

DP3522**Polyclonal Antibody to VEGFR-1 / Flt-1 (C-term) - Azide Free****Alternate names:**

FLT, FLT1, FRT, Fms-like tyrosine kinase 1, Tyrosine-protein kinase FRT, Tyrosine-protein kinase receptor FLT, VEGF Receptor 1, VEGFR1, Vascular endothelial growth factor receptor 1, Vascular permeability factor receptor

Quantity:

0.2 mg

Background:

Three cell membrane receptor tyrosine kinases, Flt (also designated VEGF-R1), Flk-1 (also designated VEGF-R2) and Flt-4, putatively involved in the growth of endothelial cells, are characterized by the presence of seven immunoglobulinlike sequences in their extracellular domain. These receptors exhibit high degrees of sequence relatedness to each other as well as lesser degrees of relatedness to the class III receptors, including CSF-1/Fms, PDGR, SLFR/Kit and Flt-3/Flk-2. Two members of this receptor class, Flt-1 and Flk-1, have been shown to represent high affinity receptors for vascular endothelial growth factors (VEGFs). On the basis of structural similarity to Flt and Flk-1, it has been speculated that Flt-4 might represent a third receptor for either VEGF or a VEGF-related ligand.

Uniprot ID:

[P17948](#)

NCBI:

[NP_001153392.1](#)

GeneID:

[2321](#)

Host / Isotype:

Rabbit / IgG

Immunogen:

Peptide of the unique C-terminal end of native Human soluble VEGFR-1/Flt-1

AA Sequence:

GEHCNKKAVFSRISKFKSTRNDSTTQSNVKH

Format:

State: Lyophilized purified Ig fraction

Purification: Protein A Chromatography

Buffer System: PBS, pH 7.2 without preservatives or stabilizers

Reconstitution: Restore in sterile water to a concentration of 0.1-1.0 mg/ml

Applications:

Western Blot: This VEGFR1 antibody can be used at 0.5-2.0 µg/ml with the appropriate secondary reagents to detect native Human sVEGFR-1/Flt-1.

Immunofluorescence: 1-5 µg/ml.

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

Specificity:

This antibody recognizes the recombinant soluble VEGFR-1/FLT-1 (native) but not the recombinant soluble VEGFR-1/FLT-1 (D1-5) both produced in Insect cells. Because of the different glycosylation of insect cells compared to mammalian cells the MW of sFlt-1 (native) is about 96 kDa instead of about 110 kDa of the naturally occurring sFlt-1.

The antibody did not cross react with recombinant Human soluble KDR (D1-7).

Species Reactivity:

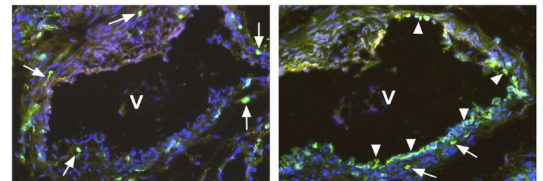
Tested: Human.

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. Barleon B, Totzke F, Herzog C, Blanke S, Kremmer E, Siemeister G, et al. Mapping of the sites for ligand binding and receptor dimerization at the extracellular domain of the vascular endothelial growth factor receptor FLT-1. *J Biol Chem.* 1997 Apr 18;272(16):10382-8. PubMed PMID: 9099677.
2. Roeckl W, Hecht D, Sztajer H, Waltenberger J, Yayon A, Weich HA. Differential binding characteristics and cellular inhibition by soluble VEGF receptors 1 and 2. *Exp Cell Res.* 1998 May 25;241(1):161-70. PubMed PMID: 9633524.

Pictures: **Immunofluorescence** staining (green) using Polyclonal antibody directed against the C-terminal end of native soluble VEGFR-1/Flt-1 (Cat#DP3522)(Left panel) and Monoclonal antibody directed against the extracellular domain of the membrane-bound VEGFR-1/Flt-1(Cat#DM3507) (Right panel). You see two neighboring sections of a Human Vein (V), located near a hemangioma. The antibody against the soluble VEGFR-1/Flt-1 marked single cells (arrows) within the media and adventitia of the vein. The antibody against the membrane-bound VEGFR-1/Flt-1 marked single cells (arrows) and the endothelium (arrowhead) of the vein. Cell nuclei are stained with Dapi (blue).



The experiment was performed by K. Butler and J. Wilting, University Göttingen, Germany.

Western Blot: Detection of Human soluble VEGFR-1/Flt-1 by a specific polyclonal antibody. Left: Mouse anti-Human Flt-1 Monoclonal antibody (Cat#DM3507) Right: Rabbit anti-Human Flt-1 Polyclonal antibody (Cat#DP3522/DP3522S)

