



# Anti-Human Flt-3 Ligand

20210820BB

**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>102-P14</b>
Size:	100 µg
Lot. No.:	According to product label

**Preparation:** Produced from sera of rabbits pre-immunized with highly pure (>98%) recombinant human flt3-Ligand. Anti-human flt3-Ligand specific antibody was purified by affinity chromatography employing immobilized human flt3-Ligand matrix.

## Target Background

<b>Synonyms (Target):</b>	FLT3; FLK2; STK1; CD135; FLK-2
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Flt-3 Ligand, also known as FL, is an  $\alpha$ -helical cytokine that promotes the differentiation of multiple hematopoietic cell lineages. Mature human Flt-3 Ligand consists of a 158 amino acid (aa) extracellular domain (ECD) with a cytokine-like domain and a juxtamembrane region, a 21 aa transmembrane segment, and a 30 aa cytoplasmic tail. Within the ECD, human Flt-3 Ligand shares 71% and 65% aa sequence identity with mouse and rat Flt-3 Ligand, respectively. Human and mouse Flt-3 Ligand show cross-species activity. Flt-3 Ligand is expressed as a non-covalently linked dimer by T cells and bone marrow and thymic fibroblasts. Each 36 kDa chain carries approximately 12 kDa of N- and O-linked carbohydrates. Alternate splicing and proteolytic cleavage of the transmembrane form can generate a soluble 30 kDa fragment that includes the cytokine domain. 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. Both transmembrane and soluble Flt-3 Ligand signal through the tyrosine kinase receptor Flt3/ FIK-1. Flt-3 Ligand induces the expansion of monocytes and immature dendritic cells as well as early B cell lineage differentiation.

### Database References Target

<b>Protein RefSeq:</b>	NP_004110.2
<b>Uniprot ID:</b>	P36888
<b>mRNA RefSeq:</b>	NM_004119

## Product Specifications

<b>Species reactivity</b>	Human
<b>Clone/Ab feature</b>	Rabbit IgG
<b>Cross reactivity</b>	Human
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal Antibody
<b>Purification</b>	Antigen-affinity purified
<b>Immunogen</b>	Recombinant human FLT3-Ligand
<b>Formulation</b>	lyophilized from PBS
<b>Reconstitution buffer</b>	water

**Reconstitution:** Centrifuge the vial prior for opening. Reconstitute the antibody in sterile water to a concentration of 0.1 - 1.0 mg/ml.

**Stability:** The lyophilized antibody is stable for 1 month at room temperature and for 2 years from date of receipt at -20 to -70°C. The reconstituted antibody is stable for at least two weeks at 2-8°C. Frozen aliquots are stable for at least 6 months when stored at -20°C.

**AVOID REPEATED FREEZE AND THAW CYCLES!**

## Applications

### Neutralization:

To yield one-half maximal inhibition [ $ND_{50}$ ] of the biological activity of human flt3-Ligand (1 ng/ml), a concentration of 4-6 ng/ml of this antibody is required.

**Western Blot:** To detect human Flt3-Ligand by Western Blot analysis this antibody can be used at a concentration of 0.1 - 0.2 µg/ml. When used in conjunction with compatible secondary reagents the detection limit for recombinant human Flt3-Ligand is 1.5 - 3.0 ng/lane, under either reducing or non-reducing conditions.

**Sandwich ELISA:** To detect human Flt3-Ligand by Sandwich ELISA (using 100 µl/well antibody solution) a concentration of 0.5 - 2.0 µg/ml of this antibody is required. This antigen affinity purified antibody, in conjunction with compatible secondary reagents, allows the detection of at least 0.2 - 0.4 ng/well of recombinant hflt-3-Ligand.

**NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!**