

LeadGMP® Human Flt-3 Ligand Protein, His Tag, E. coli

Catalog Number LDG019PHE-GMP

Package 100 μg / 1 mg / Customized package

For full product information, images and publications, please visit our website.



Specifications

Species of Origin

Human

Affinity Tag

His Tag (C-term)

Purity

>95% as determined by SDS-PAGE analysis.

Activity

Measure by its ability to induce proliferation in BaF3 cells transfected with mouse Flt-3. The ED $_{50}$ for this effect is <0.8 ng/mL. The specific activity of recombinant human Flt-3 Ligand is > 1 x 10^6 IU/mg, which is calibrated against the human Flt-3 Ligand WHO Reference Reagent (NIBSC code 96/532).

Mycoplasma

Not detected

Expression system

Escherichia coli

Buffer

Lyophilized from a 0.2 μm filtered solution of PBS, pH 8.0.

Molecular weight

The protein has a calculated MW of 18.6 kDa. The protein migrates as 15-19 kDa under reducing condition (SDS-PAGE analysis).

Endotoxin level

<0.05 EU per 1 μg of the protein by the LAL method.

Form

Lyophilized

Background

Tainan Headquarter

Taipei Office



Background

Fms-related tyrosine kinase-3 ligand (Flt-3 Ligand) is a protein which is encoded by the FLT3LG gene in human. As an important regulator of hematopoiesis, Flt-3 ligand has a tyrosine-protein kinase activity that stimulate the proliferation of hematopoietic progenitor cells of both lymphoid and myeloid origin. Flt-3 ligand can synergistically increase the proliferation of immature progenitors with other cytokines such as GM-CSF, G-CSF, IL-3, EPO, IL-11, IL-12, IL-6 or TPO. Flt-3 ligand is expressed by a variety of hematopoietic progenitor cells including immature hematopoietic and marrow stromal cells.

Uniprot ID

P49771

Synonyms

Fms-related tyrosine kinase 3 ligand, Flt3L, SL cytokine

Sequence Note

Thr27-Ala181

Instruction

Reconstitution

It is recommended to reconstitute the lyophilized protein in sterile H₂O to a concentration not less than 0.5 mg/mL and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved.

Shipping

The product is shipped with polar packs. Upon receipt, store it immediately at -20°C or lower for long term storage.



Stability & Storage

This product is stable after storage at:

- -20°C for 12 months in lyophilized state from date of receipt.
- -20°C or -80°C for 1 month under sterile conditions after reconstitution.

Avoid repeated freeze/thaw cycles.

Manufacturing specifications

LeadGMP® recombinant proteins are manufactured in ISO 13485:2016 and GMP certified facility. The processes include:

- Animal-free reagent and laboratory
- Manufactured and tested under GMP guideline
- Testing and traceability of raw material
- Records of the maintenance and equipment calibration
- Personnel training records
- Batch-to-batch consistency
- Documentation of QA control and process changes
- Manufactured and tested under an ISO 13485:2016 certified quality management system
- Stability monitor of product shelf-life

Image



SDS-PAGE analysis of LeadGMP® Flt-3 Ligand, Human



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