

DESCRIPTION

Source *E. coli*-derived human CXCL11/I-TAC protein
Phe22-Phe94
Accession # O14625

N-terminal Sequence Analysis Phe22

Predicted Molecular Mass 8.3 kDa

SPECIFICATIONS

Activity Measured by its ability to chemoattract BaF3 mouse pro-B cells transfected with human CXCR3. The ED₅₀ for this effect is 1-5 ng/mL.

Endotoxin Level <0.10 EU per 1 µg of the protein by the LAL method.

Purity >97%, by SDS-PAGE under reducing conditions and visualized by silver stain.

Formulation Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 100 µg/mL in sterile PBS containing at least 0.1% human or bovine serum albumin.

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage **Use a manual defrost freezer and avoid repeated freeze-thaw cycles.**

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

CXCL11, also known as I-TAC, SCYB9B, H174 and β-R1, is a non-ELR CXC chemokine. CXCL11 cDNA encodes a 94 amino acid (aa) residue precursor protein with a 21 aa residue putative signal sequence, which is cleaved to form the mature 73 aa 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. CXCL11 is expressed at low levels in normal tissues including thymus, spleen and pancreas. The expression of CXCL11 mRNA is radically up regulated in IFN-γ and IL-1 stimulated astrocytes. Moderate increase in expression is also observed in stimulated monocytes. CXCL11 has potent chemoattractant activity for IL-2 activated T cells and transfected cell lines expressing CXCR3, but not freshly isolated T cells, neutrophils or monocytes. The gene encoding CXCL11 has been mapped to chromosome 4.

References:

1. Cole, K. *et al.* (1998) *J. Exp. Med.* **187**:2009.
2. Sandhya Rani, M. *et al.* (1996) *J. Biol. Chem.* **271**:22878.
3. Lou, Y. *et al.* (1998) *J. Neurovirol.* **4**:575.