

Recombinant Human Interferon-inducible T-cell alpha chemoattractant (rh I-TAC / CXCL11)

Synonyms: Small inducible cytokine B11, SCYB11, Interferon-gamma-inducible protein 9, IP-9, H174, Beta-R1, chemokine (C-X-C motif) ligand 11, SCYB9B

Introduction: I-TAC is a small cytokine belonging to the CXC chemokine family. It is highly expressed in peripheral blood leukocytes, pancreas and liver, with moderate levels in thymus, spleen and lung and low expression levels were in small intestine, placenta and prostate. Gene expression of I-TAC is strongly induced by IFN- γ and IFN- β , and weakly induced by IFN- α . This chemokine elicits its effects on its target cells by interacting with the cell surface chemokine receptor CXCR3, with a higher affinity than do the other ligands for this receptor, MIG and IP-10. I-TAC is chemotactic for activated T cells. Its gene is located on human chromosome 4 along with many other members of the CXC chemokine family.

Description: rh I-TAC produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 73 amino acids and having a molecular mass of 8.3 kDa. The I-TAC is purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*.

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a concentrated (1mg/ml) solution in water containing no additives. The aliquots/samples of 1 μ g contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized I-TAC in sterile 18M Ω -cm H₂O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rh I-TAC, although stable at room temperature for 3 weeks, should be stored desiccated below -18 $^{\circ}$ C. Upon reconstitution rh I-TAC should be stored at 4 $^{\circ}$ C between 2-7 days and for future use below -18 $^{\circ}$ 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 RP-HPLC and by SDS-PAGE.

Amino acid sequence: The sequence of the first five N-terminal amino acids was determined and was found to be, Phe-Pro-Met-Phe-Lys.

Biological Activity: Determined by the dose dependent chemotaxis of human lymphocytes cultured in the presence of IL-2 the ED₅₀ range is 1.0 – 10.0 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 $^{\circ}$	11343730
<i>medium</i>	20 μ g	Cat.N $^{\circ}$	11343734
<i>large</i>	100 μ g	Cat.N $^{\circ}$	11343736

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