



Product Information

Interferon- γ -Inducible Protein-10

human, recombinant, expressed in *Escherichia coli*

Product Number **I 3400**

Storage Temperature $-20\text{ }^{\circ}\text{C}$

Product Description

Interferon- γ -Inducible Protein-10 (IP-10) is a CXC or α -chemokine. A primary characteristic of this subfamily is the conserved cysteine residues of the mature protein that have one amino acid residue separating the first two conserved cysteine residues. Additionally, IP-10 does not have the characteristic ELR (glutamic acid-leucine-arginine) amino acid sequence immediately preceding the first cysteine residue near the amino terminus.¹

IP-10 functions primarily as a chemoattractant and activator of monocytes and T-lymphocytes^{1,2}, mitogen and chemoattractant of vascular smooth muscle cells,³ and promoter of lymphocyte adhesion to activated endothelial cells.⁴ It can be readily detected on cells participating in delayed-type hypersensitivity reactions and leprosy lesions.⁵ Overall, the implication is this inducible protein participates in directional cell migration in inflammatory disease states and vascular remodeling.

The methionyl form of recombinant IP10 contains 78 amino acid residues and has a predicted molecular mass of approximately 8.7 kDa.

Lyophilized from a 0.2 μm filtered solution in PBS with 5% trehalose containing 50 μg BSA per 1 μg of cytokine.

Purity: $\geq 97\%$ (SDS-PAGE)

Endotoxin: ≤ 0.1 ng/ μg cytokine

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at $-20\text{ }^{\circ}\text{C}$ prior to reconstitution. After reconstitution, the product can be stored under sterile conditions at $2-8\text{ }^{\circ}\text{C}$ for up to one month. For extended use, freeze reconstituted product in working aliquots. Repeated freezing and thawing is not recommended. Do not store in a frost-free freezer.

Reconstitution

The lyophilized powder can be reconstituted in sterile PBS containing a minimum of 0.1% HSA or BSA. A stock solution should be prepared at a minimal concentration of 20 $\mu\text{g}/\text{ml}$.

Product Profile

The biological activity is measured by:

- its ability to chemoattract T-lymphocytes cultured in the presence of IL-2 for 21 days, with $\text{ED}_{50} = 0.02-0.06\text{ }\mu\text{g}/\text{mL}$, or
- its ability to chemoattract mouse BaF/3 cells transfected with hCXCR3, with $\text{ED}_{50} = 0.015-0.075\text{ }\mu\text{g}/\text{mL}$

References

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