

**DP3511S****Polyclonal Antibody to VEGFR-3 / Flt-4 - Azide Free****Alternate names:**

FLT4, Tyrosine-protein kinase receptor FLT4, VEGF Receptor 3, VEGFR3, Vascular endothelial growth factor receptor 3

**Quantity:**

0.1 mg

**Background:**

The sVEGFR-3/FLT-4 monomers have a mass of approximately 120kDa. The soluble receptor protein consists of all 7 extracellular domains (Met1-Glu774). All three VEGF receptors belong to the class III subfamily of receptor tyrosine kinases (RTKs) characterised by the seven immunoglobulin-like loops in the extracellular domain. The expression of VEGFR-1 to -3 is almost exclusively restricted to hematopoietic precursor cells, vascular and lymphatic endothelial cells and to the monocyte/macrophage lineage. They play key roles in vasculogenesis, hematopoiesis, angiogenesis and lymphangiogenesis. The FLT-4 cDNA encodes a 1298 amino acid (aa) residue precursor protein with a 23 aa residue signal peptide. Mature VEGFR-3/FLT-4 is composed of a 751 aa residue extracellular domain, a 22 aa transmembrane domain and a 482aa residue cytoplasmic domain. Both VEGF family members VEGF-C and VEGF-D have been shown to bind and activate VEGFR-3/FLT-4. The Flt-4 gene is widely expressed in the early embryo but becomes restricted to the lymphatic endothelial

**Uniprot ID:**

[P35916](#)

**NCBI:**

[NP\\_002011.2](#)

**GeneID:**

[2324](#)

**Host:**

Rabbit

**Immunogen:**

Recombinant human soluble FLT-4 protein (110 kDa).

**Format:**

**State:** Lyophilized purified Ig fraction

**Purification:** Protein A Affinity Chromatography

**Buffer System:** PBS, pH 7.4 containing no preservatives or stabilizers

**Reconstitution:** Restore in sterile water to a concentration of 0.1-1 mg/ml.

**Applications:**

**ELISA:** 0.5-1.5 µg/ml, allows the detection of 0.25-0.5 ng/well rhVEGFR-3/FLT-4.

**Western Blot:** 0.5-1 µg/ml, it will detect approximately 5 ng/lane of rh VEGFR-3/FLT-4 under reducing conditions depending on the visualisation method.

**Immunoprecipitation:** 1-5 µg/ml lysate or reaction volume.

**FACS:** Use 1-5 µg/ml

**Immunofluorescence.**

**Immunohistochemistry on Frozen sections.**

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

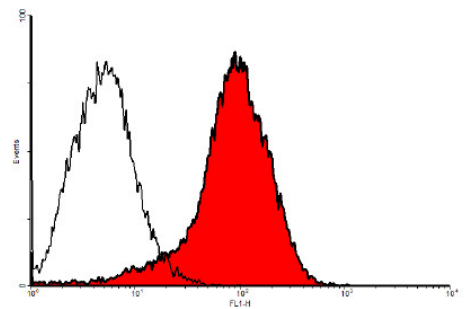
**Specificity:** The antibody will detect human VEGFR-3/FLT-4.  
 In Western blots, this antibody shows a moderate cross-reactivity with VEGFR-2/KDR and a weak cross-reactivity with VEGFR-1/Flt-1.

**Species:** Human.  
 Other species not tested.

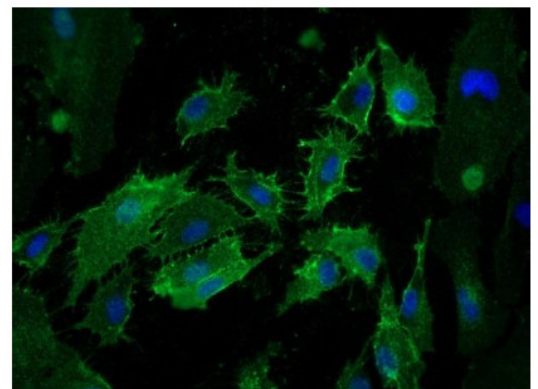
**Storage:** Store lyophilized at 2-8°C for 6 months or at -20°C long term.  
 After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term.  
 Avoid repeated freezing and thawing.  
 Shelf life: one year from despatch.

**General Readings:**  
 1. Joukov et al., EMBO J 15 :290, 1996.  
 2. Kukk et al., Development 122 :3829, 1996.

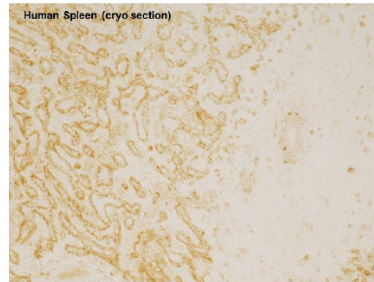
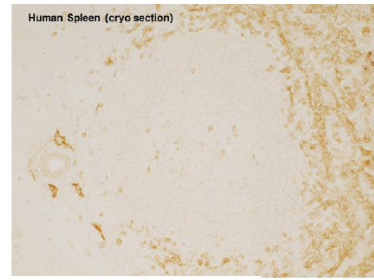
**Pictures:** FACS analysis with primary human dermal lymphatic endothelial cells (HDLEC).



Immunofluorescence staining (green) of VEGFR-3/FLT4 in primary human dermal lymphatic endothelial cells (HDLEC) with anti-human VEGFR-3/FLT4 (10µg/ml) [Cat#DP3511] and counter staining of nuclei with Dapi. As secondary antibody goat anti-rabbit ALEXA Flour 488 (Dianova) was used 1:800.



IHC with cryo sections of human spleen.



Western Analysis of anti-human VEGFR-3/FLT-4 Cat.N-DP3511. Samples were loaded in 7.5% SDS-polyacrylamide gel under reducing conditions.

