

## I-TAC/CXCL11, Human

**Cat. No.:** Z03060-1

**Size:** 1.0 mg

**Synonyms:** I-TAC/CXCL11, Human

### Description:

I-TAC (Interferon-inducible T-cell  $\alpha$  Chemoattractant), also known as CXCL11, is a chemokine belonging to the CXCL subfamily. Along with Interferon- $\gamma$  induced Protein 10 kDa and Monokine Induced by Interferon- $\gamma$ , I-TAC is strongly up-regulated by Interferon- $\gamma$  and binds to the G-protein coupled receptor CXCR3. The expression of CXCR3 is associated with Th1-mediated immune responses and mediates chemotaxis of Th1 cells. I-TAC induces, maintains, and amplifies the inflammatory reactions, and sustains chronic immune responses against self-antigens. Although CXCR3 was thought to be the exclusive receptor of I-TAC initially, more evidence has shown that I-TAC can also bind to CXCR4 and CXCR7, and that I-TAC plays important roles in tumor development and angiostasis.

Recombinant human I-TAC/CXCL11 (rhI-TAC) produced in *E. coli* is a single non-glycosylated polypeptide chain containing 74 amino acids. A fully biologically active molecule, rhI-TAC has a molecular mass of 8.4 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

### Amino Acid Sequence:

00001 MFPMFKRGRG LCIGPGVKAV KVADIEKASI MYPNNCDKI  
00041 EVIITLKENK GQRCLNPKSK QARLIKKVE RKNF

**Source:** *E. coli*

**Species:** Human

**Biological Activity:** ED<sub>50</sub> < 2.5  $\mu$ g/mL, measured by the FLIPR assay using CHO cells transfected with human CXCR3, the receptor of human CXCL11, corresponding to a specific activity of > 400 units/mg.

**Molecular Weight:** 8.4 kDa, observed by reducing SDS-PAGE.

**Formulation:** Lyophilized after extensive dialysis against PBS.

**Reconstitution:** Reconstituted in ddH<sub>2</sub>O at 100  $\mu$ g/mL.

**Purity:** > 95% as analyzed by SDS-PAGE and HPLC.

**Endotoxin Level:** < 0.2 EU/ $\mu$ g, determined by LAL method.

**Storage:** Lyophilized recombinant human I-TAC/CXCL11 (rhI-TAC) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhI-TAC remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.