

BACKGROUND

The chemokine IP-10 (or CXCL10) is a chemokine made by monocytes, endothelial cells and fibroblasts in response to treatment with IFN γ . IP-10 functions as a chemoattractant cells expressing the G protein-coupled receptor, CXCR3, which is found mainly on activated T cells and NK cells. IP-10 plays an important role in Th1 type inflammatory diseases and autoimmune diseases such as, Hashimoto's thyroiditis, Graves' disease and Type 1 diabetes mellitus.

Recombinant human IP-10 is a non-glycosylated protein, containing 77 amino acids and having a molecular mass of 8.5 kDa.

Alternative Names:

CXCL10, crg-2

Amino Acid Sequence:

VPLSRTVRCT CISISNQPVN PRSLEKLEII PASQFCPRVE
IIATMKKKGE KRCLNPESKA IKNLLKAVSK EMSKRSP

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

Recombinant human IP-10 is lyophilized with no additives.

Stability:

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:

The biological activity is calculated by its ability to chemoattract human T lymphocytes at 5 – 40 ng/mL.

Products are for research use only. They are not intended for human, animal, or diagnostic applications.

