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Datasheet for ABIN5692962

anti-VEGFA antibody (AA 27-190)

1 Image

54 Publications

Overview

Quantity:	100 µg
Target:	VEGFA
Binding Specificity:	AA 27-190
Reactivity:	Rat, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), ELISA

Product Details

Brand:	Picoband™
Immunogen:	E. coli-derived mouse VEGF recombinant protein (Position: A27-N190).
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for VEGF detection. Tested with WB, Direct ELISA in Mouse,Rat.

Target Details

Target:	VEGFA
Alternative Name:	Vegfa (VEGFA Products)
Background:	Synonyms: Vascular endothelial growth factor A, VEGF-A, Vascular permeability factor, VPF, Vegfa, Vegf Tissue Specificity: In developing embryos, expressed mainly in the choroid plexus, paraventricular neuroepithelium, placenta and kidney glomeruli. Also found in bronchial

Target Details

epithelium, adrenal gland and in seminiferous tubules of testis. High expression of VEGF continues in kidney glomeruli and choroid plexus in adults.

Background: VEGF, a homodimeric glycoprotein of relative molecular mass 45,000, is the only mitogen that specifically acts on endothelial cells. It may be a major regulator of tumor angiogenesis in vivo. It is, however, structurally related to platelet-derived growth factor. VEGF shares homology with the PDGF A chain and B chain, including conservation of all 8 cysteines found in PDGFA and PDGFB. VEGF gene contains 8 exons. And VEGF induces remodeling and enhances TH2-mediated sensitization and inflammation in the lung. This gene can also regulate haematopoietic stem cell survival by an internal autocrine loop mechanism. What's more, it also stimulates neurogenesis in vitro and in vivo.

UniProt: [Q00731](#)

Pathways: [RTK Signaling](#), [Glycosaminoglycan Metabolic Process](#), [Regulation of Cell Size](#), [Tube Formation](#), [Signaling Events mediated by VEGFR1 and VEGFR2](#), [Platelet-derived growth Factor Receptor Signaling](#), [VEGFR1 Specific Signals](#), [VEGF Signaling](#)

Application Details

Application Notes: Recommended Detection Systems: Enhanced Chemiluminescent Kit with anti-Rabbit IgG (ABIN921124) for Western blot.
Application Details: Western blot, 0.1-0.5 µg/mL
Direct ELISA, 0.1-0.5 µg/mL

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Buffer: Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na₂HPO₄, 0.05 mg NaN₃.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C, -20 °C

Storage Comment: At -20°C for one year. After reconstitution, at 4°C for one month.
It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing

and thawing.

Publications

Product cited in:

Zhang, Chu, Liu, Coates, Shang, Li: "Deer thymosin beta 10 functions as a novel factor for angiogenesis and chondrogenesis during antler growth and regeneration." in: **Stem cell research & therapy**, Vol. 9, Issue 1, pp. 166, (2019) ([PubMed](#)).

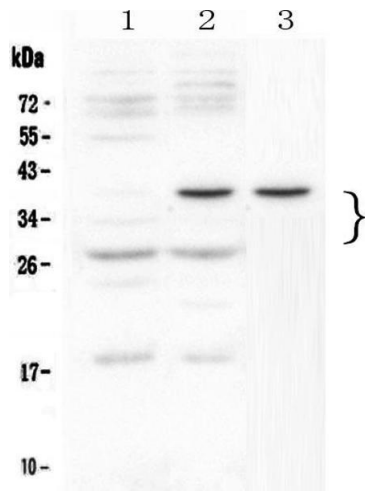
Liu, Kuang, Wu, Jin, Sun: "A novel polysaccharide from Sargassum integerrimum induces apoptosis in A549 cells and prevents angiogenesis in vitro and in vivo." in: **Scientific reports**, Vol. 6, pp. 26722, (2018) ([PubMed](#)).

Qin, Ke, Zhou, Wang, Liang, Wang, Yang, Gao, Ye, Kumar, Wang: "Metastasis-Associated Protein 1 Deficiency Results in Compromised Pulmonary Alveolar Capillary Angiogenesis in Mice." in: **Medical science monitor : international medical journal of experimental and clinical research**, Vol. 23, pp. 3932-3941, (2018) ([PubMed](#)).

Fang, Li, Qiao, Guo, Miao: "Neuroprotective effect of total flavonoids from Ilex pubescens against focal cerebral ischemia/reperfusion injury in rats." in: **Molecular medicine reports**, Vol. 16, Issue 5, pp. 7439-7449, (2018) ([PubMed](#)).

Yang, Zhang, Li, Wen: "MALAT1 enhanced the proliferation of human osteoblasts treated with ultra-high molecular weight polyethylene by targeting VEGF via miR-22-5p." in: **International journal of molecular medicine**, Vol. 41, Issue 3, pp. 1536-1546, (2018) ([PubMed](#)).

There are more publications referencing this product on: [Product page](#)



Western Blotting

Image 1. Western blot analysis of VEGF using anti-VEGF antibody. 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 50µg of sample under reducing conditions. Lane 1: mouse thymus tissue lysates, Lane 2: mouse HEPA1-6 whole cell lysates, Lane 3: rat C6 whole cell 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-VEGF antigen affinity purified polyclonal antibody (Catalog #) at 0.5 µg/mL overnight at 4°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 (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for VEGF at approximately 27KD, 40KD. The expected band size for VEGF is at 25KD.