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BCA-1 Human

BCA-1/BLC Human Recombinant (CXCL13)
CHK0001

Product Overview

Name	BCA-1 Human
Description	
BCA-1/BLC Human Recombinant (CXCL13)	
Accession (Primary)	O43927
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.	
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. 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.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile Filtered White lyophilized (freeze-dried) powder.	
Formulation	
The BCA-1 protein was lyophilized from a concentrated (0.5mg/ml) solution containing 20mM PBS & 150mM NaCl pH-7.4.	
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: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Amino acid sequence

VLEVYYTSLRCRCVQESSVFIPRRFIDRIQILPRGNG CPRKEIIVWKKNKSIVCVDPQAEWIQRMMEVLRKR SSSTLPVPVFKRKIP.

Biological Activity

Determined by its ability to chemoattract human B cells using a concentration range of 1-10ng/ml corresponding to a Specific Activity of 100,000-1,000,000IU/mg.

Solubility

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

Precautions

BCA-1 Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (O43927)