

Datasheet for ABIN5693262  
**anti-VEGFR2/CD309 antibody (AA 20-244)**



[Go to Product page](#)

3 Images

5 Publications

## Overview

|                      |  |
|----------------------|--|
| Quantity:            | 100 µg   |
| Target:              | VEGFR2/CD309 (VEGFR2)                                    |
| Binding Specificity: | AA 20-244  |
| Reactivity:          | Mouse, Rat   |
| Host:                | Rabbit   |
| Clonality:           | Polyclonal   |
| Conjugate:           | This VEGFR2/CD309 antibody is un-conjugated              |
| Application:         | Western Blotting (WB), Immunohistochemistry (IHC), ELISA |

## Product Details

|                             |   |
|-----------------------------|---|
| Brand:                      | Picoband™   |
| Immunogen:                  | E. coli-derived mouse VEGF Receptor 2 recombinant protein (Position: A20-L244).                               |
| Cross-Reactivity (Details): | No cross reactivity with other proteins.  |
| Characteristics:            | Rabbit IgG polyclonal antibody for VEGF Receptor 2 detection. Tested with WB, IHC-P, ELISA(Cap) in Mouse,Rat. |

## Target Details

|                   |  |
|-------------------|--|
| Target:           | VEGFR2/CD309 (VEGFR2)  |
| Alternative Name: | Kdr ( <a href="#">VEGFR2 Products</a> )  |
| Background:       | Synonyms: Vascular endothelial growth factor receptor 2, VEGFR-2, Fetal liver kinase 1, FLK-1, |

## Target Details

---

Kinase NYK, Protein-tyrosine kinase receptor flk-1, CD309, Kdr, Flk-1, Flk1

Tissue Specificity: Expressed in endothelial cells (at protein level). Detected in embryonic endothelial cells, as well as hematopoietic stem and progenitor cells. Detected in vascular endothelium. Expressed at high levels in adult heart, lung, kidney, brain and skeletal muscle, but is also expressed at lower levels in most other adult tissues.

Background: KDR (Kinase Insert Domain Receptor), also known as FLK1, VEGFR or VEGFR2, is a VEGF receptor. KDR is the human gene encoding it. Vascular endothelial growth factor (VEGF) is the only mitogen that specifically acts on endothelial cells. Its expression is upregulated by hypoxia, and its cell-surface receptor, known as fetal liver kinase-1 (Flk1) in mouse, is exclusively expressed in endothelial cells. Flk1 is the mouse homolog of KDR.

---

UniProt: [P35918](#)

---

Pathways: [RTK Signaling](#), [Glycosaminoglycan Metabolic Process](#), [Signaling Events mediated by VEGFR1 and VEGFR2](#), [Growth Factor Binding](#), [Regulation of long-term Neuronal Synaptic Plasticity](#), [VEGF Signaling](#)

## Application Details

---

Application Notes: Recommended Detection Systems: Enhanced Chemiluminescent Kit with anti-Rabbit IgG (ABIN921124) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).

Application Details: Western blot, 0.1-0.5 µg/mL

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/mL

ELISA(Cap), 1-5 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 Na<sub>2</sub>HPO<sub>4</sub>, 0.05 mg NaN<sub>3</sub>.

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

## Handling

---

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

---

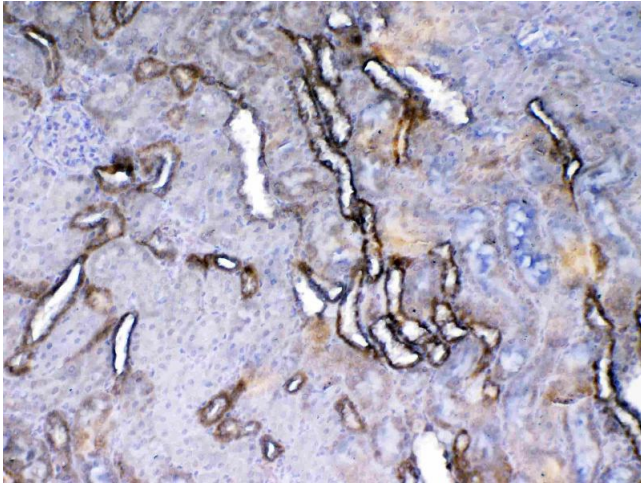
Product cited in: Huang, Li, Pan, Cheng, Ren, Jia, Ma, Xu: "A novel multi-target RNAi adenovirus inhibits hepatoma cell proliferation, migration, and induction of angiogenesis." in: **Oncotarget**, Vol. 7, Issue 36, pp. 57705-57713, (2018) ([PubMed](#)).

Yan-Ping, Xiao-Qin, Xiao Ping, Ying Quan: "Effects of Chronic Exposure to Sodium Arsenite on Expressions of VEGF and VEGFR2 Proteins in the Epididymis of Rats." in: **BioMed research international**, Vol. 2017, pp. 2597256, (2018) ([PubMed](#)).

Zhu, Tuerxun, Hui, Abliz: "Effects of propranolol and isoproterenol on infantile hemangioma endothelial cells in vitro." in: **Experimental and therapeutic medicine**, Vol. 8, Issue 2, pp. 647-651, (2014) ([PubMed](#)).

Liu, Yang, Zhang, Shui, Song, Yao, Dai, Sun: "Fructopyrano-(1?4)-glucopyranose inhibits the proliferation of liver cancer cells and angiogenesis in a VEGF/VEGFR dependent manner." in: **International journal of clinical and experimental medicine**, Vol. 7, Issue 11, pp. 3859-69, (2014) ([PubMed](#)).

Wu, You, Ma, Li, Yuan, Li, Ye, Liu, Yao, Chen, Lai, Yang: "Role of transient receptor potential ion channels and evoked levels of neuropeptides in a formaldehyde-induced model of asthma in BALB/c mice." in: **PLoS ONE**, Vol. 8, Issue 5, pp. e62827, (2013) ([PubMed](#)).



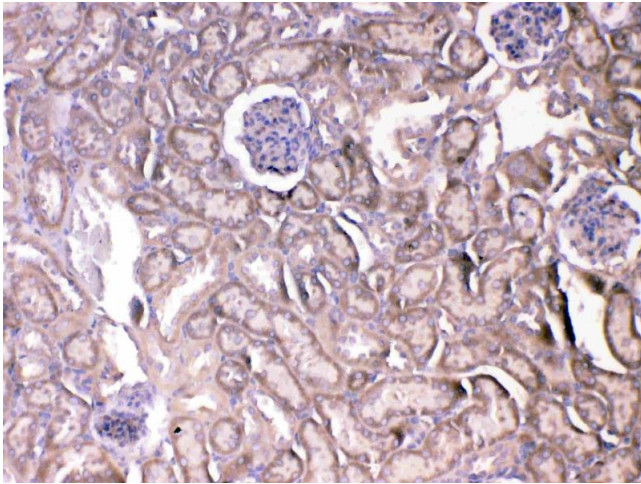
### Immunohistochemistry

**Image 1.** IHC analysis of VEGF Receptor 2 using anti-VEGF Receptor 2 antibody . VEGF Receptor 2 was detected in paraffin-embedded section of rat kidney 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 1µg/ml rabbit anti-VEGF Receptor 2 Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



### Western Blotting

**Image 2.** Western blot analysis of VEGF Receptor 2 using anti-VEGF Receptor 2 antibody . Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. Lane 1: Recombinant mouse VEGFR2 Protein 1ng. 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 Receptor 2 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 Receptor 2 at approximately 166-200KD. The expected band size for VEGF Receptor 2 is at 153KD.



### Immunohistochemistry

**Image 3.** IHC analysis of VEGF Receptor 2 using anti-VEGF Receptor 2 antibody . VEGF Receptor 2 was detected in paraffin-embedded section of mouse kidney 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 1µg/ml rabbit anti-VEGF Receptor 2 Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.