

VEGFR-1/FLT-1 Polyclonal antibody

Catalog Number: 13687-1-AP

51 Publications

Basic Information

Catalog Number:

13687-1-AP

Concentration:

1000 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG4558

GenBank Accession Number:

BC039007

GeneID (NCBI):

2321

UNIPROT ID:

P17948

Full Name:

fms-related tyrosine kinase 1
(vascular endothelial growth factor/vascular permeability factor receptor)

Calculated MW:

1338 aa, 151 kDa

Observed MW:

55-60 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:500-1:1000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:1000-1:4000

IF/ICC: 1:10-1:100

Applications

Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

Cited Applications:

WB, IHC, IF, IP

Species Specificity:

human, mouse

Cited Species:

human, mouse, rat, bovine, deer

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: HEK-293 cells, human placenta tissue, mouse lung tissue

IP: A549 cells,

IHC: human renal cell carcinoma tissue,

IF/ICC: HeLa cells,

Background Information

Vascular endothelial growth factor receptor-1 (VEGFR-1, FLT-1) is a receptor tyrosine kinase belonging to the VEGFR family. VEGF is a key regulator of physiological angiogenesis and has also been implicated in pathological angiogenesis associated with tumors, intraocular neovascular disorders, and other conditions. The biological effects of VEGF are mediated by VEGFR-1 and VEGFR-2. Both the two receptors have seven immunoglobulin-like repeats in the extracellular domain, a single transmembrane region and a tyrosine kinase domain. VEGFR-1 binds VEGFA, PIGF, and VEGFB, and plays an essential role in the development of embryonic vasculature, the regulation of angiogenesis, cell survival, cell migration, macrophage function, chemotaxis, and cancer cell invasion. Two isoforms of VEGFR-1 exist, a full-length transmembrane form and a short soluble form (sVEGFR-1) consisting of only the extracellular ligand-binding domain. (PMID: 12778165; 17109193; 8806634)

Notable Publications

Author	Pubmed ID	Journal	Application
Qiang Ma	31562866	Eur J Pharmacol	WB, IHC
Yun Shi	31513785	Biochem Pharmacol	WB
Jie Zhang	36266491	Mol Cell Biochem	WB

Storage

Storage:

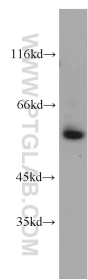
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

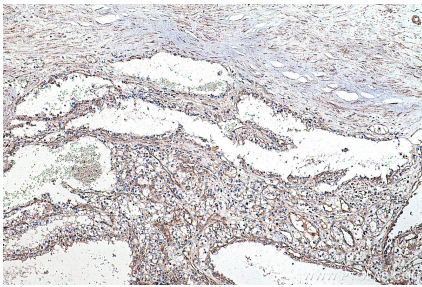
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

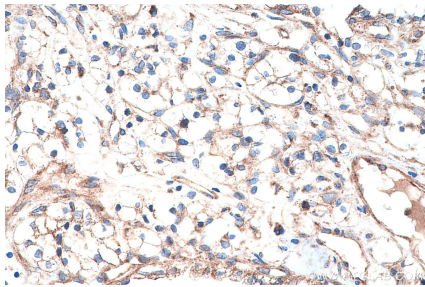
Selected Validation Data



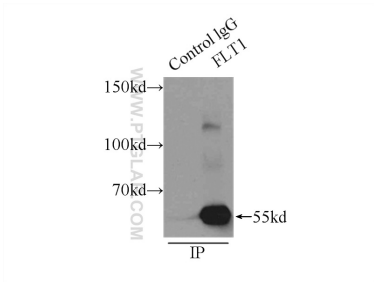
HEK-293 cells were subjected to SDS PAGE followed by western blot with 13687-1-AP (VEGFR-1/FLT-1 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



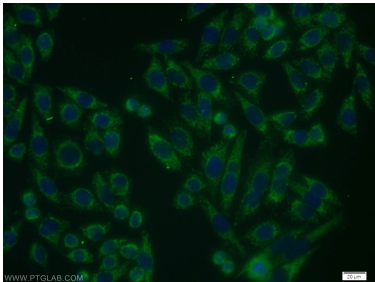
Immunohistochemical analysis of paraffin-embedded human renal cell carcinoma tissue slide using 13687-1-AP (VEGFR-1/FLT-1 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human renal cell carcinoma tissue slide using 13687-1-AP (VEGFR-1/FLT-1 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-VEGFR-1/FLT-1 (IP:13687-1-AP, 5ug; Detection:13687-1-AP 1:500) with A549 cells lysate 3300ug.



Immunofluorescent analysis of HeLa cells using 13687-1-AP (VEGFR-1/FLT-1 antibody) at dilution of 1:25 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).