

IL-16

Catalog # PVGS1018

Specification

IL-16 - Product Information

Primary Accession **Species** Human Q14005

Sequence

Met1203-Ser1332

Purity

> 95% as analyzed by SDS-PAGE

Endotoxin Level

< 1 EU/ µg of protein by LAL method

Expression System

E. coli

Formulation

Lyophilized from a 0.2 µm filtered solution in 20 mM PB, 150 mM NaCl, pH 7.0.

Reconstitution

It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in distilled water up to 100 µg/ml.

Storage & Stability

Upon receiving, this product remains stable for up to 6 months at -70 $^{\circ}$ C or -20 $^{\circ}$ C. Upon reconstitution, the product should be stable for up to 1 week at 4 $^{\circ}$ C or up to 3 months at -20 $^{\circ}$ C. Avoid repeated freeze-thaw cycles.

IL-16 - Additional Information

Gene ID 3603

Other Names

Pro-interleukin-16, Interleukin-16, IL-16, Lymphocyte chemoattractant factor, LCF, IL16

Target Background

IL-16 is a CD8⁺ T cell-derived cytokine that induces chemotaxis of CD4⁺ T cells and CD4⁺ monocytes and eosinophils. Analysis by gel filtration suggests that, under physiological conditions, human IL-16 exists predominantly as a noncovalently linked multimer, but that some IL-16 may exist as a monomer. However, only the multimeric form appears to possess chemotactic activity, suggesting that receptor cross-linking may be required for activity. IL-16 also induces expression of IL-2 receptor (IL-2R) and MHC class II molecules on CD4⁺ T cells. Human and murine IL-16 show significant cross-species reactivity.



IL-16 - Protein Information

Name IL16

Function

Interleukin-16 stimulates a migratory response in CD4+ lymphocytes, monocytes, and eosinophils. Primes CD4+ T-cells for IL-2 and IL-15 responsiveness. Also induces T-lymphocyte expression of interleukin 2 receptor. Ligand for CD4. Isoform 3 is involved in cell cycle progression in T-cells. Appears to be involved in transcriptional regulation of SKP2 and is probably part of a transcriptional repression complex on the core promoter of the SKP2 gene. May act as a scaffold for GABPB1 (the DNA- binding subunit the GABP transcription factor complex) and HDAC3 thus maintaining transcriptional repression and blocking cell cycle progression in resting T-cells.

Cellular Location

[Interleukin-16]: Secreted. [Isoform 3]: Cytoplasm. Nucleus.

Tissue Location

[Isoform 3]: Expressed in hemopoietic tissues, such as resting T-cells, but undetectable during active T-cell proliferation

IL-16 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IL-16 - Images