

## **DATASHEET** Version 20181206

## IL-11, Mouse

Cat. No.: Z02769-1

**Size**: 1.0 mg

Synonyms: Interleukin-11 (IL-11), Mouse;

## **Description:**

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 T11. 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 megakary-ocyte colony formation. IL-11 has been found to stimulate the T cell dependent development of specific immunoglobulin-secreting B cell.

## **Amino Acid Sequence:**

00001 MPGPPAGSPR VSSDPRADLD SAVLLTRSLL ADTRQLAAQM 00041 RDKFPADGDH SLDSLPTLAM SAGTLGSLQL PGVLTRLRVD 00081 LMSYLRHVQW LRRAGGPSLK TLEPELGALQ ARLERLLRRL 00121 QLLMSRLALP QAAPDQPVIP LGPPASAWGS IRAAHAILGG 00161 LHLTLDWAVR GLLLLKTRL Source: E. coli
Species: Mouse

**Biological Activity**: Fully biologically active when compared to standard. 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 >  $5.0 \times 10^5$  IU/mg.

**Molecular Weight**: Approximately 19.1 kDa, a single non-glycosylated polypeptide chain containing 179 amino acids.

**Formulation**: Lyophilized from a 0.2 μm filtered solution in PBS, pH 7.4.

**Appearance**: Sterile Filtered White lyophilized (freeze-dried) powder.

**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  $\leq$  -20 °C. Further dilutions should be made in appropriate buffered solutions.

Purity: > 97 % by SDS-PAGE and HPLC analyses.

**Endotoxin Level**: Less than 1 EU/ $\mu$ g of rMuIL-11 as determined by LAL method.

**Storage**: This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. Avoid repeated freeze/thaw cycles.