## For Research Use Only

# **VEGFA** Monoclonal antibody

Catalog Number:66828-1-lg Featured Product

97 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number:

66828-1-lg BC065522 Protein A purification GeneID (NCBI): CloneNo.:

150ul, Concentration: 2200 µg/ml by 7422 2E2H9

Nanodrop and 1000  $\mu g/ml$  by Bradford UNIPROT ID: Recommended Dilutions: method using BSA as the standard; P15692 WB 1:1000-1:4000 Source: IHC 1:400-1:1600 Full Name:

Mouse IF 1:200-1:800 vascular endothelial growth factor A

Isotype: Calculated MW: lgG2b 412 aa, 46 kDa Immunogen Catalog Number: Observed MW: AG13500 43 kDa

**Applications** 

**Tested Applications:** 

WB, IF, FC, IHC, ELISA Cited Applications: WB, IF, IHC, ELISA Species Specificity:

Human **Cited Species:** 

human, goat, rat, zebrafish, pig

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: MCF-7 cells, HUVEC cells, NCI-H1299 cells, A431 cells, SH-SY5Y cells, HuH-7 cells, T-47D cells, MDA-MB-231 cells

**Purification Method:** 

IHC: human lung cancer tissue, human liver cancer tissue, human colon cancer tissue

IF: MCF-7 cells, human endometrial cancer tissue, human lung cancer tissue

## **Background Information**

VEGFA, also named as 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  $cell\ migration, inhibits\ apoptosis\ and\ induces\ permeabilization\ of\ blood\ vessels.\ It\ binds\ to\ the\ FLT1/VEGFR1\ and$  $KDR/VEGFR2\ receptors, he paran sulfate\ and\ he parin.\ Defects\ in\ VEGFA\ are\ associated\ with\ microvascular$ complications of diabetes type 1 (MVCD1). VEGFA has 17 isoforms with MW from 16 to 45 kDa. Some isoforms have homodimer forms (e.g.; VEGFA189 38kDa or VEFGA110 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
Qingrong Zhang	34655915	Colloids Surf B Biointerfaces	WB,IHC
Yongguang Yang	36212390	Front Oncol	WB,IHC
Jingyun Guo	36213383	Open Life Sci	WB

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

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)

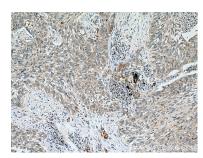
E: proteintech@ptglab.com W: ptglab.com

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

#### Selected Validation Data



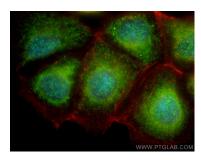
MCF-7 cells were subjected to SDS PAGE followed by western blot with 66828-1-1g (VEGFA antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



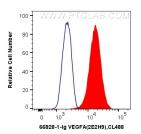
Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 66828-1-Ig (VEGFA antibody) at dilution of 1:800 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 66828-1-Ig (VEGFA antibody) at dilution of 1:800 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed MCF-7 cells using VEGFA antibody (66828-1-lg, Clone: 2E2H9) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



1X10^6 MCF-7 cells were intracellularly stained with 0.5 ug Anti-Human VEGFA (66828-1-1g, Clone:2E2H9) and Coralite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.5 ug Mouse IgG2b Isotype Control (66360-3-Ig, Clone: K11B8C4B5) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).