

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CXCL13/BLC/BCA-1 in ELISAs and Western blots. In ELISAs, this antibody does not cross-react with recombinant human (rh) CXCL1, rhCXCL2, rhCXCL3, rhCXCL8/IL-8, rhCXCL10, rhCXCL9, rhCXCL12/SDF-1α, or rhCXCL12/SDF-1β.
Source	Monoclonal Mouse IgG ₁ Clone # 53610
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human CXCL13/BLC/BCA-1 Val23-Arg94 Accession # O43927
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	0.25-1 µg/10 ⁶ cells	Human monocyte-derived immature dendritic cells fixed with paraformaldehyde and permeabilized with saponin

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

CXCL13, also known as B-lymphocyte chemoattractant (BLC), is a CXC chemokine that is constitutively expressed in secondary lymphoid organs. BCA-1 cDNA encodes a protein of 109 amino acid residues with a leader sequence of 22 residues. Mature human BCA-1 shares 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 BCA-1. Among cells of the hematopoietic lineages, the expression of BLR1, now designated CXCR5, is restricted to B lymphocytes and a subpopulation of T helper memory cells. Mice lacking BLR1 have been shown to lack inguinal lymph nodes. These mice were also found to have impaired development of Peyer's patches and defective formation of primary follicles and germinal centers in the spleen as a result of the inability of B lymphocytes to migrate into B cell areas.

References:

- Gunn, M.D. *et al.* (1998) *Nature*, **391**:799.
- Legler, D.F. *et al.* (1998) *J. Exp. Med.* **187**:655.
- Forster, R. *et al.* (1996) *Cell* **87**:1037.

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