



Recombinant Protein Technical Manual

Recombinant Rat VEGFR1/FLT Protein (His Tag)(Active)
RPES0966

Product Data:

Product SKU: RPES0966

Size: 50µg

Species: Rat

Expression host: HEK293 Cells

Uniprot: P53767

Protein Information:

Molecular Mass: 84 kDa

AP Molecular Mass: 10814 kDa

Tag: C-His

Bio-activity: Measured by its binding ability in a functional ELISA. Immobilized ratFLT1-His at 10 µg/ml (100 µl/well) can bind biotinylated mouse VEGFD-Fc with a linear range of 0.125-2.0 µg/ml.

Purity: > 90 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg of the protein as determined by the LAL method

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

Synonyms: FLT1;Flt;Vegfr1

Immunogen Information:

Sequence: Met1-Glu758

Background:

Vascular endothelial growth factor receptor 1, also known as VEGFR, Fms-like tyrosine kinase 1, Tyrosine-protein kinase FRT, Tyrosine-protein kinase receptor FLT, Vascular permeability factor receptor and FLT1, is a single-pass type I membrane protein and secreted protein which belongs to the protein kinase superfamily, Tyr protein kinase family and CSF/PDGF receptor subfamily. VEGFR / FLT1 contains seven Ig-like C2-type (immunoglobulin-like) domains and one protein kinase domain. VEGFR / FLT1 is expressed mostly in normal lung, but also in placenta, liver, kidney, heart and brain tissues. It is specifically expressed in most of the vascular endothelial cells, and also expressed in peripheral blood monocytes. VEGFR / FLT1 is not expressed in tumor cell lines. VEGFR / FLT1 is an essential receptor tyrosine kinase that regulates mammalian vascular development and embryogenesis. EGF-induced angiogenesis requires inverse regulation of VEGFR and VEGFR-2 in tumor-associated endothelial cells. VEGFR / FLT1 is a receptor for VEGF, VEGFB and PGF. It has a tyrosine-protein kinase activity. The VEGF-kinase ligand/receptor signaling system plays a key role in vascular development and regulation of vascular permeability.