

RayBiotech, Inc.

3607 Parkway Lane suite 100
Norcross, GA 30092
Tel: 770-729-2992, 1-888-494-8555
Fax: 770-206-2393
Website: www.raybiotech.com
Email: info@raybiotech.com

Certificate of Analysis and Data Sheet

Recombinant Human Vascular Endothelial Growth Factor B

Catalog No.
228-11629

Source:
Escherichia Coli.

Synonyms

Vascular endothelial growth factor B, VEGF-B, VRF, VEGFL, VEGF-related factor, VEGFB.

Introduction

VEGFB is a growth factor for endothelial cells. VEGFB 167 a.a. binds heparin and neuropilin-1 while the binding to neuropilin-1 of VEGFB 186 a.a. is regulated by proteolysis. Overexpression of VEGFB in mouse heart alters cardiac lipid metabolism and induces myocardial hypertrophy. Increased VEGFB expression is associated with hepatocellular carcinoma. VEGF-B has restricted angiogenic activity in the ischemic heart. VEGFB binds to VEGFR1, Flt1, but not to VEGFR2 and VEGFR3. VEGFB is homodimeric, heparin-binding glycoprotein involved in embryonic angiogenesis and vasculogenesis.

Description

VEGFB Human Recombinant produced in E.Coli is a double, non-glycosylated, polypeptide chain containing 207 amino acids (22-207) and having a molecular mass of 21.6 kDa. The VEGFB is fused to a 20 amino acid His Tag at N-terminus & purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered colorless liquid formulation.

Formulation

The VEGFB protein solution contains 20mM Tris-HCl buffer pH 7.5 & 10% glycerol.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time.

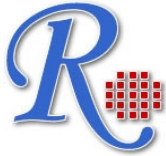
For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Avoid multiple freeze-thaw cycles.

Purity

Greater than 90.0% as determined by SDS-PAGE.

**The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.**



RayBiotech, Inc.

3607 Parkway Lane suite 100
Norcross, GA 30092
Tel: 770-729-2992, 1-888-494-8555
Fax: 770-206-2393
Website: www.raybiotech.com
Email: info@raybiotech.com

Biological Activity

Measured in a cell proliferation assay using NIH-3T3 mouse embryonic fibroblast. The ED50 for this effect is < 1ng/ml corresponding to a specific activity of less than 1,000,000units/mg.

Amino Acid Sequence

MGSSHHHHH SSGLVPRGSH MPVSQPDAPG HQRKVVSVID VYTRATCQPR EVVPLTVEL
MGTVAKQLVP SCVTVQRCGG CCPDDGLECV PTGQHQVRMQ ILMIRYPSSQ LGEMSLEEHS
QCECRPKKKD SAVKPDRAAT PHHRPQRSV PGWDSAPGAP SPADITHPTP APGPSAHAAP
STTSALTPGP AAAAADAAAS SVAKGGA.

**The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.**