

anti-Human VEGFD Polyclonal Antibody | anti-VEGFD antibody

Anti-VEGFD Antibody

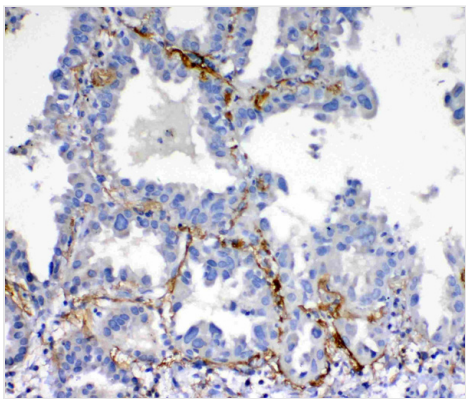
CATALOG # AAA46362	REACTIVITY Human	APPLICATIONS Western Blot
------------------------------	----------------------------	-------------------------------------

PRODUCT SYNONYMS

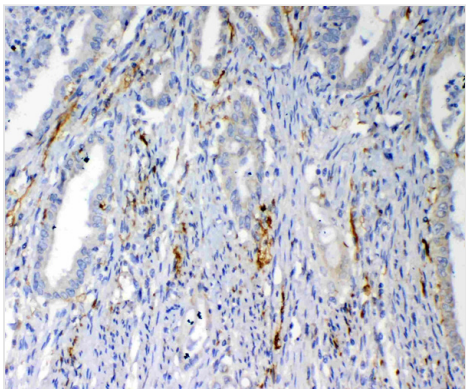
VEGFD; Polyclonal Antibody; Anti-VEGFD Antibody; Vascular endothelial growth factor D; c-fos induced growth factor; c-fos induced growth factor (vascular endothelial growth factor D); c-fos-induced growth factor; FIGF; Vascular endothelial growth factor D precursor; VEGF D; VEGF-D; VEGFD_HUMAN; c-fos induced growth factor (vascular endothelial growth factor D)(VEGF-D); anti-VEGFD antibody

PRODUCT SPECIFICATIONS

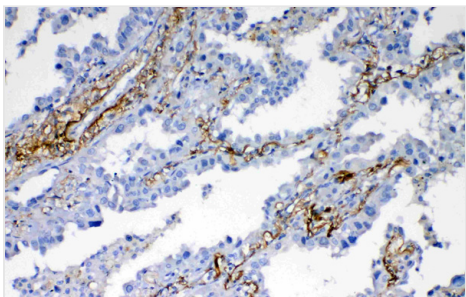
Reactivity	Human
Clonality	Polyclonal
Purity/Purification	Immunogen Affinity Purified
Form/Format	Lyophilized. Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Na ₃ N.
Sequence Length	354
Applicable Applications for anti-VEGFD antibody	WB (Western Blot)
Immunogen	E Coli-derived human VEGFD recombinant protein (Position: F89-R205). Human VEGFD shares 94% and 94.9% amino acid (aa) sequence identity with mouse and rat VEGFD, respectively.
Ig Type	Rabbit IgG
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Preparation and Storage	At -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquoted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



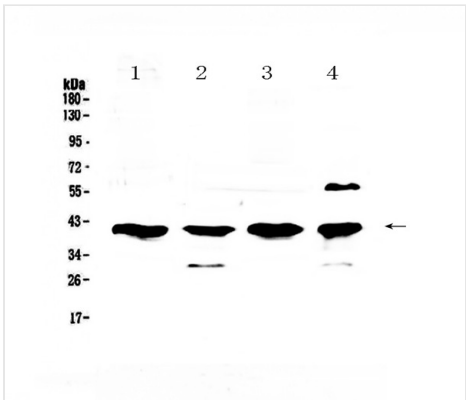
IHC (Immunohistochemistry)
Figure 4. IHC analysis of VEGFD using anti-VEGFD antibody (AAA46362). VEGFD was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-VEGFD Antibody (AAA46362) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)
Figure 2. IHC analysis of VEGFD using anti-VEGFD antibody (AAA46362). VEGFD was detected in paraffin-embedded section of human colon cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-VEGFD Antibody (AAA46362) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)
Figure 3. IHC analysis of VEGFD using anti-VEGFD antibody (AAA46362). VEGFD was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-VEGFD Antibody (AAA46362) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)
Figure 1. Western blot analysis of VEGFD using anti-VEGFD antibody (AAA46362). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat lung tissue lysates, Lane 2: rat brain tissue lysates, Lane 3: mouse lung tissue lysates, Lane 4: mouse brain tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-VEGFD antigen affinity purified polyclonal antibody at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for VEGFD at approximately 40KD. The expected band size for VEGFD is at 40KD.

ADDITIONAL INFORMATION

Related Product Information for anti-VEGFD antibody	Description: Rabbit IgG polyclonal antibody for Vascular endothelial growth factor D (FIGF) detection. Tested with WB in Human. Background: C-fos induced growth factor (FIGF) (or vascular endothelial growth factor D, VEGF-D) is a vascular endothelial growth factor that in humans is encoded by the FIGF gene. The protein encoded by this gene is a member of the platelet-derived growth factor/vascular endothelial growth factor (PDGF/VEGF) family and is active in angiogenesis, lymphangiogenesis, and endothelial cell growth. Analyzing by Northern blotting, Yamada et al. (1997) symbolized VEGFD, was expressed as a 2.2-kb transcript with highest expression in lung, heart, small intestine, and fetal lung, and lower levels in skeletal muscle, colon, and pancreas. And Achen et al. (1998) concluded that VEGFD was most closely related to VEGFC by virtue of the presence of N- and C-terminal extensions that were not found in other VEGF family members. Stacker et al. (2001) showed that VEGFD can induce tumor angiogenesis through VEGFR2 and tumor lymphangiogenesis through VEGFR3, whereas VEGF, which does not activate VEGFR3, induces only tumor angiogenesis.
References	1. Achen, M. G., Jeltsch, M., Kukk, E., Makinen, T., Vitali, A., Wilks, A. F., Alitalo, K., Stacker, S. A. Vascular endothelial growth factor D (VEGF-D) is a ligand for the tyrosine kinases VEGF receptor 2 (Flk1) and VEGF receptor 3 (Flt4). Proc. Nat. Acad. Sci. 95: 548-553, 1998. 2. Stacker, S. A., Caesar, C., Baldwin, M. E., Thornton, G. E., Williams, R. A., Prevo, R., Jackson, D. G., Nishikawa, S., Kubo, H., Achen, M. G. VEGF-D promotes the metastatic spread of tumor cells via the lymphatics. Nature Med. 7: 186-191, 2001. 3. Yamada, Y., Nezu, J., Shimane, M., Hirata, Y. Molecular cloning of a novel vascular endothelial growth factor, VEGF-D. Genomics 42: 483-488, 1997.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4758378
NCBI GeneID	2277
NCBI Accession #	NP_004460.1
NCBI GenBank Nucleotide #	NM_004469.4
UniProt Accession #	O43915; B2R7Z3
Molecular Weight	40,444 Da
NCBI Official Full Name	vascular endothelial growth factor D preproprotein
NCBI Official Synonym Full Names	c-fos induced growth factor (vascular endothelial growth factor D)
NCBI Official Symbol	FIGF
NCBI Official Synonym Symbols	VEGFD; VEGF-D
NCBI Protein Information	vascular endothelial growth factor D
UniProt Protein Name	Vascular endothelial growth factor D
UniProt Gene Name	FIGF
UniProt Synonym Gene Names	VEGFD; VEGF-D; FIGF
UniProt Entry Name	VEGFD_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.