

Product Specification Sheet

FLT-4/VEGFR3 Antibodies

Cat. FLT42-A	Rabbit Anti-Human FLT-4 IgG # 2 (Affinity pure)	SIZE: 100 ug
Cat. FLT42-P	Human FLT-4 Control/blocking peptide # 2	SIZE: 100 ug

Embryonic vascular system undergoes a series of complex, highly regulated series of events involving differentiation, migration and association of primitive endothelial cells. This process is termed vasculogenesis. A further remodeling of the primitive vascular system forms the mature cardiovascular system. This process is known as angiogenesis (sprouting of new capillary vessels from pre-existing vasculature). Study of tumor angiogenesis has led to the identification of several proteins including basic fibroblast growth factor (bFGF) and vascular endothelial growth factor. VEGF acts by interacting with a family of largely endothelial-specific receptor tyrosine kinases that includes VEGFR-1 (flt-1/flk-2), VEGFR-2 (flk-1/KDR), and VEGFR-3/Flt-4. Disruption of VEGFRs interferes with differentiation of endothelial cells and it is lethal for the embryo.

FLT-4 (mouse/rat 1363 aa, human 1298 aa;), a receptor protein tyrosine kinase, is a receptor for VEGF-C. It is type 1 membrane protein. It is expressed in adult lung, and liver, and in fetal liver, brain, intestine, and placenta

Source of Antigen and Antibodies

Antigen	20aa peptide of Human FLT4 ; Designated (FLT42-P or control peptide) conjugated to KLH; Epitope location~ C-terminal, Cytoplasmic domain
Ab Host/type	Rabbit, polyclonal Aff pure IgG1 (cat #FLT42-A) purified over antigen-agarose column
2-ab	Goat Anti-rabbit IgG-HRP cat # 20320 (AP, biotin, FITC conjugates also available)
-ve control IgG	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as -ve control

Form & Storage of Antibodies/Peptide Control

Affinity pure IgG
100 ug/100ul solution lyophilized powder
Supplied in **Buffer:** PBS+0.1% BSA
Reconstitute powder in PBS at 1mg/ml

Control/blocking peptide
100 ug/100 ul solution lyophilized powder
Supplied in **Buffer:** PBS pH 7.5,
Reconstitute powder in PBS at 1 mg/ml.

Storage

Short-term: unopened, undiluted liquid vials at -20OC and powder at 4oC or -20oC..

Long-term: at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at -20oC or below.

Shipping: 4oC for solutions and room temp for powder.

Recommended Usage

Western Blotting (1-10 ug/ml for affinity pure using Chemiluminescence technique). The antibodies detected ~140 kDa band in rat liver extracts.

ELISA (1:10K-1:100K; using 50-100 ng of control peptide/well).

Histochemistry & Immunofluorescence: Not tested. We recommend the use of affinity purified antibody at 2-20 ug/ml in formaldehyde fixed tissue.

Specificity & Cross-reactivity

Human FLT42-P peptide sequence is 89% conserved in rat, 73% in mouse, and 78% in Japanese quail Flt-4/VEGFR3. No significant sequence homology of FLT42-P is seen with VEGFR1 or VEGFR2 or other tyrosine kinases. Antibody crossreactivity in various species is not established. The control peptide, because of its low mol. Wt (<3 kDa), is not suitable for Western. It should be used for ELISA or antibody blocking experiments (use 5-10 ug control peptide per 1 ug of aff pure IgG or 1 ul antiserum) to confirm antibody specificity (A detailed protocol is available at our web-site).

General References: (1) Finnerty H et al (1993) Oncogene 8, 2293-2298; Bailey SK et al (1992) Cancer Res. 52, 746-748; Pajusola K et al (1992) Cancer Res. 52, 5738-5743; Aprelikova O et al (1992) Cancer Res. 52, 746-748

**This product is for in vitro research use only.*

Related material available

Antibodies to Ang-1, Ang-2, Tie-1, Tie-2, Recombinant Mouse and Human VEGFs, Anti-flk-1, Flt-1, and Flt-4 (VEGFRs 1-3)

Western Blot recycling kit (Use the same blot to probe with multiple antibodies Ang-1 and Ang-2, etc.) **recycle blot at room temp in 5-10 min;** No mercaptoethanol or heating required).

FLT42-A-P 71208A

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