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Product Data Sheet

Cat # SB-006-10	Recombinant Human Interleukin-11 (IL11)	Size: 10 ug
Cat # SB-006-50	Recombinant Human Interleukin-11 (IL11)	Size: 50 ug

Background:

IL-11 is a thrombopoietic growth factor that directly stimulates the proliferation of hematopoietic stem cells and megakaryocyte progenitor cells and induces megakaryocyte maturation resulting in increased platelet production. IL-11 is a member of a family of human growth factors which includes human growth hormone, granulocyte colony-stimulating factor and other growth factors.

Description:

The protein is produced in *P. Pichia* by recombinant DNA technology. The protein has a molecular mass of approximately 19,000 Daltons and is non-glycosylated. The protein is 177 amino acids in length and differs from the 178 amino acid length of native IL-11 only in lacking the amino-terminal proline residue.

Quality Control:

Biological activity: The ED50 as determined by the dose-dependant stimulation of the proliferation of murine 7TD1 was found to be less than 0.2ng/ml, corresponding to a Specific Activity of 8.0×10^6 IU/ mg.

Purity: Greater than 95% as determined by

(a) Analysis by SEC-HPLC.

(b) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel.

Molecular weight: 19.2KD \pm 10% determined by reduced SDS-PAGE.

Isoelectric Point: More than 11

UV scan: the maximal absorption wave is 278 \pm 3nm.

Amino-Acid Sequence: The sequence of the first fifteen N-terminal amino acids was determined and was found to be Gly-Pro-Pro-Gly-Pro-Pro-Arg-Val-Ser-Pro-Asp-Pro- Arg-Ala.

Residual DNA: less than 2ng/mg analysis by solid phase blot.

Residual host cell protein: less than 0.1% analysis by ELISA.

Endotoxin: Less than 2ng/mg (2IEU/mg) determined by LAL test.

Formulation: The protein was lyophilized from a concentrated (1mg/ml) solution with no additives.

Storage: Lyophilized rHuIL-11 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rHuIL-11 should be stored at 4°C between 2-7 days and for future use below -18°C. For long-term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please avoid freeze-thaw cycles.

Reconstitution: It is recommended to reconstitute the lyophilized rHuIL-11 in sterile 18M Ω -cm H₂O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions

Usage:

This item is for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals. If supplied in powder then reconstitute it in 100 ul water for 1 mg/ml stock and store in liquid at 4°C for ~1 week or aliquots in suitable size and store at -20°C for long term storage.