

Datasheet for 200-401-B74**VEGF-A Antibody****Overview**

Description:	Anti-Bovine VEGF-A (RABBIT) Antibody - 200-401-B74
Item No.:	200-401-B74
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Bovine
Host Species:	Rabbit

Product Details**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
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	VEGFA
Reactivity:	Bovine
Immunogen Type:	Recombinant Protein
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.
Purity/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.
Relevant Links:	• NCBI - 27806357 • UniProtKB - P15691 • GeneID - 281572

Application Details

Tested Applications:	ELISA, WB
Application 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.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	User Optimized
WB:	1:333

Formulation

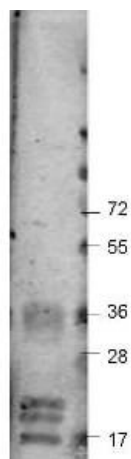
Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None
Reconstitution Volume:	100 μ L
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot

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.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.