

I-TAC/CXCL11

Catalog # PVGS1437

Specification

I-TAC/CXCL11 - Product Information

Primary Accession **Species** Human 014625

Sequence

Phe22-Phe94

Purity

> 98% as analyzed by SDS-PAGE

Endotoxin Level

< 0.2 EU/ μg of protein by gel clotting method

Biological Activity

The EC₅₀ value of human I-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 μ g/ml.

Expression System

HEK 293

Formulation

Lyophilized after extensive dialysis against PBS.

Reconstitution

It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH_2O or PBS up to $100 \mu g/ml$.

Storage & Stability

Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

I-TAC/CXCL11 - Additional Information

Gene ID 6373

Other Names

C-X-C motif chemokine 11, Beta-R1, H174, Interferon gamma-inducible protein 9, IP-9, Interferon-inducible T-cell alpha chemoattractant, I-TAC, Small-inducible cytokine B11, CXCL11, ITAC, SCYB11, SCYB9B

Target Background

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.

I-TAC/CXCL11 - Protein Information

Name CXCL11

Synonyms ITAC, SCYB11, SCYB9B

Function

Chemotactic for interleukin-activated T-cells but not unstimulated T-cells, neutrophils or monocytes. Induces calcium release in activated T-cells. Binds to CXCR3. May play an important role in CNS diseases which involve T-cell recruitment. May play a role in skin immune responses.

Cellular Location Secreted.

Tissue Location

High levels in peripheral blood leukocytes, pancreas and liver astrocytes. Moderate levels in thymus, spleen and lung. Low levels in placenta, prostate and small intestine. Also found in epidermal basal layer keratinocytes in skin disorders

I-TAC/CXCL11 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

I-TAC/CXCL11 - Images