

Datasheet for 009-001-B99

rHuman VEGF-165 Protein

Overview

Description:	VEGF-165 Human Recombinant Protein - 009-001-B99
Item No.:	009-001-B99
Size:	10 µg
Applications:	SDS-PAGE
Origin:	Human
Expressed in:	E. coli

Product Details

Background:

Vascular endothelial growth factor-A was originally isolated from tumor cells and referred to as Tumor Angiogenesis Factor or Vascular Permeability Factor. Although expressed at high levels in certain tumor-derived cells it is produced by a wide variety of cell types. In addition to stimulating vascular growth and vascular permeability it may play a role in stimulating vasodilation via nitric oxide-dependent pathways. Alternative splicing of the mRNA for VEGF-A results in several isoforms of the protein being produced. Rat and bovine VEGF are one amino acid shorter than the human factor, and the bovine and human sequences show a homology of 95 percent.

In contrast to other factors mitogenic for endothelial cells such as FGF-1, FGF-2 and PDGF, VEGF is synthesized as a precursor containing a typical hydrophobic secretory signal sequence of 26 amino acids. Glycosylation is not required for efficient secretion of VEGF. Recombinant Human VEGF produced in E.coli is a double, non-glycosylated, polypeptide chain containing 165 amino acids and having a molecular mass of 38231 Daltons.

Synonyms:	Vascular endothelial growth factor A-165, VEGF-A165 cytokine, Vascular permeability factor, VPF-165
Species of Origin:	Human
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	VEGFA
Purity/Specificity:	Purity was determined to be greater than 95% as determined by analysis by RP-HPLC and by reducing and non-reducing SDS-PAGE against known standard.
Relevant Links:	<ul style="list-style-type: none">• UniProtKB - P15692• NCBI

Application Details

Tested Applications:	SDS-PAGE
Application Note:	VEGF-165 Recombinant Protein has been tested by SDS-PAGE and is suitable as a control for polyclonal or monoclonal anti-VEGF-165 in immunological assays.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Biological Activity: Human recombinant VEGF-165 is fully biologically active when compared to standards. The ED50, as determined by the dose dependent induction of HUVEC proliferation, is 3.1-4.6 ng/ml. Endotoxin Level: Measured by LAL is <0.01ng/μg or <0.1EU/μg.

Formulation

Physical State:	Lyophilized
Concentration:	0.1 mg/mL neat
Buffer:	0.1% Trifluoroacetic acid
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	100 μL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

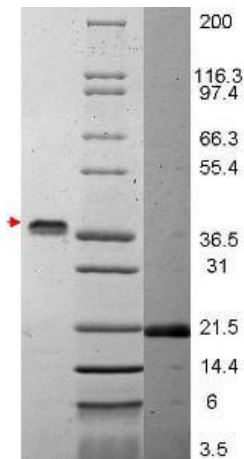
Shipping & Handling

Shipping Condition:	Ambient
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Storage Condition: Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL) . For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.

Expiration: Expiration date is six (6) months from date of receipt.

Images



SDS-PAGE

SDS-PAGE of VEGF-165 Human Recombinant cytokine. Lane 1: VEGF-165 unreduced, arrowhead. Lane 2: Molecular weight. Lane 3: VEGF-165 reduced. Load: 1 µg per lane.

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.