

For Research Use Only

Recombinant Human VEGFR3/FLT4 protein (hFc Tag)(HPLC verified)

Catalog Number: Eg0353



Basic Information

Species:
Human

Purity:
>95 %, SDS-PAGE
 SEC-HPLC

Tag:
hFc Tag
EC50:
2-9 ng/mL

Technical Specifications

Purity:
>95 %, SDS-PAGE
 >90 %, SEC-HPLC

Endotoxin Level:
<0.1 EU/μg protein, LAL method

Source:
HEK293-derived Human VEGFR3 protein Tyr25-Ile776 & Ser473-Ile776 (Accession# P35916-1) with a human IgG1 Fc tag at the C-terminus.

GeneID:
2324

Accession:
P35916-1

Predicted Molecular Mass:
110.5 kDa

SDS-PAGE:
125-150 kDa, 85-95 kDa, 65-75kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 μm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Immobilized Human VEGFC (Myc tag, His tag) at 2 μg/mL (100 μL/well) can bind Human VEGFR3 (hFc tag) with a linear range of 2-9 ng/mL.

Storage and Shipping

Storage:
It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20°C to -80°C as lyophilized proteins.
- 3 months, -20°C to -80°C under sterile conditions after reconstitution.

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

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

FLT4 (Fms-related tyrosine kinase 4; also known as VEGFR3) is the main receptor for VEGFC (vascular endothelial growth factor C), and its activation mediates LEC (lymphatic endothelial cell) proliferation, migration, and survival. FLT4 and the ligand VEGFC increase their expression in macrophages upon bacterial infection. Studies have demonstrated the critical roles of the FLT4-mediated pathway in the regulation of lymphatic and blood vascular development. FLT4 and its ligand VEGFC are expressed in leukemic blasts in AML and that the role of this signaling axis is closely related to blast survival. In addition, VEGFC and FLT4 are expressed in the BM (bone marrow) of AML (Acute myeloid leukemia) and VEGFC can protect AML blasts against chemotherapy by inducing their proliferation, showing the importance of VEGFC signaling in blast maintenance.

References

1. Tuomas Tammela. et al. (2008). Nature. 454(7204):656-660.
2. Ayelet Jerafi-Vider. et al. (2021). Cell Reports. 35(11):109255.
3. Li Ma. et al. (2022). Autophagy. 18(6):1385-1400.
4. de Jonge HJ. et al. (2008). Clinical Cancer Research. 14(3):924-930.
5. Sergio Dias. et al. (2002). Blood. 99(6):2179-2184.

Synonyms

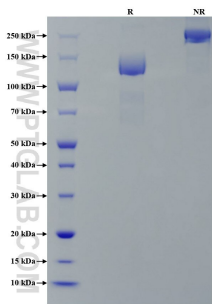
FLT4, EC:2.7.10.1, FLT 4, FLT-4, FLT41

For technical support and original validation data for this product please contact

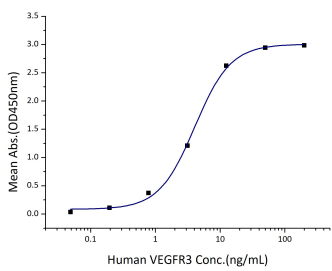
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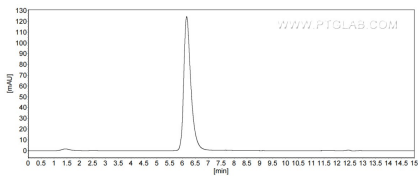
Selected Validation Data



Purity of Recombinant Human VEGFR3 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.



Immobilized Human VEGFC (Myc tag, His tag) at 2 µg/mL (100 µL/well) can bind Human VEGFR3 (hFc tag) with a linear range of 2-9 ng/mL



The purity of inant Human VEGFR3/FLT4 was greater than 90% as determined by SEC-HPLC.