

For Research Use Only

VEGFA Polyclonal antibody

Catalog Number: 19003-1-AP

Featured Product

907 Publications



Basic Information

Catalog Number:

19003-1-AP

Size:

150ul, Concentration: 650 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG13500

GenBank Accession Number:

BC065522

GeneID (NCBI):

7422

UNIPROT ID:

P15692

Full Name:

vascular endothelial growth factor A

Calculated MW:

412 aa, 46 kDa

Observed MW:

36-40 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:2000-1:12000

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

IHC: 1:50-1:500

IF/ICC: 1:200-1:800

FC (Intra): 0.40 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

Cited Applications:

WB, IHC, IF, IP, CoIP, RIP

Species Specificity:

human, mouse

Cited Species:

human, mouse, rat, pig, rabbit, monkey, bovine, sheep, goat

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: A431 cells, bEnd.3 cells, C6 cells, Jurkat cells, MCF-7 cells

IP: Jurkat cells,

IHC: human lung cancer tissue, human liver cancer tissue, mouse kidney tissue, mouse liver tissue, mouse lung tissue

IF/ICC: HeLa cells,

FC (Intra): NIH/3T3 cells,

Background Information

VEGFA, also named VEGF or VPF, belongs to the PDGF/VEGF growth factor family. It is a growth factor active in angiogenesis, vasculogenesis and endothelial cell growth. VEGFA induces endothelial cell proliferation, promotes cell migration, inhibits apoptosis and induces permeabilization of blood vessels. It binds to the FLT1/VEGFR1 and KDR/VEGFR2 receptors, heparan sulfate and heparin. Defects in VEGFA are associated with microvascular complications of diabetes type 1 (MVC1). VEGFA has 17 isoforms with MW from 16 to 45 kDa. Some isoforms have homodimer forms (e.g.: VEGFA189 38 kDa or VEGFA110 34 kDa). VEGF-A exists in at least seven homodimeric isoforms. The monomers consist of 121, 145, 148, 165, 183, 189, or 206 amino acids (PMID:15602010). This antibody can recognize all VEGFA isoforms.

Notable Publications

Author	Pubmed ID	Journal	Application
Zhou Yang	32993738	J Exp Clin Cancer Res	IHC
Wen Zhou	36170566	J Med Chem	WB
Jianwen Ye	30272364	Oncol Rep	WB, IHC

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

*** 20ul sizes contain 0.1% BSA

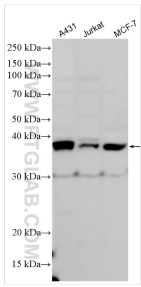
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

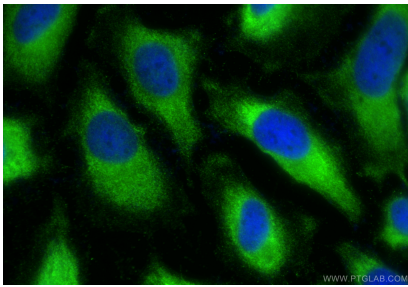
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

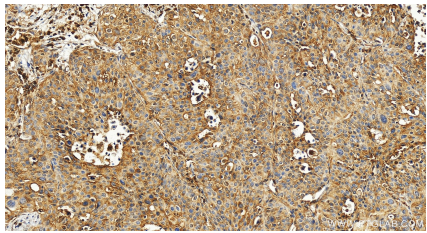
Selected Validation Data



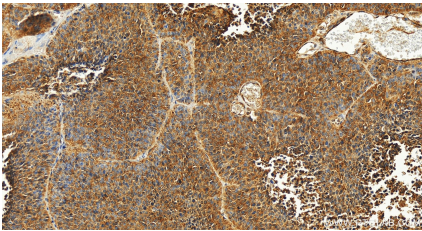
Various lysates were subjected to SDS PAGE followed by western blot with 19003-1-AP (VEGFA antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



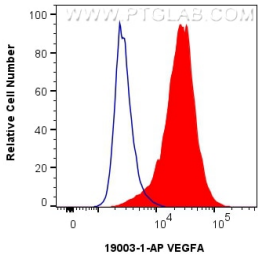
Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using VEGFA antibody (19003-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



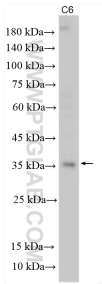
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 19003-1-AP (VEGFA antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



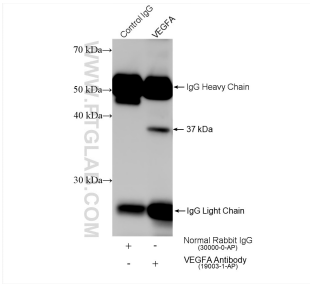
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 19003-1-AP (VEGFA antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



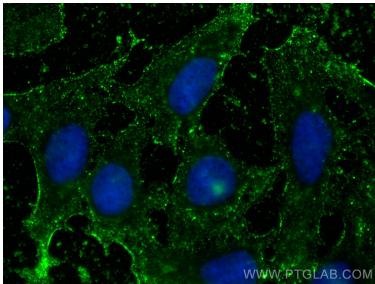
1X10⁶ NIH/3T3 cells were intracellularly stained with 0.4 ug Anti-Human VEGFA (19003-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Rabbit IgG control Rabbit PolyAb (30000-O-AP, Clone:) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Various lysates were subjected to SDS PAGE followed by western blot with 19003-1-AP (VEGFA antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



IP result of anti-VEGFA (IP:19003-1-AP, 4ug; Detection:19003-1-AP 1:3000) with Jurkat cells lysate 1560 ug.



Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using VEGFA antibody (19003-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).