



Recombinant Human His-VEGF₁₂₁ protein

E13-008

Catalog Number:	E13-008-1, E13-008-2
Amount:	10µg, 50µg
Product description:	Human N-his-tag VEGF ₁₂₁ produced in E. coli is non-glycosylated polypeptide chain containing 121 amino acids (28-149 a.a; predicted MW=17KDa). The VEGF ₁₂₁ is fused to 28 amino acid His-tag at N-terminal. The recombinant protein was purified by Ni-NTA affinity column, ion exchange chromatography and followed by gel filtration chromatography. Purity was greater than 95% by Coomassie blue staining SDS-PAGE (Figure A). The protein was active in ELISA assay with an EC50 of about 20nM (Figure B).
Background:	Vascular endothelial growth factor (VEGF or VEGF-A), also known as vascular permeability factor (VPF), is a member of the PDGF family and often exists as a disulfide-linked homodimer. VEGF is expressed in a variety of tissues as multiple homodimeric forms (121, 165, 189, and 206 amino acids/monomer) resulting from alternative RNA splicing. It binds the type I transmembrane receptor tyrosine kinases VEGF R1 (also called Flt1) and VEGF R2 (Flk1/KDR) on endothelial cells. VEGF plays a central role in tumor angiogenesis and is frequently targeted in anticancer therapies.
GenBank accession number:	NP_001020541
Amino acid sequence:	MGSSHHHHHHSSGLVPRGSHMENLYFQGMPMAEGGGQNHHEVVKFMDVYQRSYCHPIET LVDLIFQEYPDEIEYIFKPCVPLMRCGGCCNDEGLECVPTTESNITMQIMRIKPHQQHNKCE CRPKKDRARQEKC DKPRR
Activity:	ELISA to measure His-VEGF ₁₂₁ binding activity (Figure B). His-VEGF ₁₂₁ was immobilized on the plate and was detected by anti VEGF antibody (Santacruz sc-507).
Formulation:	Lyophilized from a 0.22µm filtered solution at a concentration of 1mg/ml in 20mM Tris-HCl, pH8.0, 150mM NaCl.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water to a concentration of 1.0 mg/ml.
Shipping&Stability:	The Product is shipped at ambient temperature. Upon reconstitution, the preparation is stable for up to 1 month at 2-8°C. For long term storage, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

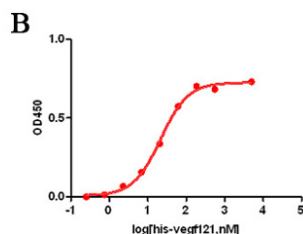
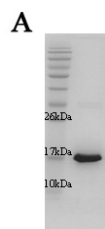


Figure A. The purity of recombinant protein His-VEGF₁₂₁ (E13-008). 12% SDS-PAGE under reducing condition, 2.4 µg protein.

Figure B. ELISA to measure the activity of His-VEGF₁₂₁ (E13-008)

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