### Species Reactivity
Mouse

### Specificity
Detects recombinant mouse CXCR5 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant mouse CXCR7 is observed.

### Source
Monoclonal Rat IgG2A Clone # 614641

### Purification
Protein A or G purified from hybridoma culture supernatant

### Immunogen
E. coli-derived recombinant mouse CXCR5

### Accession
Met1-Pro57

### Formulation
Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

*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.

**Recommended Concentration**

<table>
<thead>
<tr>
<th>Sample</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Cytometry</td>
<td>0.25 µg/10⁶ cells</td>
</tr>
<tr>
<td>Immunocytochemistry</td>
<td>8-25 µg/mL</td>
</tr>
<tr>
<td>CyTOF-reported</td>
<td>See Below</td>
</tr>
</tbody>
</table>

**CyTOF-reported**

This clone has been commercially reported for use in CyTOF®. Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.

### DATA

**Immunocytochemistry**

CXCR5 in A20 Mouse Cell Line. CXCR5 was detected in immersion fixed A20 mouse B cell lymphoma cell line using Rat Anti-Mouse CXCR5 Monoclonal Antibody (Catalog # MAB6198) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 493-conjugated Anti-Rat IgG Secondary Antibody (green; Catalog # NL015) and counterstained with DAPI (blue). Specific staining was localized to cell surfaces and cytoplasm. View our protocol for Fluorescent ICC Staining of Non-adherent Cells.

**Flow Cytometry**

Detection of CXCR5 in Mouse Splenocytes by Flow Cytometry. Mouse splenocytes were stained with Rat Anti-Mouse B220/CD45 APC-conjugated Monoclonal Antibody (Catalog # FAB1217A) and either (A) Rat Anti-Mouse CXCR5 Monoclonal Antibody (Catalog # MAB6198) or (B) Rat IgG2A Isotype Control (Catalog # MAB006) followed by Phycoerythrin-conjugated Anti-Rat IgG Secondary Antibody (Catalog # F0105B).

**Flow Cytometry**

Detection of CXCR5 in T Follicular Helper Cells by Flow Cytometry. T follicular helper cells from immunized Balb/c mice were stained with Rat Anti-Mouse CD4 Alexa Fluor® 405-conjugated Monoclonal Antibody (Catalog # FAB554V) and either (A) Rat Anti-Mouse CXCR5 Monoclonal Antibody (Catalog # MAB6198) or (B) Rat IgG2A Isotype Control (Catalog # MAB006) followed by Phycoerythrin-conjugated Anti-Rat IgG Secondary Antibody (Catalog # F0105B).

### PREPARATION AND STORAGE

**Reconstitution**

Reconstitute at 0.5 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**

- Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
  - 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.

Rev. 2/7/2018 Page 1 of 2
**BACKGROUND**

CXCR5 (CXC chemokine receptor 5; also BLR-1, NLR and CD185) is a 55-60 kDa member of the G-protein coupled receptor 1 family. It is expressed on select cell types, including granule and Purkinje cell neurons, embryonic CD4+ CD3- IL-7Ra+ precursor cells, B cells and follicular T helper cells. CXCR5 selectively binds BLC/CXCL13. This appears to both promote embryonic lymph node development and, in the adult, direct expressing cells to positions that optimize antigen presentation and antibody production. Mouse CXCR5 is a 7-transmembrane glycoprotein that is 374 amino acids (aa) in length. It contains a 57 aa N-terminal extracellular region plus a 47 aa C-terminal cytoplasmic domain. Over aa 1-57, mouse CXCR5 shares 84% and 47% aa identity with rat and human CXCR5, respectively.