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Datasheet for 009-F01-B99-0010

rHuman VEGF-165 Protein

Overview

Description:	Human Vascular Endothelial Growth Factor-165 Recombinant Protein (Animal Free) - 009-F01-B99-0010
Item No.:	009-F01-B99-0010
Size:	10 µg
Applications:	SDS-PAGE, Cellular Assay
Origin:	Human
Expressed in:	E. coli

Product Details

Background:	Vascular Endothelial Growth Factor-A (VEGF-A) was originally isolated from tumor cells and is produced by a wide variety of cell types. In addition to stimulating vascular growth and vascular permeability, VEGF-A may play a role in stimulating vasodilation via nitric oxide-dependent pathways. VEGF-A has several variants, VEGF-165 being the most abundant. Recombinant human VEGF 165 is a non-glycosylated homodimer, containing two 165 amino acids, with a total molecular weight of 38.2 kDa.
Synonyms:	VEGF-A, glioma-derived endothelial cell mitogen, Vascular permeability factor (VPF)
Species of Origin:	Human
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	VEGFA
Purity/Specificity:	Vascular Endothelial Growth Factor is produced with no animal-derived raw products, animal free equipment and animal free protocols. Purity was determined to be greater than 95% as determined by HPLC, analysis by UV-Spectroscopy at 280nm, and by reducing and non-reducing SDS-PAGE.
Relevant Links:	• UniProtKB - P15692-4

Application Details

Tested Applications:	SDS-PAGE
Suggested Applications:	Cellular Assay (Based on references)
Application Note:	Endothelial Growth Factor-165 Recombinant Protein has been tested by SDS-PAGE and bioactivity and is suitable as a control for polyclonal or monoclonal anti-Endothelial Growth Factor-165 in immunological assays.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Endotoxin Level: Measured by kinetic LAL analysis and is typically ≤ 1 EU/µg protein. Biologic Activity: The activity is determined by the dose-dependent proliferation of HUVECs and is typically 1-6 ng/mL.

Formulation

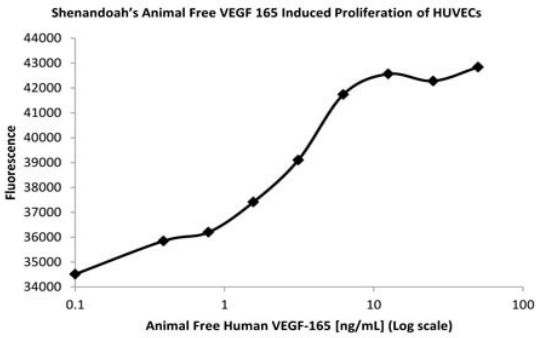
Physical State:	Lyophilized
Buffer:	0.1% Trifluoroacetic acid
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	10µl (10-100µl)
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
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

Human AF $VEGF_{165}$ Bioactivity Data



ELISA

Bioactivity of Human Vascular Endothelial Growth Factor-165 Animal Free Recombinant Bioactivity of Protein. Serial dilutions of Human VEGF165 AF, starting at 50 ng/mL, were added to HUVECs. After 24 hours, cell proliferation was measured and the linear portion of the curve was us used to calculate the ED50. The ED50 of Human VEGF165 AFis 1.8-2.6 ng/mL. This value is comparable to the typical expected range of 1-6 ng/mL.

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.