

Recombinant Human Interleukin-16, 130 aa (Human IL-16,130aa)

Product Information

Product Name	Cat#	Size
	90114ES10	10 µg
Recombinant Human Interleukin-16, 130 aa (Human IL-16,130aa)	90114ES60	100 µg
	90114ES76	500 µg

Product Description

Interleukin 16, also named lymphocyte chemoattractant factor (LCF), was originally identified as a CD8⁺ T-cell-derived chemoattractant for CD4⁺ cells. The biologically active form of IL-16 was originally proposed to be a homotetramer of 14 kDa chains containing 130 amino acid residue subunits. The complete pro-IL-16 cDNA was subsequently cloned and shown to encode a 631 amino acid residue hydrophilic protein that lacked a signal peptide. The original 130 amino acid residue polypeptide is now believed to have been derived from the C terminus of the precursor. IL-16 precursor protein has been detected in the lysates of various cells including mitogen stimulated PBMCs. The biologically active and secreted natural IL-16 is assumed to be a proteolytic cleavage product of pro-IL-16 generated by proteases present in or on activated CD8⁺ cells. A likely cleavage site was proposed to be at aspartate residue 510. This would yield a 121 amino acid residue protein, smaller than the 130 aa residue protein first described. The expression of IL-16 precursor mRNA has been detected in various tissues including spleen, thymus, lymph nodes, peripheral leukocytes, bone marrow and cerebellum. The gene for IL-16 precursor has been localized to chromosome 15.

Product Properties

Synonyms	Interleukin-16 isoform 2, Lymphocyte chemoattractant factor, LCF
Accession	Q14005
GeneID	3603
Source	E.coli-derived human IL-16 protein, Met1203-Ser1332, with an N-terminal Met.
Molecular Weight	Approximately 13.4 kDa.
AA Sequence	MPDLNSSTDS AASASAASDV SVESTAEATV CTVTLEKMSA GLGFSLEGGK GSLHGDKPLT INRIFKGAAS EQSETVQPGD EILQLGGTAM QGLTRFEAWN IIKALPDGPV TIVIRKSLQ SKETTAAGDS
Tag	None
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	> 95% by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using human CD4 ⁺ T Lymphocytes is in a concentration range of 1.0-100 ng/ml.
Endotoxin	< 1.0 EU per 1µg of the protein by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM Tris, 150 mM NaCl, pH 7.0.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at $\leq -20^{\circ}\text{C}$. Further dilutions should be made in appropriate buffered solutions.

Shipping and Storage

The products are shipped with ice pack and can be stored at -20°C to -80°C for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only.