

Interleukin-16, human recombinant (rHulL-16)

Catalog No: 97081 Lot No: XXXXX Source: E. coli

Synonyms: IL16, Interleukin-16, LCF, Lymphocyte Chemoattractant Factor, prlL-16, IL-16, FLJ16806, FLJ42735,

FLJ44234, HsT19289

Background

IL-16 is a pleiotropic cytokine that functions as a chemoattractant, a modulator of T cell activation, and an inhibitor of HIV replication. The signaling process of IL-16 is mediated by CD4. The product of this gene undergoes proteolytic processing, which is found to yield two functional proteins. IL-16 functions exclusively attributed to the secreted C-terminal peptide, while the N-terminal product may play a role in cell cycle control. Caspase 3 is reported to be involved in the proteolytic processing of this protein. Two transcript variants encoding different isoforms have been found for this gene. IL-16 stimulates a migratory response in cd4+ lymphocytes, monocytes, and eosinophils. Also induces t-lymphocyte expression of interleukin 2 receptor, ligand for cd4.

Description

Interleukin-16 human recombinant produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 130 amino acids and having a molecular mass of 13.5 kDa. IL-16 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

IL-16 was lyophilized at 1 mg/ml in 10 mM NaP, pH 7.5.

Solubility

It is recommended to reconstitute the lyophilized Interleukin-16 in sterile 18 M Ω -cm H $_2$ O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized Interleukin-16, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL16 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 prevent freeze-thaw cycles.

Purity

Greater than 90.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis SDS-PAGE.

Amino Acid Sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Pro-Asp-Leu-Asn.

Activity

The ED50 as determined by its ability to chemoattract human CD4+ T lymphocytes using a concentration range of 10 - 100 ng/ml, corresponding to a specific activity of 10,000 - 100,000 units/mg.





Usage

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