

Recombinant Human Vascular Endothelial Growth Factor-B (rh VEGF-B)

Synonyms: Vascular permeability factor (VPF), VEGF-related factor

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 VEGF-B 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. VEGFB 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: Recombinant human VEGFB 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 20 amino acid His Tag at N-terminus & purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*

Physical Appearance: Sterile filtered colorless liquid formulation.

Formulation: The 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. Please prevent freeze-thaw cycles.

Purity: greater than 90.0% as determined by SDS-PAGE.

Amino Acid Sequence:

MGSSHHHHHH SSSLVPRGSH MPVSQPDAPG HQRKVVSWID VYTRATCQPR EVVPLTVEL
MGTVAKQLVP SCVTVQRCGG CCPDDGLECV PTGQHQVRMQ ILMIRYPSSQ LGEMSLEEHS
QCECRPKKKD SAVKPDRAAT PHHRPQPRSV PGWDSAPGAP SPADITHPTP APGPSAHAAP STTSALTPGP
AAAAADAAAS SVAKGGA.

Biological Activity: Measured in a cell proliferation assay using NIH-3T3 mouse embryonic fibroblast the ED50 is < 1 ng/ml corresponding to a specific activity of less than 1×10^6 IU/mg.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	5 µg	Cat.N°	11344700
<i>medium</i>	20 µg	Cat.N°	11344704

ImmunoTools Excellent Quality - Advantageously priced

Gladiolenweg 2; 26169 Friesoythe; Germany
phone:+49-(0)4491-400997, fax:+49-(0)4491-400998, info@immunotools.com
www.immunotools.com