Datasheet for ABIN6700872

VEGFA Protein

2 Images

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Overview

Quantity:	100 µg
Target:	VEGFA
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Application:	SDS-PAGE (SDS)

Product Details

Purpose:	Mouse Vascular Endothelial Growth Factor-165 Recombinant Protein
Purification:	Vascular Endothelial Growth Factor-165 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.
Purity:	95,00%
Endotoxin Level:	Measured by LAL is typically ≤ 1 EU/µg protein.
Biological Activity Comment:	The activity is determined by the dose-dependent proliferation of human umbilical vein endothelial cells (HUVEC) and is typically 1-5 ng/mL.

Target Details

Target:	VEGFA
Alternative Name:	Vegfa (VEGFA Products)
Background:	Synonyms: VEGF-A, glioma-derived endothelial cell mitogen, Vascular permeability factor (VPF)

Target 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. Rat and bovine VEGF are one amino acid shorter than the human factor, and the bovine and human sequences show a homology of 95 % . Recombinant mouse VEGF-165 is a non-glycosylated, disulfide-linked homodimer, containing 165 amino acids, with a molecular weight of 39 kDa.
UniProt:	Q00731-2
Pathways:	RTK Signaling, Glycosaminoglycan Metabolic Process, Regulation of Cell Size, Tube Formation, Signaling Events mediated by VEGFR1 and VEGFR2, Platelet-derived growth Factor Receptor Signaling, VEGFR1 Specific Signals, VEGF Signaling

Application Details

Application Notes:	Other: User Optimized Application_Note: Endothelial Growth Factor-165 Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti-Endothelial Growth Factor-165 in immunological assays.
Comment:	Suggested_Applications: Cellular Assay Other_Performance_Data:
Restrictions:	For Research Use only

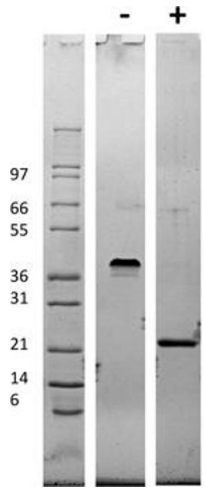
Handling

Format:	Lyophilized
Reconstitution:	Reconstitution_Buffer: Restore with deionized water (or equivalent) Reconstitution_Volume: 100 µL
Buffer:	Buffer: 0.1 % Trifluoroacetic acid Stabilizer: None
Preservative:	Without preservative
Storage:	4 °C,-20 °C
Storage Comment:	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

Handling

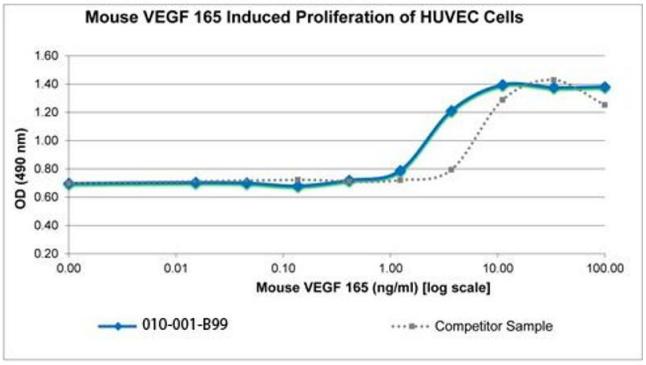
	freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.
Expiry Date:	6 months

Images



SDS-PAGE

Image 1. SDS-PAGE of Mouse Vascular Endothelial Growth Factor-165 Recombinant Protein SDS-PAGE of Mouse Vascular Endothelial Growth Factor-165 Recombinant Protein. Lane 1: Molecular weight marker. Lane 2: 1 µg Mouse VEGF-165 in non-reducing conditions . Lane 3: 1 µg Mouse VEGF-165 in reducing conditions (+). Mouse VEGF-165 is predicted to be a homodimer that has a predicted MW of 39 kDa.



SDS-PAGE

Image 2. SDS-PAGE of Mouse Vascular Endothelial Growth Factor-165 Recombinant Protein Bioactivity of Mouse Vascular Endothelial Growth Factor-165 Recombinant Protein. Serial dilutions of Murine VEGF165, starting at 100 ng/mL, were added to HUVECs. After 92 hours, cell proliferation was measured and the linear portion of the curve was us used to calculate the ED50. The ED50 of Murine VEGF165 is 1.9-2.8 ng/mL. This value is comparable to the typical expected range of 0.8-4 ng/mL.