

VEGF R1 /Flt-1, Human CellExp™, human recombinant

CATALOG #: 7237-10 10 µg

ALTERNATE NAMES: FLT, VEGFR1, FLT1

SOURCE: HEK 293 cells (Ser 27 - Asn 756)

PURITY: ≥ 98% by SDS-PAGE gel

MOL. WEIGHT: 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.

ENDOTOXIN LEVEL: <1 EU/µg by LAL method

FORM: Lyophilized

FORMULATION: Lyophilized from 0.22 µm filtered solution in PBS. Generally 5-8% Mannitol or trehalose is added as a protectant before lyophilization.

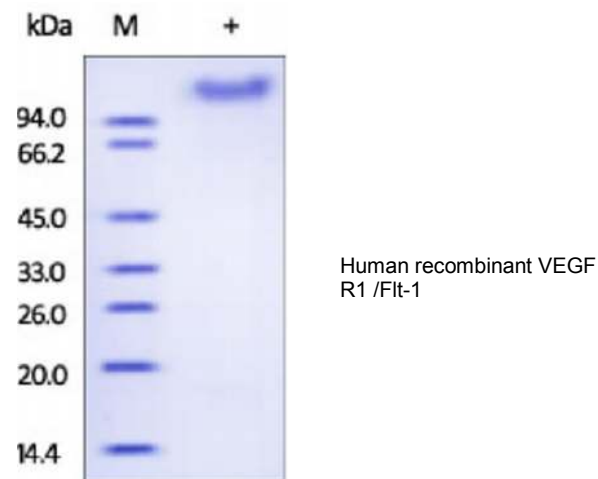
STORAGE CONDITIONS: Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

RECONSTITUTION: Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/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.

DESCRIPTION: 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.

BIOLOGICAL ACTIVITY: Measured by its ability to inhibit the VEGF-dependent proliferation of HUVEC human umbilical vein endothelial cells. The ED₅₀ for this effect is typically 2-25 ng/ml.



RELATED PRODUCTS:

- Human CellExp™ Human Recombinant VEGF-C (Cat # 7231-10)
- Human CellExp™ Human Recombinant VEGF 165 (Cat # 6485-10, -50)
- VEGF121, human recombinant (Cat. No. 4963-10, -50, -1000)
- VEGF165, human recombinant (Cat. No. 4363-10, -50, -1000)
- VEGF165, murine recombinant (Cat. No. 4364-10, -50, -1000)
- VEGF165, rat recombinant (Cat. No. 4365-10, -50, -1000)
- VEGF120, murine recombinant (Cat. No. 4964-10, -100, -1000)
- VEGF-B, human recombinant (Cat. No. 4642-10, -20, -1000)
- VEGF-C, human recombinant (Cat. No. 4633-10, -50, -1000)
- VEGF-C, murine recombinant (Cat. No. 4634-10, -50, -1000)
- VEGF-C, rat recombinant (Cat. No. 4635-10, -50, -1000)
- VEGF-D, human recombinant (Cat. No. 4343-10, -50, -1000)

