

Recombinant Human Interleukin-16 (rh IL-16)

Synonyms: LCF, Lymphocyte Chemoattractant Factor, prIL-16

Introduction: IL-16 is a pleiotropic cytokine that functions as chemoattractant, is 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 IL-16. Two transcript variants encoding different isoforms have been found for this gene.

IL-16 stimulates a migratory response in CD4+ lymphocytes, monocytes and eosinophils and induces also T-lymphocyte expression of IL-2 receptor.

Description: Recombinant Interleukin-16 produced in E.Coli is a single, non-glycosylated polypeptide chain containing 130 amino acids and having a molecular mass of 13.5 kDa. The IL-16 is purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*.

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

Formulation: 0.22 µm filtered solution in 25 mM Sodiumphosphate, 200 mM NaCl, pH 7.8, The aliquots of 1µg and 2µg contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized rh IL-16 in sterile H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rh IL-16 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C . Upon reconstitution rh IL-16 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 95.0% as determined by SDS-PAGE /silver stain.

Endotoxicity: The endotoxin level is less than 0.1 ng per µg (1EU/µg) determined by LAL method

Amino acid sequence: MPDLNSSTDS AASASAASDV SVESTAEATV CTVTLEKMSA GLGFSLEGGK
GSLHGDKPLT INRIFKGAAS EQSETVQPGD EILQLGGTAM QGLTRFEAWN IIKALPDGPV TIVIRRKSLQ
SKETTAAGDS

Biological Activity: The rh IL-16 is fully biologically active when compared to reference material (measured by its ability to modulate T-lymphocyte chemotaxis within a concentration range of 10 – 100 ng/ml).

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	2 µg	Cat.N°	11340162
<i>medium</i>	10 µg	Cat.N°	11340163
<i>large</i>	50 µg	Cat.N°	11340165

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