

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant I-TAC/CXCL11, Human

Catalog Number: BK0114-50µg

Source: Escherichia coli.

Quantity: 50µg

### 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.

### Molecular Weight:

8.4 kDa, observed by reducing SDS-PAGE.

### Purity:

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

### Biological Activity:

ED50 < 2.5 µg/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.

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation:

Lyophilized after extensive dialysis against PBS.

### AA Sequence:

MFPMFKRGRCLCIGPGVKAV-  
KVADIEKASIMYPSNCDKIEVIITLKENKGQR-  
CLNPKSKQARLIKKVERKNF

### Endotoxin:

< 0.2 EU/µg, determined by LAL method.

### Reconstitution:

Reconstituted in ddH2O at 100 µg/mL.

### Storage:

Lyophilized recombinant human I-TAC/CXCL11 (rhI-TAC) remains stable up to 6 months at -80 °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.

### Usage:

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