Human Flt-3 Ligand Biotinylated Antibody
Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: BAF308

DESCRIPTION
Species Reactivity Human
Specificity Detects human Flt-3 ligand in ELISAs and Western blots. In sandwich immunoassays, less than 0.05% cross-reactivity with rhPIGF, rmFlt-3 Ligand, hVEGF and rhFlt-1 Fc chimera is observed.
Source Polyclonal Goat IgG
Purification Antigen Affinity-purified
Immunogen S. frugiperda insect ovarian cell line SF 21-derived recombinant human Flt-3 Ligand (R&D Systems, Catalog # 308-FK) Thr27-Pro185
Accession #: AAA17999
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.

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<th>Recommended Concentration</th>
<th>Sample</th>
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<td>0.1 µg/mL</td>
<td>Recombinant Human Flt-3 Ligand</td>
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<td>(Catalog # 308-FK)</td>
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ELISA Capture 2-8 µg/mL Human Flt-3 Ligand Antibody (Catalog # MAB608)
ELISA Detection 0.1-0.4 µg/mL Human Flt-3 Ligand Biotinylated Antibody (Catalog # BAF308)

Reconstitute at 0.2 mg/mL in sterile PBS. Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

Stability & Storage
12 months from date of receipt, -20 to -70 ºC as supplied.
1 month, 2 to 8 ºC under sterile conditions after reconstitution.
6 months, 20 to -70 ºC 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 human Flt-3 Ligand consists of a 158 amino acid (aa) extracellular domain (ECD) with a cytokine-like domain and a juxta membrane tether region, a 21 aa transmembrane segment, and a 30 aa cytoplasmic tail (4-7). Within the ECD, human Flt-3 Ligand shares 71% and 66% aa sequence identity with mouse and rat Flt-3 Ligand, respectively. Human and mouse Flt-3 Ligand show cross-species activity (4-6). 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 human Flt-3 Ligand also generates membrane-associated isoforms that contain either a truncated cytoplasmic tail or an 85 aa substitution following the cytokine domain (4, 5, 8). Both transmembrane and soluble Flt-3 Ligand signal through the tyrosine kinase receptor Flt-3/Flk-2 (3, 4, 6, 7). Flt-3 Ligand induces the expansion of monocytes and immature dendritic cells as well as early B cell lineage differentiation (2, 9). It synergizes with IL-3, GM-CSF, and SCF to promote the mobilization and myeloid differentiation of hematopoietic stem cells (4-6). 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, 10). Animal studies also show Flt-3 Ligand to reduce the severity of experimentally induced allergic inflammation (11).

References: