

Product datasheet for **TA396872S**

VEGFA Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, WB
Recommended Dilution:	WB: 1:333 ELISA: User Optimized
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	This protein-A purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a recombinant protein raised in yeast, corresponding to the 164 amino acids of the mature bovine VEGF-A protein.
Specificity:	This product was Protein-A purified from monospecific antiserum by chromatography. This antibody is specific for bovine VEGF-A protein. A BLAST analysis was used to suggest cross-reactivity with VEGF-A from bovine, pig, sheep, and macaque sources based on 100% homology with the immunizing sequence. Partial reactivity is expected against human, horse, dog, cat, or guinea pig based on 95% homology; and to rat and mouse based on 93% homology. Cross-reactivity with VEGF-A from other sources has not been determined.
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Concentration:	1.51 mg/mL - lot specific
Conjugation:	Unconjugated
Storage:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Stability:	Expiration date is three (3) months from date of receipt.
Database Link:	P15691



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Background:

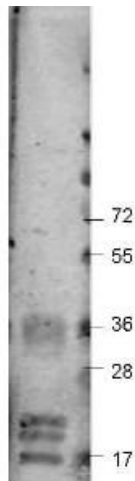
VEGF is a potent mitogen in embryonic and somatic angiogenesis with specificity for vascular endothelial cells. VEGF forms homodimers and exists in four different isoforms. Overall, the VEGF monomer resembles that of PDGF, but its N-terminal segment is helical rather than extended. VEGF shares homologies of about 21% and 24% respectively with the A and B chains of human platelet-derived growth factor (PDGF), and has complete conservation of the eight cysteine residues found in both mature PDGF chains. The cysteine knot motif is a common feature of this domain. The homology is not reflected in function, however, since the cell types responsive to VEGF are distinct from those responsive to homo- and heterodimers of the PDGF chains. This protein is a glycosylated mitogen that acts on endothelial cells and has various effects, including mediating increased vascular permeability, inducing angiogenesis, vasculogenesis and endothelial cell growth, promoting cell migration, and inhibiting apoptosis. VEGF-A also has been shown to have effects on a number of other cell types (e.g. stimulation of monocyte/macrophage migration, neurons, cancer cells, kidney epithelial cells). VEGF-A is also a vasodilator; it increases microvascular permeability, and was originally referred to as vascular permeability factor. Alternatively spliced transcript variants, encoding either freely secreted or cell-associated isoforms, have been characterized.

Synonyms:

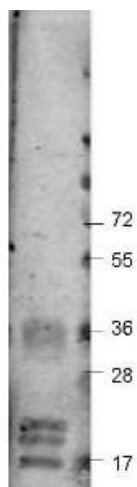
rabbit anti-VEGF-A Antibody, Vascular endothelial growth factor A, VEGF A, VEGFA, Vascular permeability factor, VPF

Note:

This protein-A purified antibody has been tested for use in ELISA and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 19.2 kDa in size corresponding to bovine VEGF-A protein by western blotting in the appropriate cell lysate or extract.

Product images:

Western blot using Rockland's Protein-A Purified anti-bovine VEGF-A antibody shows detection of recombinant bovine VEGF-A at 17-19.2 kDa. Approximately 2 µg of recombinant protein was loaded per lane onto a 4-20% gradient gel followed by transfer to PVDF membrane. The membrane was blocked using 3% BSA (p/n BSA-30) diluted 1:10. The primary antibody was used at a 1:333 dilution and was incubated with the blot for 2h at room temperature. The membrane was washed and reacted with a 1:10,000 dilution of IRDye™800 Conjugated Affinity Purified Goat-anti-Rabbit IgG [H&L] MX10. Molecular weight estimation was made by comparison to prestained MW markers. Other detection systems will yield similar results.



Western blot using Rockland's Protein-A Purified anti-bovine VEGF-A antibody shows detection of recombinant bovine VEGF-A at 17-19.2 kDa. Approximately 2 μ g of recombinant protein was loaded per lane onto a 4-20% gradient gel followed by transfer to PVDF membrane. The membrane was blocked using 3% BSA (p/n BSA-30) diluted 1:10. The primary antibody was used at a 1:333 dilution and was incubated with the blot for 2h at room temperature. The membrane was washed and reacted with a 1:10,000 dilution of IRDye™800 Conjugated Affinity Purified Goat-anti-Rabbit IgG [H&L] MX10. Molecular weight estimation was made by comparison to prestained MW markers. Other detection systems will yield similar results.