

Recombinant Human Interferon gamma induced Protein (rh IP-10 / CXCL10)

Synonyms: Small inducible cytokine B10, 10 kDa interferon-gamma-induced protein, Gamma-IP10, chemokine (C-X-C motif) ligand 10, C7, IFI10, INP10, crg-2, mob-1, SCYB10, gIP-10.

Introduction: IP-10 is a small cytokine belonging to the CXC chemokine family. IP-10 is secreted by several cell types in response to IFN- γ . These cell types include monocytes, endothelial cells and fibroblasts. IP-10 has been attributed to several roles, such as chemoattraction for monocytes and T cells, promotion of T cell adhesion to endothelial cells, anti tumor activity and inhibition of bone marrow colony formation and angiogenesis. The gene for IP-10 is located on human chromosome 4 in a cluster among several other CXC chemokines. IP-10 elicits its effects by binding to the cell surface chemokine receptor CXCR3. The three-dimensional crystal structure of this chemokine has been determined under 3 different conditions to a resolution of up to 1.92Å.

Description: Recombinant human IP-10 produced in *E.Coli* is a single, non-glycosylated polypeptide chain containing 77 amino acids and having a molecular mass of 8.5 kDa. rh IP-10 is purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*.

Physical Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a 0.22 μ m filtered solution in 50 mM sodium phosphate, 50 mM NaCl, pH 7.7. The aliquots/samples of 1 μ g contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized rh IP-10 in sterile H₂O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rh IP-10 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rh IP-10 should be stored at 4° C between 2-7 days and for future use below -18° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity: Greater than 95.0% as determined by SDS-PAGE.

Amino acid sequence: VPLSRTVRCT CISISNQPVN PRSLEKLEII PASQFCPRVE IIATMKKKGE
KRCLNPESKA IKNLLKAVSK EMSKRSP

Endotoxicity: The endotoxin level is less than 1 EU / μ g determined by LAL method

Biological Activity: Determined by its ability to chemoattract human T-lymphocytes in a concentration range of 10 – 100 ng/ml the ED₅₀ range is 5.0 - 20 ng/ml.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	5 μ g	Cat.N°	11343880
<i>medium</i>	25 μ g	Cat.N°	11343884
<i>large</i>	100 μ g	Cat.N°	11343886
<i>x-large</i>	500 μ g	Cat.N°	11343887

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