

# Recombinant Human BCA-1/CXCL13

#### Information

Gene ID	10563
Accession #	O43927
Alternate Names	Angie, B lymphocyte chemoattractant, CXC chemokine BLC, Small-inducible cytokine B13
Source	Escherichia coli.
M.Wt	Approximately 10.3 kDa, a single non-glycosylated polypeptide chain containing 87 amino acids.
AA Sequence	VLEVYYTSLR CRCVQESSVF IPRRFIDRIQ ILPRGNGCPR KEIIVWKKNK SIVCVDPQAE WIQRMMEVLR KRSSSTLPVP VFKRKIP
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.  - 12 months from date of receipt, -20 to -70 °C as supplied.  - 1 month, 2 to 8 °C under sterile conditions after reconstitution.  - 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM PB, pH 7.4, 100 mM NaCl.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
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 ng/ml.
Shipping Condition	Gel pack.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

### Components and Storage

Components	5 µg	100 µg	500 µg
Recombinant Human BCA-1/CXCL13	5 µg	100 µg	500 µg

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

#### Quality Control

	Street and the contract of the	of the Date of
Purity	> 97 % by SDS-PAGE and HPLC analyses.	P gaon Epoli
Endotoxin	Less than 1 EU/µg of rHuBCA-1/CXCL13 as	determined by LAL method.

#### Description

C-X-C motif chemokine 13 encoded by the CXCL13 gene located on human chromosome 4 is constitutively expressed in secondary lymphoid organs. It is also known as B lymphocyte chemoattractant (BLC). As its name suggests, CXCL13 is selectively chemotactic for B cells belonging to both the B-1 and B-2 subsets, and elicits its effects by interacting with chemokine receptor CXCR5. It and its receptor CXCR5 control the organization of B cells within follicles of lymphoid tissues. Recombinant human CXCL13 is a single non-glycosylated polypeptide chain containing 87 amino acids and mature human BCA-1 shares 64 % amino acid sequence similarity with the murine protein and 23–34 % amino acid sequence identity with other known CXC chemokines.

#### Reference

- 1. Legler DF, Loetscher M, Roos RS, et al. 1998. J Exp Med. 187:655-60.
- 2. Gunn MD, Ngo VN, Ansel KM, et al. 1998. Nature. 391:799-803.
- 3. Ansel KM, Harris RB, Cyster JG. 2002. Immunity. 16:67-76.
- 4. Ansel KM, Ngo VN, Hyman PL, et al. 2000. Nature. 406:309-14.

## APExBIO Technology www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com



10