

32-6600: BCA-1 Mouse

Application : Functional Assay
Alternative Name : C-X-C motif chemokine 13, B lymphocyte chemoattractant, CXC chemokine BLC, Small-inducible cytokine B13, Cxcl13, Blc, Scyb13.

Description

Source: Escherichia Coli.

Sterile Filtered White lyophilized (freeze-dried) powder.

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 Mouse Recombinant (22-109) produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 88 amino acids and having a molecular mass of 10kDa.The BCA-1 is purified by proprietary chromatographic techniques.

Product Info

Amount : 5 µg / 20 µg
Purification : Greater than 97.0% as determined by SDS-PAGE.
Content : The BCA1 protein was lyophilized from a 0.2µm filtered solution in Acetonitrile and TFA. It is recommended to reconstitute the lyophilized CXCL13 in sterile 18M Omega -cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.
Storage condition : 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.
Amino Acid : ILEAHYTNLK CRCSGVISTV VGLNIIDRIQ VTPPGNGCPK TEVVIWTKMK KVICVNPRAK WLQRLLRHVQ SKLSSTPQA PVSKRRAA.

Application Note

The ED50, as measured by its ability to chemoattract human CXCR5-transfected mouse BaF3 cells, is less than 2Åµg/ml.