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Datasheet for 009-001-V55-0010

rHuman IL-16 Protein

Overview

Description:	Human Interleukin-16 Recombinant Protein - 009-001-V55-0010
Item No.:	009-001-V55-0010
Size:	10 µg
Applications:	SDS-PAGE, Cellular Assay
Origin:	Human
Expressed in:	E. coli

Product Details

Background:	Interleukin 16 (IL-16) is produced primarily by CD4+ and CD8+ T cells and acts as a chemo-attractant for lymphocytes, monocytes, eosinophils, dendritic cells and Langerhans cells. Additionally, IL-16 has been reported to upregulate IL-2 receptor (CD25), induce progression of cells to the G1 phase and suppress HIV & SIV replication. Recombinant human IL-16 is a non-glycosylated protein, containing130 amino acids, with a molecular weight of 13.5 kDa.
Synonyms:	Lymphocyte Chemoattractant Factor (LCF)
Species of Origin:	Human
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	IL16
Purity/Specificity:	Interleukin-16 purity was determined to be greater than 95% as determined by analysis by UV-Spectroscopy at 280nm and by reducing and non-reducing SDS-pAGE.
Relevant Links:	• UniProtKB - Q14005-1

Application Details

Tested Applications:	SDS-PAGE
Suggested Applications:	Cellular Assay (Based on references)
Application Note:	Interleukin-16 Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti-Interleukin-16 in immunological assays.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Endotoxin Level: Measured by kinetic LAL analysis and is typically ≤ 1 EU/µg protein. Biologic Activity: The activity is determined by its ability to chemoattract human T lymphocytes using a concentration range of 10-100 ng/mL.

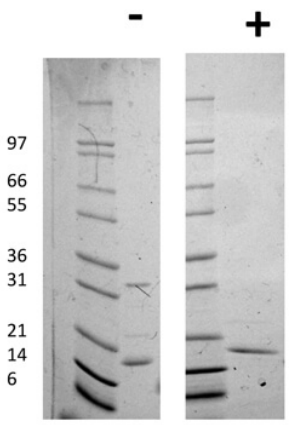
Formulation

Physical State:	Lyophilized
Buffer:	0.01 M Sodium Phosphate, pH 7.5
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	10µl (10-100µl)
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

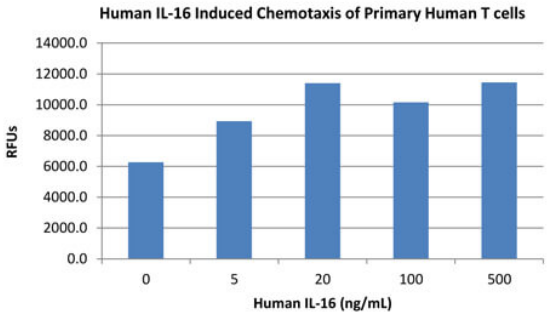
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.
Expiration:	Expiration date is six (6) months from date of receipt.

Images



SDS-PAGE

SDS-PAGE of Human Interleukin-16 Recombinant Protein. Lane 1: Molecular weight marker. Lane 2: 1 µg Human IL-16 in non-reducing conditions (-). Lane 3: Molecular weight marker. Lane 4: 1 µg Human IL-16 in reducing conditions (+). Human IL-16 has a predicted MW of 12.5 kDa.



SDS-PAGE

Bioactivity of Human Interleukin-16 Recombinant Protein. Human T cells were allowed to migrate to Human IL-16 at (0, 5, 20, 100 and 500 ng/mL). After 4 hours, cells that migrated were counted using a luminescent substrate and displayed on the bar graph above. A significant increase in migration over basal levels was seen in response to Human IL-16 starting at 5 ng/mL.

Disclaimer

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