

## DESCRIPTION

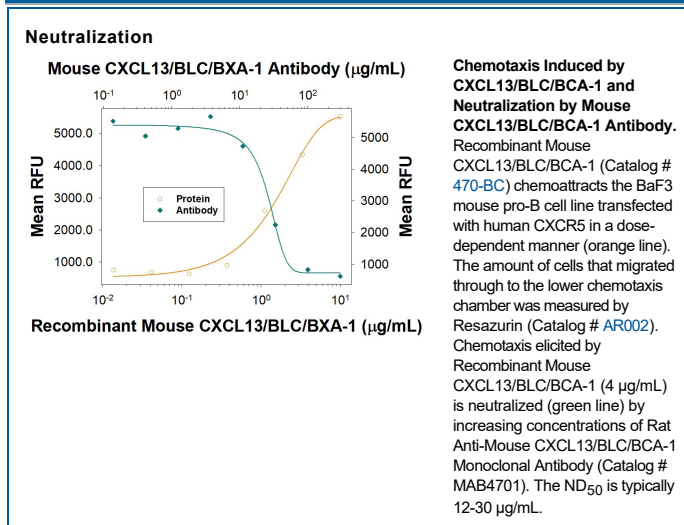
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|---------------------------|---|
| <b>Species Reactivity</b> | Mouse   |
| <b>Specificity</b>        | Detects mouse CXCL13/BLC/BCA-1 in direct ELISAs.  |
| <b>Source</b>             | Recombinant Monoclonal Rat IgG <sub>2A</sub> Clone # 143608R  |
| <b>Purification</b>       | Protein A or G purified from cell culture supernatant   |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant mouse CXCL13/BLC/BCA-1<br>Ile22-Ala109<br>Accession # O55038  |
| <b>Endotoxin Level</b>    | <0.10 EU per 1 µg of the antibody by the LAL method.  |
| <b>Formulation</b>        | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS. |

## 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.

|                       |   |
|-----------------------|---|
| <b>Neutralization</b> | Measured by its ability to neutralize CXCL13/BLC/BCA-1-induced chemotaxis in the BaF3 mouse pro-B cell line transfected with human CXCR5. The Neutralization Dose (ND <sub>50</sub> ) is typically 12-30 µg/mL in the presence of 4 µg/mL Recombinant Mouse CXCL13/BLC/BCA-1. |
|-----------------------|---|

## DATA



## PREPARATION AND STORAGE

|                                |  |
|--------------------------------|--|
| <b>Reconstitution</b>          | Reconstitute at 0.5 mg/mL in sterile PBS.  |
| <b>Shipping</b>                | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.<br>*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C   |
| <b>Stability &amp; Storage</b> | <b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul> |

## 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.