B-Lymphocyte Chemoattractant human, recombinant, expressed in *Escherichia coli* cell culture tested

Catalog Number **B2929**
Storage Temperature –20 °C

**Synonyms:** BCA-1; B-Cell Attracting Chemokine 1; BLC; CXCL13

**Product Description**
B-Lymphocyte Chemoattractant is from a DNA sequence encoding the mature human CXCL 13 (BLC/BCA-1) protein sequence, VLEVYYTSLRRCVQ-ESSVFIPRRFIDRIQELPRGNGCPKEIWKKNSIVCWDPQAEWIQMMEVLKRSSTLPVPFKRKIP, expressed in *E. coli*. The recombinant CXCL13/BLC preparation contains primarily a C-terminal truncated protein. It lacks 15 C-terminal residues and migrates in SDS-PAGE under reducing conditions with an apparent molecular mass of 8.7 kDa.

The cDNA encodes for a protein of 109 amino acid residues with a leader sequence of 22 residues. The mature BCA-1 protein results from the removal of the 22 amino acid leader sequence, leaving a protein of 87 amino acids. Mature human BCA-1 shares 64% amino acid sequence similarity with the mouse protein and 23–34% amino acid sequence identity with other CXC chemokines. High-level expression of BCA-1 and CXCR5 was observed in mucosal lymphoid aggregates and in the mantle zone of secondary lymphoid follicles in *Helicobacter pylori* induced gastric mucosa-associated lymphoid tissue (MALT), indicating that BCA-1 can act in normal homeostasis, as well as inflammation.

This product is lyophilized from a 0.2 µm filtered solution containing 35% acetonitrile, 0.1% TFA, and 50 µg bovine serum albumin per 1 µg of cytokine.

The biological activity of human BLC/BCA-1 is measured by its ability to chemoattract mouse BaF/3 cells transfected with human CXCR5.

Purity: ≥95% (SDS-PAGE and visualized by silver stain)
Endotoxin: <1.0 EU per 1 µg of the cytokine (LAL)

**Precautions and Disclaimer**
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

**Preparation Instructions**
Reconstitute the contents of the vial using sterile phosphate buffered saline containing at least 0.1% human serum albumin or bovine serum albumin. Prepare a stock solution of no less than 25 µg/mL.

**Storage/Stability**
Store the product at –20 °C. Upon reconstitution, store at 2–8 °C for up to one month. For extended storage, freeze in working aliquots at –20 °C. Repeated freezing and thawing is not recommended. Do not store in a frost-free freezer.
References

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