

Recombinant Human Interleukin-16

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

SPECIFICATION

Product Overview	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
Species	Human
Source	E.coli
Description	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.
Purity	>97% as determined by RP-HPLC, FPLC and SDS-PAGE.
Formulation	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.
Specific Activity	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  Fax: 1-631-938-8127

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

	than 1.0 x 10 ⁴ IU/mg.
Endotoxin	Less than 0.1ng/g (1 IEU/g) determined by LAL test.
Reconstitution	It is recommended to reconstitute the lyophilized rHuIL-16 in sterile 18MΩ-cm H ₂ O not less than 100g/ml, which can then be further diluted to other aqueous solutions.
Storage	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

Gene Name	IL16
Synonyms	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)
Gene ID	3603
mRNA Refseq	NM_004513
Protein Refseq	NP_004504
MIM	603035
UniProt ID	Q14005

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

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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

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

PDBrendering based on 1i16.

