

FLT3 Ligand

Fms-like Tyrosine Kinase 3 Ligand

murine, recombinant, *E. coli*

Cat. No.	Amount
PR-421	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

The activity is determined by the ability to generate CD11c+ splenic dendritic cells *in vivo* in C57B1/6-12 week female mice. To obtain the desired affect, mice were treated with approximately 25 μ g of FLT-3 Ligand once daily for 9 consecutive days via intraperitoneal injection.

Endotoxin

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

FLT-3 Ligand binds to Fms-Like Tyrosine Kinase-3 (FLT-3). 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 .

Purity

\geq 98% by SDS-PAGE, RP-HPLC, and FPLC.

Description

Recombinant murine FLT3 Ligand produced in *E. coli* is non-glycosylated, polypeptide chain containing 144 amino acids and having a molecular mass of 16.43 kDa. Recombinant FLT3 Ligand is purified by proprietary chromatographic techniques.

Selected References:

- Ciavarra *et al.* (2004) Prostate tumor microenvironment alters immune cells and prevents long-term survival in an orthotopic mouse model following flt3-ligand/CD40-ligand immunotherapy. *J. Immunother.* **27**:13.
- Ciavarra *et al.* (2003) Impact of the tumor microenvironment on host infiltrating cells and the efficacy of flt3-ligand combination immunotherapy evaluated in a treatment model of mouse prostate cancer. *Cancer Immunol. Immunother.* **52**:535.
- Somers *et al.* (2003) Orthotopic treatment model of prostate cancer and metastasis in the immunocompetent mouse: efficacy of flt3 ligand immunotherapy. *Int. J. Cancer* **107**:773.
- Agrawal *et al.* (2001) Flt3 ligand: a novel cytokine prevents allergic asthma in a mouse model. *Int. Immunopharmacol.* **1**:2081.
- Li *et al.* (2001) Neutralization of IL-12 reverses rejection of mouse liver allografts from Flt3-ligand-treated donors and is associated with suppression of both cellular and humoral responses. *Transplant. Proc.* **33**:525.