

DESCRIPTION

Species Reactivity	Feline
Specificity	Detects feline Flt-3 Ligand/FLT3L in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 10% cross-reactivity with recombinant human Flt-3 Ligand/FLT3L and recombinant mouse Flt-3 Ligand/FLT3L is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant feline Flt-3 Ligand/FLT3L Ser27-Pro185 Accession # NP_001009842
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Neutralization	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

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 feline Flt-3 Ligand consists of a 156 amino acid (aa) extracellular region with a cytokine-like domain and a juxtamembrane tether region, a 21 aa transmembrane segment, and an 88 aa cytoplasmic tail (4, 5). Within the ECD, feline Flt-3 Ligand shares 92%, 81%, 70%, and 63% aa sequence identity with canine, human, mouse, and rat Flt-3 Ligand, respectively. Flt-3 Ligand is expressed as a noncovalently-linked dimer by T cells and bone marrow and thymic fibroblasts (1, 6). Each 36 kDa chain carries approximately 12 kDa of N- and O-linked carbohydrates (6). Alternate splicing and proteolytic cleavage of the transmembrane form can generate a soluble 30 kDa fragment that includes the cytokine domain (6, 7). Multiple splice forms of canine, human, and mouse Flt-3 Ligand have been described and may also exist in feline (4, 6-10). Both transmembrane and soluble Flt-3 Ligand signal through the tyrosine kinase receptor Flt-3/Flk-2 (3, 5, 7, 10). Flt-3 Ligand induces the expansion of monocytes and immature dendritic cells as well as early B cell lineage differentiation (2, 11). It synergizes with IL-3, GM-CSF, and SCF to promote the mobilization and myeloid differentiation of hematopoietic stem cells (7, 8, 10). 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, 12). Animal studies also show Flt-3 Ligand to reduce the severity of experimentally induced allergic inflammation (13).

PRODUCT SPECIFIC NOTICES

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