



Product Datasheet

Product Name	Recombinant Human BCA-1/BLC (CXCL13)
Cata No	CB501258
Source	<i>Escherichia Coli.</i>
Synonyms	C-X-C motif chemokine 13, Small-inducible cytokine B13, B lymphocyte chemoattractant, CXC chemokine BLC, CXCL13, BCA1, BCA-1, CXCL-13, B cell Attracting Chemokine-1, BLC, ANGIE, BLR1L, SCYB13, ANGIE2.

Description

BCA-1 is a CXC chemokine that is highly expressed in thesecondary lymphoid organs, such as follicles of the spleen, lymph nodes, and Peyer's patches. CXCL13 promotes the migration of B lymphocytes (compared to T cells and macrophages), by stimulating calcium influx into, and chemotaxis of, cells expressing Burkitt's lymphoma receptor 1 (BLR1). BCA1 therefore function in the homing of B lymphocytes to follicles. Human BCA-1 shares a 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 BCA1 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 BCA1. Among cells of the hematopoietic lineages, the expression of BLR-1, now designated CXCR-5, is restricted to B lymphocytes and a subpopulation of T helper memory cells. CXCL13 Human Recombinant produced in E.Coli is a single,non-glycosylated, polypeptide chain containing 87 amino acids and having a molecular mass of 10.3 kDa. The BCA-1 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Biological Activity

Determined by its ability to chemoattract human B cells using a concentration range of 1.0-10.0 ng/ml.

Purity

Greater than 97.0% as determined by:
(a) Analysis by RP-HPLC.
(b) Analysis by SDS-PAGE.

Formulation

The BCA-1 protein was lyophilized from a concentrated (0.5mg/ml) solution containing 20mM PBS & 150mM NaCl pH-7.4.

Reconstitution

It is recommended to reconstitute the lyophilized CXCL13 in sterile 18MΩ-cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized BCA1 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution BCA1

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should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

Sequence

VLEVYYTSLRCRCVQESSVFIPRRFIDRIQILPRGN
GCPRKEIIVWKKNKSIKCVDPQAEWIQRMMEVLR
KRSSSTLPVPVFKRKIP.

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