

DATASHEET

Version 20181206

I- $\square$ TAC/CXCL11, Human(HEK 293-expressed)

Cat. No.: Z03246-10

Size: 10.0 ug

Synonyms: I- $\square$ TAC/CXCL11, Human

Description:

Chemokine (C-X-C motif) ligand 11(CXCL11), also known as I-TAC and B-R1, is a small cytokine belonging to the CXC chemokine family that is also called Interferon-inducible T-cell alpha chemoattractant (I-TAC) and Interferon-gamma-inducible protein 9 (IP-9). This chemokine elicits its effects on target cells by interacting with chemokine receptor CXCR3 having a higher affinity than other ligands for this receptor such as CXCL9 and CXCL10. CXCL11 is chemotactic for activated T cells. The gene encoding CXCL11 has been mapped to chromosome 4. CXCL11 cDNA encodes a 94 amino acid residue precursor protein with a 21 amino acid residue putative signal sequence, which is cleaved to form the mature 73 amino acid residue protein. CXCL11 shares 36% and 37% amino acid sequence homology with IP-10 and MIG (two other known human non-ELR CXC chemokines), respectively. Mouse CXCL11 exhibits 68% sequence homology with human CXCL11. Recombinant human I-TAC/CXCL11 produced in HEK293 cells is a single non-glycosylated polypeptide chain containing 73 amino acids. A fully biologically active molecule, rhI-TAC/CXCL11 has a molecular mass of 8.3 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

00001 FPMFKRGRCL CIGPGVKAVK VADIEKASIM YPSNNCDKIE
 00041 VIITLKENKG QRCLNPKSKQ ARLIKKVER KNF

Source: HEK 293

Species: Human

Biological Activity: The EC₅₀ value of human I- $\square$ TAC/CXCL11 on Ca²⁺ mobilization assay in CHO-K1/Ga15/hCXCR3 cells (human Ga15 and human CXCR3 stably expressed in CHO-K1 cells) is less than 0.5 µg/ml.

Molecular Weight: 8.3 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH₂O or PBS at 100µg/ml.

Purity: > 98% as analyzed by SDS-PAGE.

Endotoxin Level: < 0.2 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant human I- $\square$ TAC/CXCL11 remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, human CXCL11/I- $\square$ TAC should be stable up to 1 week at 4°C or up to 2 months at -20°C.