

Human IL16 / Interleukin-16 Protein (His Tag)



Sino Biological Inc.

Biological Solution Specialist

Catalog Number: 10944-H07E

General Information

Gene Name Synonym:

FLJ16806, FLJ42735, FLJ44234, LCF, NIL16, PRIL16, prIL-16

Protein Construction:

A DNA sequence encoding the mature form of human IL16 (AAC12732.1) (Pro 2-Ser 130) was expressed, with a polyhistidine tag at the N-terminus.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 96 % as determined by SDS-PAGE

Bio-Activity

Measured by its ability to bind recombinant human CD4-Fc in a functional ELISA.

Endotoxin:

Please contact us for more information.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Met

Molecular Mass:

The recombinant human IL16 consisting of 145 amino acids and has a calculated molecular mass of 15.3 kDa. It migrates as a 24 kDa band in SDS-PAGE under reducing conditions as predicted.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

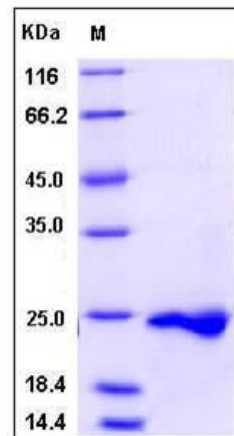
Usage Guide

Storage:

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

Interleukin-16, also known as Lymphocyte chemoattractant factor, LCF and IL16, is a secreted, cytoplasm and nucleus protein which contains 4PDZ (DHR) domains. Interleukin-16 / IL16 was originally described as a factor that could attract activated T cells in humans, it was previously called lymphocyte chemoattractant factor (LCF). Since then, this interleukin has been shown to recruit and activate many other cells expressing the CD4 molecule, including monocytes, eosinophils, and dendritic cells. The structure of Interleukin-16 / IL16 was determined following its cloning in 1994. Interleukin-16 / IL16 is produced as a precursor peptide (pro-IL-16) that requires processing by an enzyme called caspase-3 to become active. CD4 is the cell signaling receptor for mature IL-16. Interleukin-16 / IL16 is a pleiotropic cytokine that functions as a chemoattractant, a modulator of T cell activation, and an inhibitor of HIV replication. Interleukin-16 / IL16 is a cytokine that released by a variety of cells (including lymphocytes and some epithelial cells) that has been characterized as a chemoattractant for certain immune cells expressing the cell surface molecule CD4. The signaling process of Interleukin-16 / IL16 is mediated by CD4. It undergoes proteolytic processing, which is found to yield two functional proteins. Interleukin-16 / IL16 function is exclusively attributed to the secreted C-terminal peptide, while the N-terminal product may play a role in cell cycle control. Two alternatively spliced transcript variants encoding distinct isoforms have been reported

References

1. Baier M, et al.,1997, Proc Natl Acad Sci USA94 (10): 5273-7.
2. Cruikshank WW, et al.,2000, J. Leukoc. Biol.67 (6): 757-66.
3. Tsai,I.S. et al., 2005,Cytokine. 31 (1):34-40.
4. Comperat,E. et al., 2010,Prostate. 70 (15):1622-7.

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