin M, Cardiotrophin-1, IL-27 and IL-31 (1-4). In humans, IL-11 was also independently discovered as an adipogenesis inhibitory factor (AGIF)(3). The mouse IL-11 cDNA encodes a 199 amino acid (aa) precursor, which generates a 178 aa, 19 kDa mature unglycosylated protein. Mature mouse IL-11 shares 88%, 97%, and 89% aa sequence identity with human, rat and canine IL-11, respectively. IL-11 is secreted by osteoblasts, synoviocytes, fibroblasts, chondrocytes, intestinal myofibroblasts, and trophoblasts, among other cell types (1). It is found in the plasma mainly during inflammation, such as that associated with viral infection, cancer, or inflammatory arthritis, and is considered to be primarily anti-inflammatory (1). It stimulates hematopoiesis and thrombopoiesis, regulates macrophage differentiation, and confers mucosal protection in the intestine (1). 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 (1). IL-11 synergizes with several other cytokines to produce these effects, and its effects overlap with those of IL-6 (1). IL-11 receptor activation requires formation of a complex of two IL-11 molecules with two molecules of the ligand-binding IL-11 R alpha subunit and two molecules of the ubiquitously expressed cell signaling beta subunit, gp130 (5). A soluble form of IL-11 R alpha can bind IL-11 and either form a signaling complex with gp130 on the cell surface, or inhibit cell surface IL-11 R alpha /gp130 signaling (6-8).
Product Categories/Family for IL-11 recombinant protein	Other Recombinant Protein; Proteins

NCBI AND UNIPROT INFORMATION

NCBI GI #	6680393
NCBI GeneID	16156
NCBI Accession #	NP_032376.1
NCBI GenBank Nucleotide #	NM_008350.4
UniProt Accession #	P47873
UniProt Protein Name	Interleukin-11
UniProt Gene Name	IL11
UniProt Synonym Gene Names	IL-11
UniProt Entry Name	IL11_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.