



Anti-Human Flt-3 Ligand

20150223ML

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

Cat.-no.:	102-P14
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

Synonyms (Target):	FLT3; FLK2; STK1; CD135; FLK-2
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Flt-3 Ligand, also known as FL, is an α -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

Protein RefSeq:	NP_004110.2
Uniprot ID:	P36888
mRNA RefSeq:	NM_004119

Product Specifications

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

Reconstitution: Reconstitute the antibody in sterile water to a concentration of 0.1 - 1.0 mg/ml.

Stability: The lyophilized antibody is stable for at least 2 years from date of receipt at -20°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 [**ND₅₀**] of the biological activity of human flt3- Ligand (15 ng/ml), a concentration of 0.25 - 0.75 mg/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 mg/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 mg/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!