

## VEGF R3/FLT4

Catalog # PVGS1839

## **Product Information**

Primary Accession Species	<u>P35917</u> Mouse
Sequence	Tyr25-Glu775
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC
Endotoxin Level	Less than 1EU per Ig by the LAL method.
Biological Activity	Immobilized VEGF R3/FLT4 hFc Chimera, Mouse (Cat.No.: Z03974) at 1 [g/ml (100 []/Well) on the plate can bind Human VEGF-C, His Tag
Expression System	HEK293
Theoretical Molecular Weight	111.69 kDa
Formulation Reconstitution	Lyophilized from a 0.22 Im filtered solution in PBS, (pH 7.4). It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH <sub>2</sub> O more than 100 Ig/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.

## **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.

## **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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.