

Recombinant Human Flt3 ligand/Flt3L Protein

Catalog No.: RP00175 **Recombinant**

Sequence Information

Species	Gene ID	Swiss Prot
Human	2323	P49771

Tags

C-His

Synonyms

FL;FLT3L;FLT3LG;FLT3LG

Product Information

Source	Purification
HEK293 cells	≥ 95 % as determined by SDS-PAGE; ≥ 95 % as determined by HPLC.

Calculated MW	Observed MW
18.88 kDa	20-37 kDa

Endotoxin

< 0.1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

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✉	cn.market@abclonal.com.cn

Background

FLT3LG, also known as flt3 ligand, is a small molecule that acts as a growth factor that increases the number of immune cells by activating the hematopoietic progenitors. FLT3LG is expressed as a noncovalently-linked dimer by T cells and bone marrow and thymic fibroblasts. Alternate splicing of human FLT3LG also generates membrane-associated isoforms that contain either a truncated cytoplasmic tail or an 85 aa substitution following the cytokine domain. Both transmembrane and soluble FLT3LG signal through the tyrosine kinase receptor Flt-3/Flk-2. FLT3LG induces the expansion of monocytes and immature dendritic cells as well as early B cell lineage differentiation. It synergizes with IL-3, GM-CSF, and SCF to promote the mobilization and myeloid differentiation of hematopoietic stem cells. It cooperates with IL-2, -6, -7, and -15 to induce NK cell development and with IL-3, -7, and -11 to induce terminal B cell maturation.

Basic Information

Description

Recombinant Human Flt3 ligand/Flt3L Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Thr27-Pro185) of human FLT3L/Flt3 ligand/FLT3LG (Accession #NP_001450.2) fused with a 6xHis tag at the C-terminus.

Bio-Activity

1□ Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human Flt3 ligand at 2 μg/mL (100 μL/well) can bind Recombinant Human Flt-3 with a linear range of 0.128-3.97 ng/mL. 2□ Measured in a cell proliferation assay using Human OCI-AML5 cells. The ED₅₀ for this effect is 0.09-0.36 ng/mL, corresponding to a specific activity of 2.78×10⁶~1.11×10⁷ units/mg.

Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

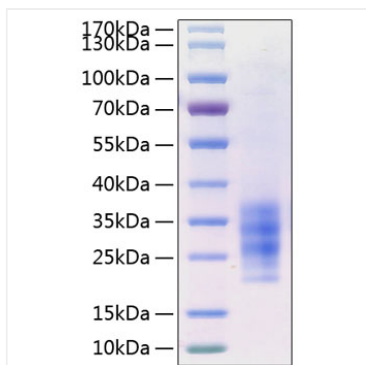
Avoid repeated freeze/thaw cycles.

Operational Notes

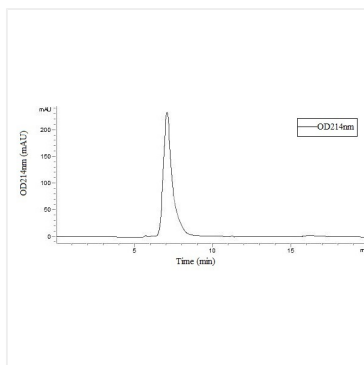
For your safety and health, please wear a lab coat and disposable gloves for handling.



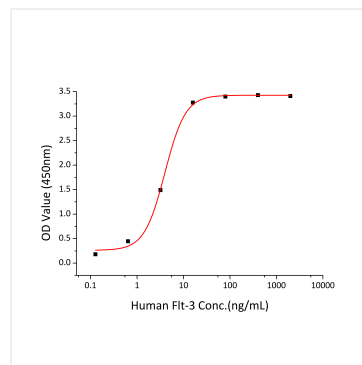
Validation Data



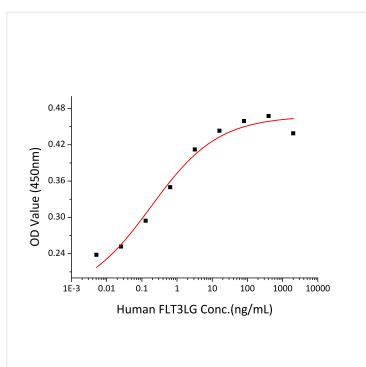
Recombinant Human Flt3 ligand/Flt3L Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



The purity of Recombinant Human Flt3 ligand/Flt3L Protein is greater than 95% as determined by SEC-HPLC.



Immobilized Recombinant Human Flt3 ligand at 2 μ g/mL (100 μ L/well) can bind Recombinant Human Flt-3 with a linear range of 0.128-3.97 ng/mL.



Measured in a cell proliferation assay using Human OCI-AML5 cells. The ED₅₀ for this effect is 0.09-0.36 ng/mL, corresponding to a specific activity of 2.78 $\times 10^6$ ~1.11 $\times 10^7$ units/mg.