

Human Recombinant B cell Attracting Chemokine-1 (rh BCA-1 / CXCL13)

Synonyms: C-X-C motif chemokine 13, Small-inducible cytokine B13, B lymphocyte chemoattractant (BLC), CXC chemokine BLC, ANGIE, BLR1L, SCYB13, ANGIE2.

Introduction: 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. BCA-1 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). BCA-1 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 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 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.

Description: Recombinant human BCA-1 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.

Source: *Escherichia Coli*

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a concentrated solution containing 20mM PBS & 150mM NaCl pH-7.4
The samples of 1µg contain Trehalose 5% (w/vol) for better recovery

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

Purity: Greater than 97.0% as determined by RP-HPLC and by SDS-PAGE.

Amino Acid Sequence:

VLEVYYTSLRCRCVQESSVFIPRRFIDRIQILPRGNGCPRKEIIVWKKNKSIKCVDPQAEWIQRMMMEVLRKR
SSSTLPVPVFKRKIP.

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

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	5 µg	Cat.N°	11344180
<i>medium</i>	20 µg	Cat.N°	11344184

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