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Product Information

I-309, HUMAN

Recombinant
Expressed in *E. coli*

Product Number **I-152**

Product Description

I-309, human was expressed in *E. coli* using a DNA sequence encoding mature I-309 protein.¹

I-309, human is provided lyophilized from a sterile-filtered solution in 30% CH₃CN, 0.1% TFA, containing 50 of bovine serum albumin per 1 µg of cytokine.

A member of the β (CC) chemokine family of inflammatory and immunoregulatory cytokines, I-309 was initially identified by subtractive hybridization as a transcript that was present in a γ/dt cell line, but not in EBV-transformed B cells. Assumed to be a homologue of the mouse TCA3. The two proteins share only approximately 42% amino acid sequence identity, but both contain an extra pair of cysteine residues not found in most other chemokines. I-309 cDNA encodes a 96 amino acid residue precursor protein with a hydrophobic signal peptide that is cleaved to yield a 73 amino acid residue mature protein. The sequence of I-309 contains one potential N-linked glycosylation site and natural I-309 secreted by activated T cells is a glycoprotein doublet of 15-16 kDa.

Components

Lyophilized from a sterile-filtered solution in 30% CH₃CN, 0.1% TFA, containing 50 µg of bovine serum albumin per 1 µg of cytokine.

Preparation Instructions

It is recommended that sterile PBS containing at least 0.1% human serum albumin or bovine serum albumin be added to the vial to prepare a stock solution of no less than 10 µg/ml.

Storage/Stability

Store tightly sealed at -20°C. After reconstitution and for continuous use, store at 2 - 8°C for up to one month. For extended storage, solution may be frozen in working aliquots. Storage in "frost-free" freezers is not recommended. Repeated freezing and thawing is not recommended.

Product Profile

Measured by its ability to induce elevation of intracellular free calcium in B10 TIL cell line. The ED₅₀ for this effect is typically 30 - 60 ng/ml.

References

1. Miller, M., et al. "A novel polypeptide secreted by activated human T lymphocytes." *J. Immunol.* **143**, 2907-2916 (1989).
2. Miller, M. and Krangel, M. "The human cytokine I-309 is a monocyte chemoattractant." *Proc. Natl. Acad. Sci. USA* **89**, 2950-2954 (1992).
3. Miller, M., et al. "Sequence and chromosomal location of the I-309 gene." *J. Immunol.* **145**, 2737-2744 (1990).

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