

FLT3 Ligand

Fms-like Tyrosine Kinase 3 Ligand

human, recombinant, *E. coli*

Cat. No.	Amount
PR-419	10 μ g

For *in vitro* use only
Quality guaranteed for 12 months
Store at -20°C

Avoid freeze / thaw cycles

Form
Lyophilized.

Solubility
It is recommended to reconstitute the lyophilized FLT3 in sterile bidest H₂O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Activity
EC₅₀: < 1 ng/ml, corresponding to a specific activity of 1 x 10⁶ Units/mg, calculated by the dosedependant stimulation of the proliferation of human AML5 cells.

Endotoxin
Less than 0.1 ng/ μ g (IEU/ μ g) of FLT3.

Molecular Weight
18 kDa

Purity
≥ 95% by SDS-PAGE and RP-HPLC

Description

FLT-3 Ligand binds to Fms-Like Tyrosine Kinase-3 (FLT-3). Human FLT3 ligand also stimulates the proliferation of cells expressing murine FLT-3 receptors. The effects of FLT-3 ligand are synergized by coexpression of G-CSF (cat.# PR-423), GM-CSF (cat.# PR-436), M-CSF (cat.# PR-491), IL-3 (cat.# PR-462), and SCF (cat.# PR-682). FLT-3 Ligand promotes long-term expansion and differentiation of human pro-B-cells in the presence of IL-7 (cat.# PR-468) or in combination of IL-7 and IL-3.

Recombinant human FLT3 Ligand produced in *E. coli* is non-glycosylated, polypeptide chain containing 155 amino acids and having a molecular mass of 17.6 kDa. Recombinant FLT3 Ligand is purified by proprietary chromatographic techniques.

Selected References:

- Edwan *et al.* (2005) Treatment with Flt3 ligand plasmid reverses allergic airway inflammation in ovalbuminsensitized and -challenged mice. *Int. Immunopharmacol.* **5**:345.
- Chen *et al.* (2005) FLT3 ligand administration after hematopoietic cell transplantation increases circulating dendritic cell precursors that can be activated by CpG oligodeoxynucleotides to enhance T-cell and natural killer cell function. *Biol. Blood Marrow Transplant.* **11**:23.
- Fukuda *et al.* (2005) Flt3-ligand and the Flt3 receptor regulate hematopoietic cell migration by modulating the SDF-1alpha(CXCL12)/CXCR4 axis. *Blood* **105**:3117.
- Coates *et al.* (2004) CCR and CC chemokine expression in relation to Flt3 ligand-induced renal dendritic cell mobilization. *Kidney Int.* **66**:1907.
- Swanson *et al.* (2004) Flt3-ligand, IL-4, GM-CSF, and adherencemediated isolation of murine lung dendritic cells: assessment of isolation technique on phenotype and function. *J. Immunol.* **173**:4875.
- Shackleton *et al.* (2004) The impact of imiquimod, a Toll-like receptor-7 ligand (TLR7L), on the immunogenicity of melanoma peptide vaccination with adjuvant Flt3 ligand. *Cancer Immun.* **4**:9.