

Recombinant Murine Interleukin-11

#R00225

Size: 10 µg/100 µg/500 µg

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

Interleukin-11 (IL-11) is encoded by the IL11 gene. IL-11 is a multifunctional cytokine first isolated from bone marrow-derived stromal cells. IL-11 receptor activation requires formation of a complex of two IL-11 molecules with two molecules of the ligand-binding IL-11 R α subunit and two molecules of the expressed cell signaling β subunit, gp130. IL-11 is a member of the IL-6 superfamily, distinguished based on their use of the common co-receptor gp130. IL-11 can directly stimulate the proliferation of hematopoietic stem cells and megakaryocyte progenitor cells, and induce megakaryocyte maturation resulting in increased platelet production. Mature murine IL-11 shares 88 % amino acid sequence identity with human IL-11.

AA Sequence

MPGPPAGSPRVSSDPRADLDSAVLLTRSLADTRQLA
AQMRDKFPADGDHSLDSLPTLAMSAGTLGSLQLPGV

LTRLRVDLMSYLRHVQWLRRAGGPSLKTLEPELGAL
QARLERLLRRLQLLMSRLALPQAAPDQPVIPLGPPAS
AWGSIRAAHAILGGLHLTLDWAVRGLLLLLKTRL

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.

Product Specification

Accession	P47873
GeneID	16156
Species	Murine
Source	Escherichia coli.
Molecular Weight	Approximately 19.1 kDa, a single non-glycosylated polypeptide chain containing 179 amino acids.
Purity	> 97 % by SDS-PAGE and HPLC analyses.
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 × 10 ⁵ IU/mg.
Physical	Sterile Filtered White Lyophilized

Appearance	(freeze-dried) powder.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS, pH 7.4.
Endotoxin	Less than 1 EU/μg of rMuL-11 as determined by LAL method.