

# Human CellExp VEGF R1 /Flt-1, human recombinant protein

FLT, VEGFR1, FLT1 Catalog # PBV10867r

#### **Specification**

### Human CellExp VEGF R1 /Flt-1, human recombinant protein - Product info

Primary Accession <u>P17948</u>

Calculated MW

The protein is fused with 6×His tag at the

N-terminus, has a calculated MW of 50.6 kDa. The predicted N-terminus is Asp 34. DTT-reduced Protein migrates as 55-60

kDa due to glycosylation. KDa

# Human CellExp VEGF R1 /Flt-1, human recombinant protein - Additional Info

Gene ID 2321 Gene Symbol VEGFR1

Other Names FLT, VEGFR1, FLT1

Gene Source Human

Source HEK 293 cells
Assay&Purity SDS-PAGE; ≥98%

Assay2&Purity2 HPLC; Recombinant Yes

Target/Specificity

VEGFR1

# **Application Notes**

Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50  $\mu$ g/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

# **Format**

Lyophilized powder

#### **Storage**

 $-20^{\circ}$ C; Lyophilized from 0.22 µm filtered solution in PBS. Generally 5-8% Mannitol or trehalose is added as a protectant before lyophilization.

# Human CellExp VEGF R1 /Flt-1, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry



Tel: 858.875.1900 Fax: 858.875.1999

- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### Human CellExp VEGF R1 /Flt-1, human recombinant protein - Images

# Human CellExp VEGF R1 /Flt-1, human recombinant protein - Background

Vascular endothelial growth factor receptor 1 (VEGFR1) also known as Fms-like tyrosine kinase 1 (FLT-1), Tyrosine-protein kinase receptor FLT, is a single-pass type I membrane protein and secreted protein which belongs to the protein kinase superfamily, Tyr protein kinase family and CSF-1/PDGF receptor subfamily. VEGFR1 is detected in normal lung, but also in placenta, liver, kidney, heart and brain tissues and specifically expressed in most of the vascular endothelial cells, and also expressed in peripheral blood monocytes. VEGFR1 acts as a cell-surface receptor for VEGFA, VEGFB and PGF, 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. VEGFR1 may play an essential role as a negative regulator of embryonic angiogenesis by inhibiting excessive proliferation of endothelial cells. VEGFR1 can promote endothelial cell proliferation, survival and angiogenesis in adulthood.

# Human CellExp VEGF R1 /Flt-1, human recombinant protein - References

Shibuya M., et al. Oncogene 5:519-524(1990). Kendall R.L., et al. Proc. Natl. Acad. Sci. U.S.A. 90:10705-10709(1993). Herley M.T., et al. Biochem. Biophys. Res. Commun. 262:731-738(1999). Jin P., et al. Arthritis Res. Ther. 10:R73-R73(2008). Sela S., et al. Circ. Res. 102:1566-1574(2008).