

# Datasheet for ABIN988026

## **IL-11 Protein**



#### Overview

| Quantity:            | 10 μg  |
|----------------------|--|
| Target:              | IL-11 (IL11)   |
| Origin:              | Human  |
| Source:              | Escherichia coli (E. coli)   |
| Biological Activity: | Active   |
| Product Details      |  |
| Sequence:            | PGPPPGPPR VSPDPRAELD STVLLTRSLL ADTRQLAAQL RDKFPADGDH NLDSLPTLAM SAGALGALQL PGVLTRLRAD LLSYLRHVQW LRRAGGSSLK TLEPELGTLQ ARLDRLLRRL QLLMSRLALP QPPPDPPAPP LAPPSSAWGG IRAAHAILGG LHLTLDWAVR GLLLLKTR   |
| Characteristics:     | Fully biologically active when compared to standard. The ED50 as determined by the dose-dependant stimulation of the proliferation of murine B9-11 was found to be less than 1 ng/ml, corresponding to a specific activity of 1 x 107 IU/mg. |
| Purity:              | > 97 % by SDS-PAGE and HPLC analyses.  |
| Endotoxin Level:     | Level Less than 1EU/μg of rHulL-11 as determined by LAL method   |
| Target Details       |  |
| Target:              | IL-11 (IL11)   |
| Alternative Name:    | Interleukin-11 (IL-11) (IL11 Products)   |
| Background:          | Interleukin 11 is a pleiotropic cytokine that was originally detected in the conditioned medium of an IL-1a-stimulated primate bone marrow stromal cell line (PU-34) as a mitogen for the IL-6-  |
|                      |  |

responsive mouse plasmacytoma cell line T1165. IL-11 was also independently discovered as an adipogenesis inhibitory factor (AGIF). The human IL-11 cDNA encodes a 199 amino acid residue precursor polypeptide with a 21 amino acid residue hydrophobic signal that is processed proteolytically to generate the 178 amino acid residue mature protein. IL-11 contains no cysteine residues or potential glycosylation sites.IL-11 has multiple effects on both hematopoietic and nonhematopoietic cells. Many of the biological effects described for IL-11 overlap those for IL-6. In vitro, IL-11 can synergize with IL-3, IL-4 and SCF to shorten the G0 period of early hematopoietic progenitors. IL-11 also enhances the IL-3-dependent megakaryocyte colony formation. IL-11 has been found to stimulate the T cell dependent development of specific immunoglobulin-secreting B cell. Synonym:. Formulation: Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.4.

Molecular Weight:

Approximately 19.1 kDa, a single non-glycosylated polypeptide chain containing 178 amino acids.

Pathways:

JAK-STAT Signaling, Negative Regulation of Hormone Secretion

## **Application Details**

Restrictions:

For Research Use only

## Handling

| Format:         | Lyophilized  |
|-----------------|--|
| Reconstitution: | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the |
|                 | bottom. 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.       |
| Storage:        | 4 °C   |