Data sheet

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Jena Bioscience

FLT3 Ligand
Fms-like Tyrosine Kinase 3 Ligand
murine, recombinant, *E. coli*

Cat. No.	Amount
PR-421	10 μg

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 H_2O not less than 100 μg/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 μg of FLT-3 Ligand once daily for 9 consecutive days via intraperitoneal injection.

Molecular Weight
16.4 kDa

Purity
$\geq$ 95% by SDS-PAGE and RP-HPLC

Description
Recombinant murine FLT3 Ligand produced in *E. coli* is a non-glycosylated, polypeptide chain containing 144 amino acids and having a molecular mass of 16.4 kDa. 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.
Recombinant FLT3 Ligand is purified by proprietary chromatographic techniques.

Amino acid sequence
The sequence of the first five N-terminal amino acids was determined and was found to be Thr-Gln-Asp-Cys-Ser.

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.