Anti-human VEGFR-3/FLT-4

20201118DS

FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	**102-PA22**
Size:	200 µg
Lot. No.:	According to product label
Country of origin:	Germany

Preparation: Produced from sera of rabbits immunised with highly pure recombinant human soluble VEGFR-3/FLT-4 (D1-7).

Target Background

Synonyms:	Vascular endothelial growth factor receptor 2, Protein-tyrosine kinase receptor flk-1

Recombinant human soluble Vascular Endothelial Growth Factor Receptor-3 (sVEGFR-3/FLT-4) was fused with a C-terminal 6X Histidine-tag. The recombinant mature sVEGFR-3/FLT-4 is a glycosylated monomeric protein. 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

References

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

Database References Antigen

Protein RefSeq:	NP_002011
Uniprot ID:	P35916
mRNA RefSeq:	NM_002020

Product Specifications

Species reactivity	human
Clone/Ab feature	Rabbit IgG
Cross reactivity	ND
Host	rabbit
Clonality	polyclonal
Purification	Protein A purified
Immunogen	Recombinant human sFLT-4 (D1-7)
Formulation	lyophilized
Buffer	PBS

Stability: The lyophilized antibody is stable for at least 2 years at -20°C. After sterile reconstitution the antibody is stable at 2-8°C for up to 6 months. Frozen aliquots are stable for at least 6 months when stored at -20°C. Addition of a carrier protein or 50% glycerol is recommended for frozen aliquots.

Reconstitution: Centrifuge vial prior to opening. Reconstitute in sterile water to a concentration of 0.1-1.0 mg/ml.

AVOID REPEATED FREEZE AND THAW CYCLES!

Applications

Western Blot:	Use at 1-2 µg/ml
ELISA:	Use at 1-5 µg/ml
FACS	Use 1-5 µg/ml
IF/IHC	Cryo sections

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!

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Handling/Applications

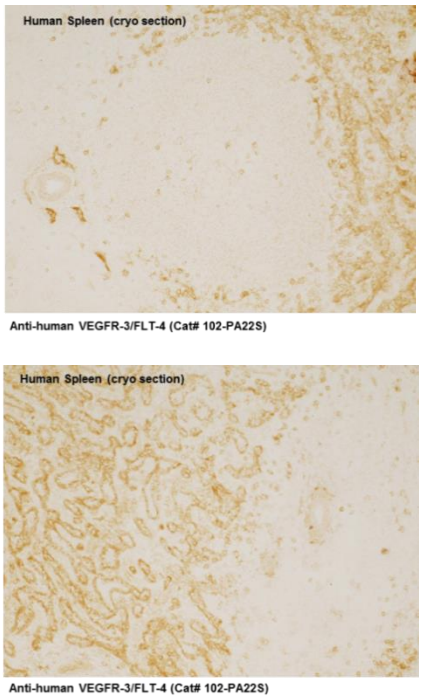

Figure 1: IHC with cryo sections of human spleen.

The experiment was performed by Prof. Dr. Birte Steiniger, Institute of Anatomy and Cell Biology Robert-Koch-Str. 8, D-35037 Marburg, Germany

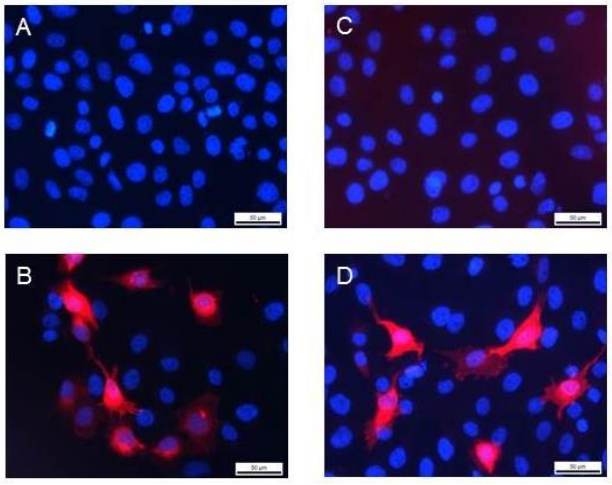

Figure 2: Immunofluorescence staining of human VEGFR-3/FLT-4 (red) in hFlt4-transfected MG63 cells. Monoclonal mouse anti-human FLT-4 #9D9 [Cat# 101-M36] and polyclonal rabbit anti-human FLT-4 (D) [Cat# 102-PA22]: A and C are negative control with secondary antibody only; B (mAb) and D (pAb) with specific antibodies against human FLT-4.

The experiment was performed by the research group of Dr. Wolfgang Holnthoner, Ludwig Boltzmann Institute for Experimental and Clinical Traumatology, Austrian Cluster for Tissue Regeneration, Donaueschingenstrasse 13, A-1200 Vienna, Austria

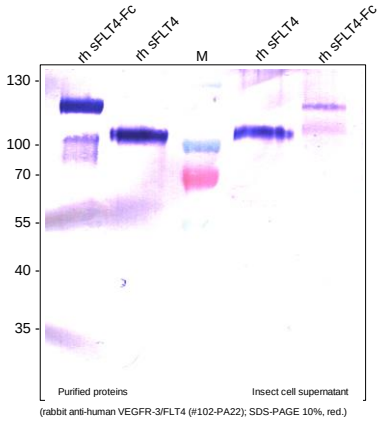

Figure 3: Western analysis of recombinant human soluble VEGFR3/FLT-4 using a rabbit anti-human FLT-4 antibody [Cat# 102-PA22]. Lane ½: purified proteins; Lane 4/5: insect cells supernatant.

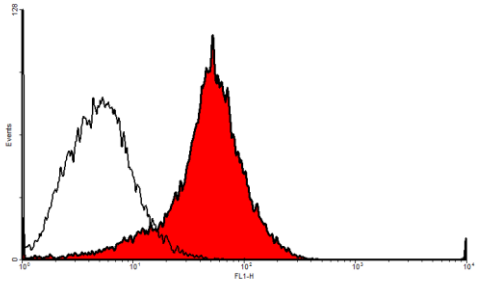

Figure 4. FACS analysis with primary human dermal lymphatic endothelial cells (HDLEC).