

Anti-VEGFB Picoband Antibody

Catalog # ABO13032

Product Information

Application	WB, IHC-P, E
Primary Accession	O35485
Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for VEGFB detection. Tested with WB, IHC-P, Direct ELISA in Mouse;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	89811
Other Names	Vascular endothelial growth factor B, VEGF-B, VEGF-related factor, VRF, Vegfb, Vrf
Calculated MW	21869
Application Details	Western blot, 0.1-0.5 μ g/ml Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml Direct ELISA, 0.1-0.5 μ g/ml
Subcellular Localization	Secreted. Secreted but remains associated to cells or to the extracellular matrix unless released by heparin.
Source	Eukaryota
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	E. coli-derived rat VEGFB recombinant protein (Position: P22-A207).
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20 °C; for one year. After r ° Constitution, 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.

Protein Information

Name	Vegfb
Synonyms	Vrf
Function	Growth factor for endothelial cells. VEGF-B167 binds heparin and neuropilin-1 whereas the binding to neuropilin-1 of VEGF-B186 is regulated by proteolysis (By similarity).
Cellular Location	Secreted. Note=Secreted but remains associated to cells or to the extracellular matrix unless released by heparin.

Background

Vascular endothelial growth factor B also known as VEGF-B is a protein that, in humans, is encoded by the VEGF-B gene. VEGF-B is a growth factor that belongs to the vascular endothelial growth factor family, of which VEGF-A is the best-known member. In contrast to VEGF-A, VEGF-B plays a less pronounced role in the vascular system: Whereas VEGF-A is important for the formation of blood vessels, such as during development or in pathological conditions, VEGF-B seems to play a role only in the maintenance of newly formed blood vessels during pathological conditions. It also plays an important role on several types of neurons. And it is important for the protection of neurons in the retina and the cerebral cortex during stroke and of motoneurons during motor neuron diseases such as amyotrophic lateral sclerosis.

Images

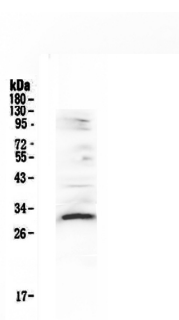


Figure 1. Western blot analysis of VEGFB using anti-VEGFB antibody (ABO13032). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat heart tissue 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-VEGFB antigen affinity purified polyclonal antibody (Catalog # ABO13032) at 0.5 μ g/mL overnight at 4 $^{\circ}$ 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 VEGFB at approximately 29KD. The expected band size for VEGFB is at 22KD.

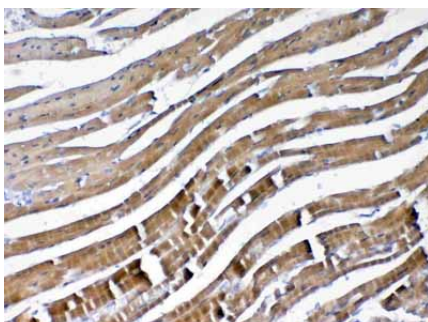


Figure 2. IHC analysis of VEGFB using anti-VEGFB antibody (ABO13032). VEGFB was detected in paraffin-embedded section of mouse heart tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti-VEGFB Antibody (ABO13032) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

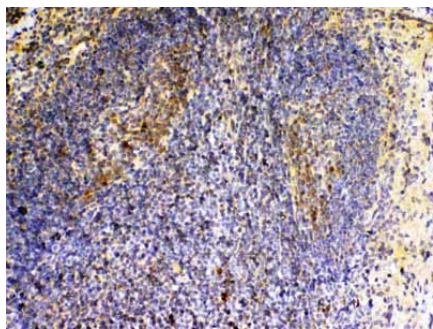


Figure 3. IHC analysis of VEGFB using anti-VEGFB antibody (ABO13032). VEGFB was detected in paraffin-embedded section of mouse spleen tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti-VEGFB Antibody (ABO13032) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

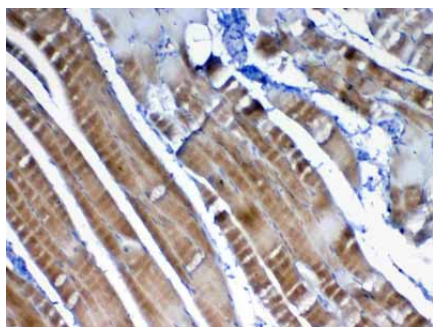


Figure 4. IHC analysis of VEGFB using anti-VEGFB antibody (ABO13032). VEGFB was detected in paraffin-embedded section of rat skeletal muscle tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti-VEGFB Antibody (ABO13032) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

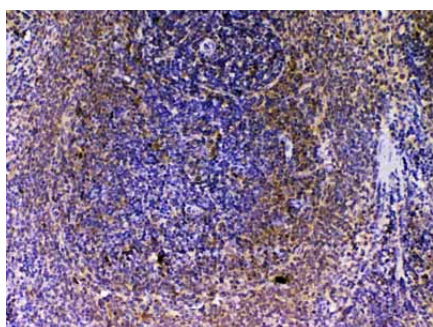


Figure 5. IHC analysis of VEGFB using anti-VEGFB antibody (ABO13032). VEGFB was detected in paraffin-embedded section of rat spleen tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti-VEGFB Antibody (ABO13032) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.