

Datasheet for ABIN6700865

VEGFA Protein



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1 Image

Overview

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

Product Details

Purpose:	VEGF-165 Human Recombinant Protein
Purification:	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.
Purity:	95,00%
Endotoxin Level:	Measured by LAL is 0.10 EU/µg protein.
Biological Activity Comment:	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 3.7-5.6 ng/ml.

Target Details

Target:	VEGFA
Alternative Name:	VEGFA (VEGFA Products)
Background:	Synonyms: Vascular endothelial growth factor A-165, VEGF-A165 cytokine, Vascular permeability factor, VPF-165

Target 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.

UniProt: [P15692](#)

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: 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.
Other: User Optimized

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Reconstitution_Buffer: Restore with deionized water (or equivalent)
Reconstitution_Volume: 100 µL

Concentration: 0.1 mg/mL

Buffer: Buffer: 0.1 % Trifluoroacetic acid
Stabilizer: None

Preservative: Without preservative

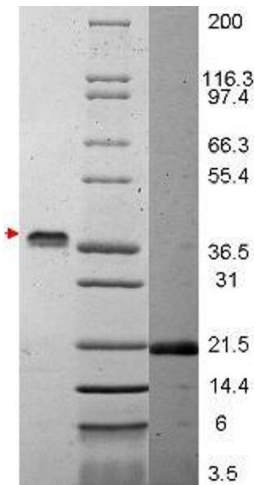
Storage: -20 °C

Handling

Storage Comment: Store vial at -20° 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.

Expiry Date: 6 months

Images



SDS-PAGE

Image 1. SDS-PAGE of VEGF-165 Human Recombinant cytokine 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.