Mouse Flt-3 Ligand Biotinylated Antibody
Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: BAF427

DESCRIPTION
Species Reactivity Mouse
Specificity Detects mouse Flt-3 Ligand in ELISAs and Western blots. In sandwich immunoassays, less than 0.1% cross-reactivity with recombinant human Flt-3 Ligand is observed.
Source Polyclonal Goat IgG
Purification Antigen Affinity-purified
Immunogen Mouse myeloma cell line NS0-derived recombinant mouse Flt-3 Ligand Gly27-Arg188
Accession #: P49772
Formulation Lyophilized from a 0.2 µm 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.

<table>
<thead>
<tr>
<th>Application</th>
<th>Recommended Concentration</th>
<th>Sample</th>
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</thead>
<tbody>
<tr>
<td>Western Blot</td>
<td>0.1 µg/mL</td>
<td>Recombinant Mouse Flt-3 Ligand (Catalog # 427-FL)</td>
</tr>
<tr>
<td>Mouse Flt-3 Ligand Sandwich Immunoassay</td>
<td></td>
<td></td>
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<tr>
<td>ELISA Capture</td>
<td>0.2-0.8 µg/mL</td>
<td>Mouse Flt-3 Ligand Antibody (Catalog # AF427)</td>
</tr>
<tr>
<td>ELISA Detection</td>
<td>0.1-0.4 µg/mL</td>
<td>Mouse Flt-3 Ligand Biotinylated Antibody (Catalog # BAF427)</td>
</tr>
<tr>
<td>Standard</td>
<td></td>
<td>Recombinant Mouse Flt-3 Ligand (Catalog # 427-FL)</td>
</tr>
</tbody>
</table>

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 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.

BACKGROUND
Flt-3 Ligand, also known as FL, is an α-helical cytokine that promotes the differentiation of multiple hematopoietic cell lineages (1-3). Mature mouse Flt-3 Ligand consists of a 161 amino acid (aa) extracellular domain (ECD) with a cytokine-like domain and a juxtamembrane tether region, a 21 aa transmembrane segment, and a 22 aa cytoplasmic tail (4-6). Within the ECD, mouse Flt-3 Ligand shares 71% and 81% aa sequence identity with human and rat Flt-3 Ligand, respectively. Mouse and human Flt-3 Ligand show cross-species activity (4, 5, 7). Flt-3 Ligand is expressed as a noncovalently linked dimer by T cells and bone marrow and thymic fibroblasts (1, 8). Each 36 kDa chain carries approximately 12 kDa of N- and O-linked carbohydrates (8). Alternate splicing and proteolytic cleavage of the transmembrane form can generate a soluble 30 kDa fragment that includes the cytokine domain (4, 8). Alternate splicing of mouse Flt-3 Ligand also generates a membrane-associated isoform with a 57 aa substitution following the cytokine domain (4, 5, 8, 9). Both transmembrane and soluble Flt-3 Ligand signal through the tyrosine kinase receptor Flt3/Flik-2 (3-6). Flt-3 Ligand induces the expansion of monocytes and immature dendritic cells as well as early B cell lineage differentiation (2, 10). It synergizes with IL-3, GM-CSF, and SCF to promote the mobilization and myeloid differentiation of hematopoietic stem cells (4, 5, 7). It cooperates with IL-2, -6, -7, and -15 to induce NK cell development and with IL-3, -7, and -11 to induce terminal B cell maturation (1, 11). Animal studies also show Flt-3 Ligand to reduce the severity of experimentally induced allergic inflammation (12).

References: