

## Recombinant Human FLT3-Ligand

<b>Catalog No.:</b>	PA1021XC
<b>Quantity:</b>	1 mg
<b>Background:</b>	FLT3 ligand is a receptor for the fl cytokine has a tyrosine-protein kinase activity & a growth factor that regulates proliferation of early hematopoietic cells. Flt3-Ligand synergizes with other CSFs and interleukins to induce growth and differentiation.
<b>Species:</b>	Human
<b>Source:</b>	E. coli, E.coli.
<b>Format:</b>	<b>State:</b> Sterile Filtered White lyophilized (freeze-dried) powder. <b>Purity:</b> >98% Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE. <b>Buffer System:</b> FLT-3 was lyophilized with no additives. <b>Reconstitution:</b> It is recommended to reconstitute the lyophilized Flt3-L in sterile 18MΩ-cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.
<b>Description:</b>	Flt3-Ligand Human Recombinant produced in E.Coli is non-glycosylated, polypeptide chain containing 155 amino acids. Flt3-Ligand is purified by proprietary chromatographic techniques. <b>AA Sequence:</b> The sequence of the first five N-terminal amino acids was determined and was found to be Thr-Gln-Asp-Cys-Ser. <b>Biological Activity:</b> The ED50 range=0.5-1.0 ng/mL, calculated by the dose-dependant stimulation of the proliferation of human OCMI-AML5 cells. <b>Molecular weight:</b> 18 kDa 17605 Dalton.
<b>Storage:</b>	Lyophilized Flt3-Ligand although stable at room temperature for 3 weeks, should be stored desiccated below -18 C. Upon reconstitution Flt3-Ligand should be stored at 4 C between 2-7 days and for future use below -18 C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please avoid freeze-thaw cycles.
<b>General Readings:</b>	<ol style="list-style-type: none"><li>1. Chan SS, Lyons N, McConnell I, Blacklaws BA. Cloning and sequencing of ovine Flt3 ligand. <i>Int J Immunogenet.</i> 2007 Jun;34(3):167-71. PubMed PMID: 17504506.</li><li>2. Harada S, Kimura T, Fujiki H, Nakagawa H, Ueda Y, Itoh T, et al. Flt3 ligand promotes myeloid dendritic cell differentiation of human hematopoietic progenitor cells: possible application for cancer immunotherapy. <i>Int J Oncol.</i> 2007 Jun;30(6):1461-8. PubMed PMID: 17487367.</li><li>3. Crucial role of FLT3 ligand in immune reconstitution following bone marrow transplantation and high dose chemotherapy. <i>Blood</i> 2007 Mar 22;</li><li>4. Wils EJ, Braakman E, Verjans GM, Rombouts EJ, Broers AE, Niesters HG, et al. Flt3 ligand expands lymphoid progenitors prior to recovery of thymopoiesis and accelerates T cell reconstitution after bone marrow transplantation. <i>J Immunol.</i> 2007 Mar 15;178(6):3551-7.</li></ol>

PubMed PMID: 17339451.

5. Yoon WS, Choi WC, Sin JI, Park YK. Antitumor therapeutic effects of Salmonella typhimurium containing Flt3 Ligand expression plasmids in melanoma-bearing mouse. Biotechnol Lett. 2007 Apr;29(4):511-6. Epub 2007 Jan 19. PubMed PMID: 17235489.

6. Bharadwaj AS, Agrawal DK. Flt3 ligand generates morphologically distinct semimature dendritic cells in ovalbumin-sensitized mice. Exp Mol Pathol. 2007 Aug;83(1):17-24. Epub 2006 Dec 19. PubMed PMID: 17182033.