

BCA-1/CXCL13
Catalog # PVGS1082**Specification**

BCA-1/CXCL13 - Product Information

Primary Accession [O43927](#)
Species
Human

Sequence
val23-Pro109

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

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

Biological Activity
Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using human B cells is in a concentration range of 1.0-10.0 ng/ml.

Expression System
E. coli

Theoretical Molecular Weight
10.3 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 -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

BCA-1/CXCL13 - Additional Information

Gene ID 10563

Other Names
C-X-C motif chemokine 13, Angie, B cell-attracting chemokine 1, BCA-1, B lymphocyte chemoattractant, CXC chemokine BLC, Small-inducible cytokine B13, CXCL13, BCA1, BLC, SCYB13

Target Background

CXCL13, also known as B-lymphocyte chemoattractant (BLC), is a CXC chemokine that is constitutively expressed in secondary lymphoid organs. BCA-1 cDNA encodes a protein of 109 amino acid residues with a leader sequence of 22 residues. Mature human BCA-1 shares 64% amino acid sequence similarity with the mouse protein and 23 - 34% amino acid sequence identity with other known CXC chemokines. Recombinant or chemically synthesized BCA-1 is a potent chemoattractant for B lymphocytes but not T lymphocytes, monocytes or neutrophils. BLR1, a G protein-coupled receptor originally isolated from Burkitt's lymphoma cells, has now been shown to be the specific receptor for BCA-1. Among cells of the hematopoietic lineages, the expression of BLR1, now designated CXCR5, is restricted to B lymphocytes and a subpopulation of T helper memory cells. Mice lacking BLR1 have been shown to lack inguinal lymph nodes. These mice were also found to have impaired development of Peyer's patches and defective formation of primary follicles and germinal centers in the spleen as a result of the inability of B lymphocytes to migrate into B cell areas.

BCA-1/CXCL13 - Protein Information

Name CXCL13

Synonyms BCA1, BLC, SCYB13

Function

Chemotactic for B-lymphocytes but not for T-lymphocytes, monocytes and neutrophils. Does not induce calcium release in B- lymphocytes. Binds to BLR1/CXCR5.

Cellular Location

Secreted.

Tissue Location

Highest levels in liver, followed by spleen, lymph node, appendix and stomach. Low levels in salivary gland, mammary gland and fetal spleen

BCA-1/CXCL13 - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

BCA-1/CXCL13 - Images