

RP01314

Leader in Biomolecular Solutions for Life Science



Recombinant Human FLT-3/FLK-2/CD135 Protein

Catalog No.: RP01314

Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
Human	2322	P36888

Tags

C-hFC&His

Synonyms

FLT3;CD135;FLK-2;FLK2;STK1

Product Information

Source	Purification
HEK293 cells	> 95% by SDS-PAGE.

Endotoxin

< 1.0 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

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



www.abclonal.com

Background

The cluster of differentiation (CD) system is commonly used as cell markers in Immunophenotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules which associating with the immune function of the cell. There are more than 320 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a signal cascade which then alter the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion. CD135, also known as FLT-3, FLK-2, is a member of the CD system. CD135 is an important cell surface marker recognized by specific sets of antibodies to identify the types of hematopoietic (blood) progenitors in the bone marrow and it function to differentiate hematopoietic stem cells, which are CD135 negative, from multipotent progenitors, which are CD135 positive. CD135 is a receptor tyrosine kinase typeIII for the cytokine Flt3 ligand and activat signaling through second messengers by binding to Flt3. Signaling through CD135 is important for lymphocyte development. The encoding gene CD135 is a proto-oncogene to which mutations happened will lead to cancer such as leukemia.

Basic Information

Description

Active Recombinant Human FLT-3/FLK-2 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Asn27-Asn541) of human Flt-3 (Accession #NP_004110.2) fused with an 6xHis tag and Fc tag at the C-terminus.

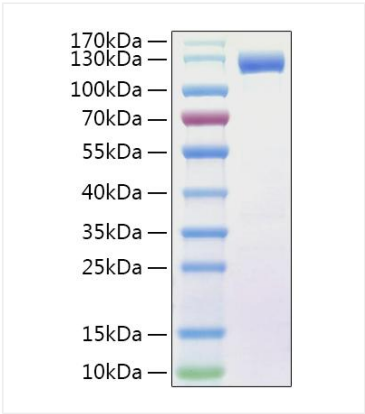
Bio-Activity

Measured by its binding ability in a functional ELISA. Immobilized Human FLT3L at 5 μg/mL (100 μL/well) can bind Human FLT3 with a linear range of 1.95-66.1 ng/mL.

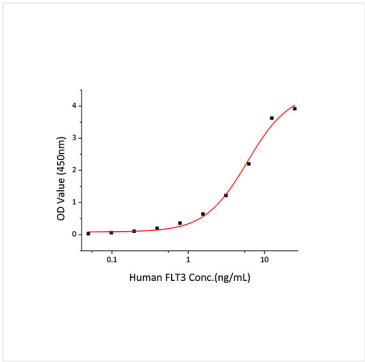
Storage

Store the lyophilized protein at -20°C to -80°C for long term.
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.

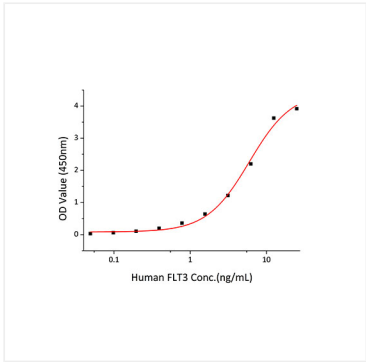
Validation Data



Recombinant Human Flt-3 Protein with His tag was determined by SDS-PAGE with Coomassie Blue, showing a band at 120-130 kDa.



Immobilized Human FLT3L at 5 µg/mL (100 µL/well) can bind Human FLT3 with a linear range of 1.95-66.1ng/mL.



Immobilized recombinant Human FLT3L at 0.5 µg/mL (100 µL/well) can bind FLT3 with a linear range of 0.05-6 ng/mL.