10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

VEGF R3/FLT4

Catalog # PVGS1839

Specification

VEGF R3/FLT4 - Product Information

Primary Accession	P35917

Species
Mouse

Sequence
Tyr25-Glu775

Purity
> 95% as determined by Bis-Tris PAGE
 > 95% as determined by HPLC

Endotoxin Level
Less than 1EU per μg by the LAL method.

Biological Activity
Immobilized VEGF R3/FLT4 hFc Chimera, Mouse (Cat.No.: Z03974) at 1 μg/ml (100 μl/Well) on the plate can bind Human VEGF-C, His Tag

Expression System
HEK293

Theoretical Molecular Weight
111.69 kDa

Formulation	**Lyophilized from a 0.22 μm filtered solution in PBS, (pH 7.4).**

Reconstitution
It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH₂O more than 100 μg/ml.

Storage & Stability
Upon receiving, the product remains stable up to 6 months at -20 °C or below. Upon reconstitution, the product should be stable for 3 months at -80 °C. Avoid repeated freeze-thaw cycles.

VEGF R3/FLT4 - Additional Information

Gene ID 14257

Other Names
Vascular endothelial growth factor receptor 3, VEGFR-3, 2.7.10.1, Fms-like tyrosine kinase 4, FLT-4, Tyrosine-protein kinase receptor FLT4, Flt4, Flt-4, Vegfr3

Target Background
Vascular endothelial growth factor receptor 3 (VEGFR3) is one kind of tyrosine-protein kinase.

VEGFR3 acts as a cell-surface receptor for VEGFC and VEGFD. It is a key regulator of lymphatic system development and establishment. VEGFR3 plays important roles in angiogenesis. It is also up-regulated in the endothelium of blood vessels in breast cancer and various other tumors.

VEGF R3/FLT4 - Protein Information

Name Flt4

Synonyms Flt-4, Vegfr3

Function
Tyrosine-protein kinase that acts as a cell-surface receptor for VEGFC and VEGFD, and plays an essential role in adult lymphangiogenesis and in the development of the vascular network and the cardiovascular system during embryonic development. Promotes proliferation, survival and migration of endothelial cells, and regulates angiogenic sprouting. Signaling by activated FLT4 leads to enhanced production of VEGFC, and to a lesser degree VEGFA, thereby creating a positive feedback loop that enhances FLT4 signaling. Modulates KDR signaling by forming heterodimers. Mediates activation of the MAPK1/ERK2, MAPK3/ERK1 signaling pathway, of MAPK8 and the JUN signaling pathway, and of the AKT1 signaling pathway. Phosphorylates SHC1. Mediates phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase. Promotes phosphorylation of MAPK8 at 'Thr-183' and 'Tyr-185', and of AKT1 at 'Ser-473'.

Cellular Location
Cell membrane; Single-pass type I membrane protein Cytoplasm. Nucleus. Note=Ligand-mediated autophosphorylation leads to rapid internalization

Tissue Location
Expressed in adult lung and liver, and in fetal liver, brain, intestine and placenta.

VEGF R3/FLT4 - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

VEGF R3/FLT4 - Images