

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CXCL13 in ELISAs and Western blots. In sandwich immunoassays, less than 0.05% cross-reactivity with recombinant human CXCL13, recombinant mouse (rm) I-TAC, rmMIG, and rmSDF-1 α is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse CXCL13/BLC (R&D Systems, Catalog # 470-BC) Ile22-Ala109 Accession # Q3U1E8
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

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
Western Blot	0.1 μ g/mL	Recombinant Mouse CXCL13/BLC/BCA-1 (Catalog # 470-BC)
Mouse CXCL13/BLC/BCA-1 Sandwich Immunoassay		Reagent
ELISA Capture	2-8 μ g/mL	Mouse CXCL13/BLC/BCA-1 Antibody (Catalog # MAB470)
ELISA Capture	2-8 μ g/mL	Mouse CXCL13/BLC/BCA-1 Antibody (Catalog # MAB470R)
ELISA Detection	0.1-0.4 μ g/mL	Mouse CXCL13/BLC/BCA-1 Biotinylated Antibody (Catalog # BAF470)
Standard		Recombinant Mouse CXCL13/BLC/BCA-1 (Catalog # 470-BC)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

CXCL13, also known as B-lymphocyte chemoattractant (BLC), is a CXC chemokine that is constitutively expressed in secondary lymphoid organs. Mouse BCA-1 cDNA encodes a precursor protein of 109 amino acid residues with a putative leader sequence of 21 residues. Mature mouse BCA-1 shares 64% amino acid sequence similarity with the human 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:

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