

BCA1 Macaque

BCA-1/ BLC (CXCL13) Rhesus Macaque Recombinant
CHK0003

Product Overview

Name BCA1 Macaque

Description

BCA-1/ BLC (CXCL13) Rhesus Macaque Recombinant

Accession (Primary) [Q8HYN9](#)

Synonyms

C-X-C motif chemokine 13, B lymphocyte chemoattractant, CXC chemokine BLC, Small-inducible cytokine B13, Cxcl13, Blc, Scyb13.

Introduction

BCA-1 is a CXC chemokine that is highly expressed in these secondary 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 BCA1 protein was lyophilized from a 0.2 µm filtered solution in Acetonitrile and TFA.

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 SDS-PAGE.

Amino acid sequence

ILEAHYTNLK CRCSGVISTV VGLNIIDRIQ VTPPGNGCPK TEVVIWTKMK KVICVNPRAK WLQRLLRHVQ
SKSLSSTPQA PVSKRRAA.

Biological Activity

The ED 50 , as measured by its ability to chemoattract human CXCR5-transfected mouse BaF3 cells, is less than 2 µg/ml.

Solubility

It is recommended to reconstitute the lyophilized CXCL13 in sterile 18M²-cm H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Precautions

BCA1 Macaque is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: ([Q8HYN9](#))