

Active Vascular Endothelial Growth Factor 165 (VEGF165) Instruction Manual

SBPB264Hu01

Homo sapiens (Human)

Buffer Formulation

20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.

Traits

Freeze-dried powder

Purity

> 90%

Isoelectric Point

6.9

Applications

Cell culture; Activity Assays.

ACTIVITY TEST

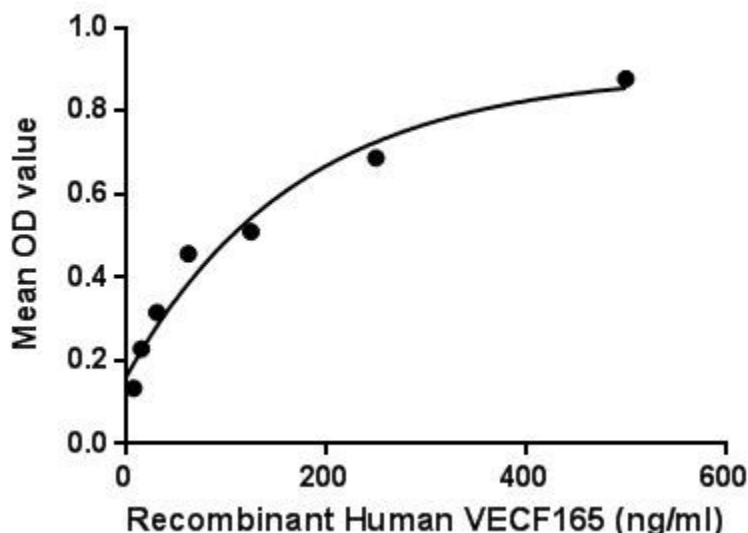


Figure. The binding activity of VEGF165 with VEGFR1.

Vascular endothelial growth factor 165 is one kind of isoforms of Vascular endothelial growth factor A (VEGFA). This protein is a glycosylated mitogen that specifically 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. Besides, Vascular Endothelial Growth Factor Receptor 1 (VEGFR1) has been identified as an interactor of VEGF165, thus a binding ELISA assay was conducted to detect the interaction of recombinant human

VEGF165 and recombinant human VEGFR1. Briefly, VEGF165 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to VEGFR1-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-VEGF165 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50µL stop solution to the wells and read at 450nm immediately. The binding activity of VEGF165 and VEGFR1 was shown in Figure 1, and this effect was in a dose dependent manner.

USAGE

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

STORAGE

Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.

STABILITY

The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

Image

TCCTCCAGCGCCGAGATTCAGCGCGAGTATGAGCTTTACCGACATCCATCTATGAGTTTGGTCAATTCAGCGATTCGAGATGAGATGAGATTTAGGTTCCGCTGATGAGCGCGCTGATGAGATTCGAGCGCTTGGCGTTACATATTCAGTATCCGATTCAGCGCTTTC
PMAEGGGQNHHEEVVKFNDVYQRSYCHPIETLVDFIQEYTPDEIEYIFXPSCVPLMRCGGCCNDEGLECVPTTEESNITWQIMRIKPHGGQH:

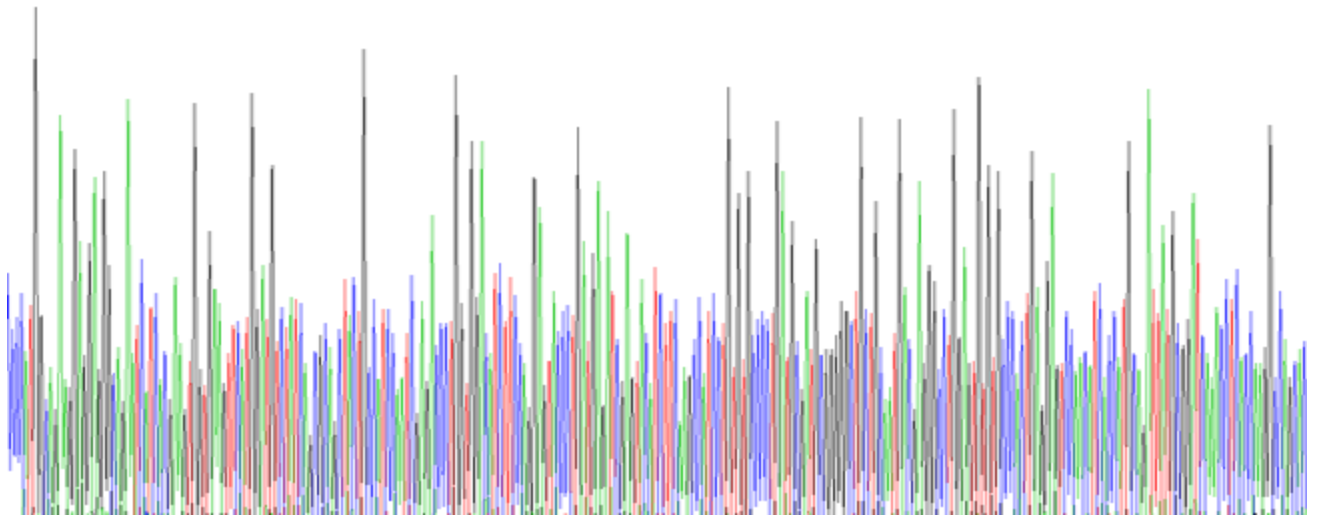


Figure. Gene Sequencing (Extract)

Image

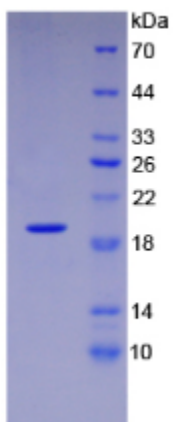


Figure. SDS-PAGE

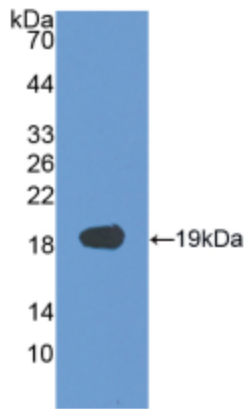


Figure. Western Blot

[IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.