

**California Bioscience** 

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# **Product Datasheet**

Product Name	Recombinant Human I-TAC (CXCL11)
Cata No	CB500067
Source	Escherichia Coli.
Synonyms	Small inducible cytokine B11, CXCL11, Interferon-inducible T-cell alpha chemoattractant, I-TAC, Interferon-gamma-inducible protein 9, IP-9, H174, Beta-R1,
	chemokine (C-X-C motif) ligand 11, IP9, b-R1, SCYB11, SCYB9B, MGC102770.

#### Description

Chemokine (C-X-C motif) ligand 11 (CXCL11) is a small cytokine belonging to the CXC chemokinen family that is also called Interferon-inducible T-cell alpha chemoattractant (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-yand 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.

I-TAC Human Recombinant (Interferon-inducible T-cell alpha chemoattractant) 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.

Sterile Filtered White lyophilized (freeze-dried) powder.

### **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.

#### Purity

Greater than 95.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.

#### Formulation

The CXCL11 was lyophilized from a concentrated (1mg/ml) solution in water containing no additives.

#### 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.

#### Sequence

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

#### **Physical Appearance**

## \* For Non-Clinical Research Use Only \*