

For Research Use Only

# Recombinant Human VEGFR1/FLT-1 protein (His Tag)



Catalog Number: Eg0438

## Basic Information

**Species:**  
Human

**Purity:**  
>90 %, SDS-PAGE

**Tag:**  
His Tag

## Technical Specifications

**Purity:**  
>90 %, SDS-PAGE

**Endotoxin Level:**  
<0.1 EU/  $\mu$ g protein, LAL method

**Source:**  
HEK293-derived Human VEGFR1 protein Ser27-Asn756 (Accession# P17948-1) with a His tag at the C-terminus.

**GeneID:**  
2321

**Accession:**  
P17948-1

**Predicted Molecular Mass:**  
86 kDa

**SDS-PAGE:**  
100-140 kDa, reducing (R) conditions

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

## Biological Activity

Not tested

## 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

Vascular endothelial growth factor receptor-1 (VEGFR-1, FLT-1) is a receptor tyrosine kinase belonging to the VEGFR family. VEGF is a key regulator of physiological angiogenesis and has also been implicated in pathological angiogenesis associated with tumors, intraocular neovascular disorders and other conditions. The biological effects of VEGF are mediated by VEGFR-1 and VEGFR-2. Both the two receptors have seven immunoglobulin-like repeats in the extracellular domain, a single transmembrane region and a tyrosine kinase domain. VEGFR-1 binds VEGFA, PlGF and VEGFB, and plays an essential role in the development of embryonic vasculature, the regulation of angiogenesis, cell survival, cell migration, macrophage function, chemotaxis, and cancer cell invasion. Soluble VEGF receptor-1 (sVEGFR-1, sFlt-1), a truncated version of the cell membrane-spanning VEGFR-1, has the potential to act as a decoy receptor for VEGFA. Elevated serum sVEGFR-1 have been found in women with preeclampsia. Excess placental sVEGFR-1 may contribute to endothelial dysfunction, hypertension, and proteinuria in preeclampsia.

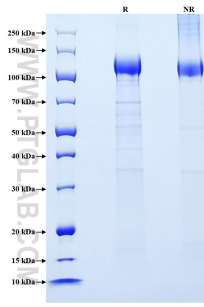
## References

1. Kendall, R L et al. (1996) *Biochem Biophys Res Commun.*226(2):324-328.
2. Koga, Kaori et al. (2003) *J Clin Endocrinol Metab.* 88(5):2348-2351.
3. Shibuya, Masubmi. (2006) *Angiogenesis.*9(4):225-231.
4. Wu, Florence T H et al. (2010) *J Cell Mol Med.*14(3):528-552.

## Synonyms

FLT1, EC:2.7.10.1, FLT, FLT 1, FLT-1

## Selected Validation Data



Purity of Recombinant Human VEGFR1 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.

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

T: 027-87531629

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

W: [ptgcn.com](http://ptgcn.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.