

# Recombinant Human Interleukin-16

Cat. No. IL16-25H Lot. No. (See product label)

## SPECIFICATION

<b>Product Overview</b>	Recombinant Human IL-16 produced in E. coli is a single, non-glycosylated polypeptide chain containing 130 amino acids and having a molecular mass of 13.4 kDa
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>Description</b>	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.
<b>Purity</b>	>97% as determined by RP-HPLC, FPLC and SDS-PAGE.
<b>Formulation</b>	rHuIL-16 was lyophilized from 1mg/ml solution after extensive dialysis against 20 mM acetic buffer, pH 5.0, 150 mM NaCl and 0.5 mM DTT.
<b>Specific Activity</b>	rHuIL-16 is fully biologically active when compared to standard. The ED50 as determined by its ability to chemoattract human CD4+ T lymphocytes using a concentration range of 10.0-100.0 ng/ml, corresponding to a Specific Activity greater

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

	than 1.0 x 10 <sup>4</sup> IU/mg.
<b>Endotoxin</b>	Less than 0.1ng/g (1 IEU/g) determined by LAL test.
<b>Reconstitution</b>	It is recommended to reconstitute the lyophilized rHuIL-16 in sterile 18MΩ-cm H <sub>2</sub> O not less than 100g/ml, which can then be further diluted to other aqueous solutions.
<b>Storage</b>	Lyophilized rHuIL-16 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rHuIL-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). Aliquot to avoid repeated freeze-thaw cycles.

## GENE INFORMATION

<b>Gene Name</b>	IL16
<b>Synonyms</b>	FLJ16806; FLJ42735; FLJ44234; LCF; prIL-16; IL16; Interleukin-16; Lymphocyte Chemoattractant Factor; prIL-16; IL-16; HsT19289 ; interleukin-16 precursor; interleukin 16 (lymphocyte chemoattractant factor)
<b>Gene ID</b>	3603
<b>mRNA Refseq</b>	NM_004513
<b>Protein Refseq</b>	NP_004504
<b>MIM</b>	603035
<b>UniProt ID</b>	Q14005

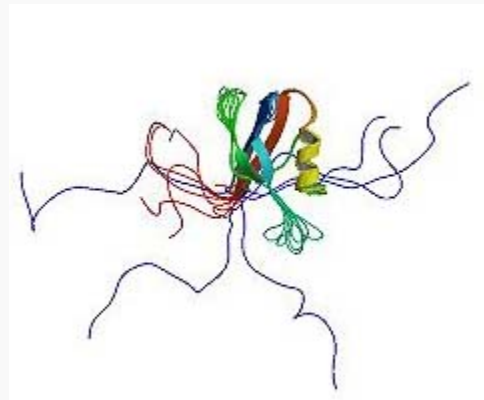
 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Chromosome Location</b>	15q26.3
<b>Pathway</b>	immune response; induction of positive chemitaxis; leukocyte chemitaxis
<b>Function</b>	cytokine activity; protein binding

PDBrendering based on 1i16.



 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA