VEGFA
Recombinant Human VEGF 121 (aa 207-327) His

Catalog No.	CRV133A CRV133B	**Quantity:**	100 µg 500 µg

Alternate Names: MVCD1, VEGF, VPF, vascular endothelial growth factor A, vascular permeability factor

Gene ID: 7422

Protein Accession No: NP_001020541

Description: Vascular endothelial growth factor (VEGF) is homodimeric, heparin-binding glycoprotein involved in both angiogenesis and vasculogenesis. VEGF is expressed as multiple alternately spliced isoforms of VEGF121, 165, 189 and 206. VEGF binds to the receptor tyrosine kinases VEGF R1 (Flt-1) and VEGF R2 (KDR/Flk-1) to activate signal transduction and regulate both physiological and pathological angiogenesis. Recombinant VEGF121 protein was expressed in *E.coli* and purified by using conventional chromatography techniques.

Concentration: 0.5 mg/ml (determined by Bradford assay)

Source: *E. coli*

Molecular Weight: 16.3 kDa (142aa), confirmed by MALDI-TOF

Formulation: Liquid in 20mM Tris pH 8.0 containing 10% glycerol.

Purity: > 95% by SDS PAGE

Endotoxin Level: < 1.0 EU per 1 ug of protein (determined by LAL method)

Biological Activity: The ED_{50} for this effect is < 4.2 ng/ml. Measured in a cell proliferation assay using NIH -3T3 cell.

Amino Acid Sequence: MGSSHHHHHH SSGLVPRGSH MAPMAEGGGQ NHHEVVKFMD VYQRSYCHPI ETLVDIFQEY PDEIEYIFKP SCVPLMRCGG CCNDEGLECV PTEESNITMQ IMRIKPHQGQ HIGEMSFLQH NKCECRPKKD RARQEKCDKP RR

Activity Assay:
1. Cell line: NIH-3T3 (Mus musculus/ embryo)
2. Maintenance Condition: RPMI 1640 containing 10% FBS
3. Assay Medium: serum free RPMI 1640
4. Cell Density: 2 x 10^4 cells/well (96 well plate, final volume 100 ul)
5. Serum Free Starvation : 24 hr with RPMI1640
6. Incubation Time: 24 hr (after sample treatment)
7. Concentration Range: 100 pg/ml - 10 ug/ml
8. Detection method: BrdU assay

Storage & Stability: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. **Avoid repeated freezing and thawing cycles**

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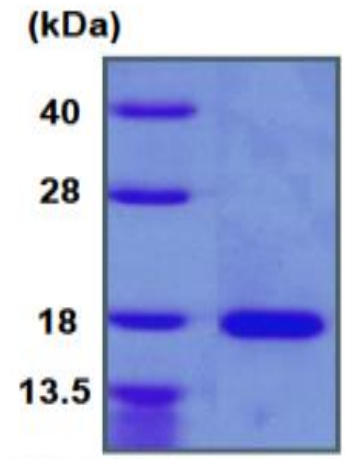
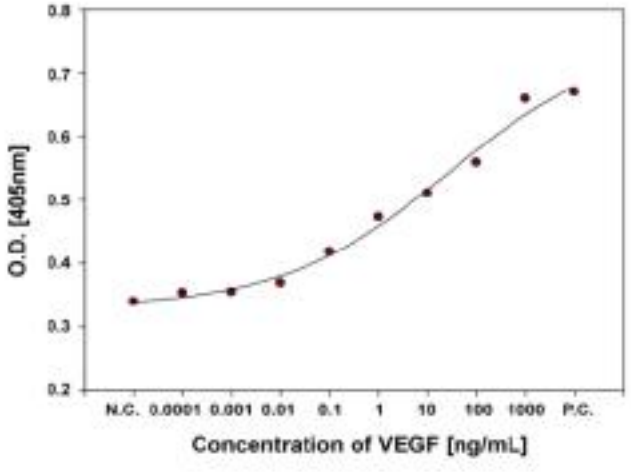
NIH/3T3 cell proliferation was determined by BrdU incorporation method at 405 nm. This test was performed duplicate.
N.C. : negative control [only 0.1% FBS]
P.C. : positive control [10% FBS]



15% SDS-PAGE (3ug)



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