

Product Data Sheet

Cat # RP-1036

Recombinant Human I-TAC (CXCL11)

Size: 5 ug

Chemokine (C-X-C motif) ligand 11 (CXCL11) is a small cytokine belonging to the CXC chemokine family that is also called Interferon-inducible T-cell alpha chemo attractant (I-TAC) and Interferon-gamma-inducible protein 9 (IP-9). 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 CXCL11 is strongly induced by IFN- $\gamma$  and IFN- $\beta$ , and weakly induced by IFN- $\alpha$ . 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, CXCL9 and CXCL10. CXCL11 is chemotactic for activated T cells. Its gene is located on human chromosome 4 along with many other members of the CXC chemokine family.

**Source:** *Escherichia Coli*. I-TAC Human Recombinant (Interferon-inducible T-cell alpha chemo attractant) produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 73 amino acids and having a molecular mass of 8300 Dalton. The I-TAC is purified by proprietary chromatographic techniques. The CXCL11 was lyophilized from a concentrated (1mg/ml) solution in water containing no additives.

**Applications and Suggested Dilutions:** Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE. It is recommended to reconstitute the lyophilized I-TAC in sterile 18M $\Omega$ -cm H<sub>2</sub>O not less than 100 $\mu$ g/ml, which can then be further diluted to other aqueous solutions. Users must optimize the appropriate concentration and conditions for each assay.

**Storage and Stability:** Lyophilized I-TAC although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CXCL11 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). If supplied in powder then reconstitute it in 100 ul water for 1 mg/ml stock and store in liquid at 4°C for ~1 week or aliquots in suitable size and store at -20°C for long term storage.

**Please prevent freeze-thaw cycles.**

**Biological Activity:** ED<sub>50</sub> range=1.0-10 ng/mL, determined by the dose dependent chemotaxis of human lymphocytes cultured in the presence of IL-2.

**Usage:**

This item is for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals

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