

# CXCL11

Catalog # PVGS1654

### Specification

## **CXCL11 - Product Information**

Primary Accession Species Human <u>014625</u>

Sequence Phe22- Phe94

Purity > 97% as analyzed by SDS-PAGE<br>> 97% as analyzed by HPLC

**Endotoxin Level** < 1 EU/ μg of protein by LAL method

**Biological Activity** 

The biological activity determined by a chemotaxis bioassay using human IL-2 activated human T-lymphocytes is in a concentration range of 0.1-10 ng/ml.

Expression System E. coli

**Theoretical Molecular Weight** 8.3 kDa

Formulation

Lyophilized from a 0.2 µm filtered solution in 20 mM PB, pH 7.4, 100 mM NaCl.

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 sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml.

Storage & Stability

Upon receiving, this product remains stable for up to 6 months at -20°C or -70°C. Upon reconstitution, the product should be stable for up to 1 week at 2-8°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

## **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

CXCL11 also known as I-TAC is belonging to the CXC chemokine family and shares 36 % and 37 % amino acid sequence homology with IP-10 and MIG, respectively. It is highly expressed in peripheral blood leukocytes, pancreas and liver. Expression of CXCL11 is strongly induced by IFN- $\gamma$  and IFN- $\beta$ , and weakly induced by IFN- $\alpha$ . This chemokine elicits its effects by binding to the cell surface chemokine receptor CXCR3, which with a higher affinity than do the other chemokines for this receptor, CXCL9 and CXCL10. Similar to CXCL10, CXCL11 has been shown to be a chemoattractant for IL-2-activated T-lymphocytes, but not for isolated T-cells, neutrophils or monocytes.

### **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

#### CXCL11 - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CXCL11 - Images