

Vascular Endothelial Growth Factor-B, Human Recombinant

CATALOG NUMBER: CEG-628-010P, 10 µg

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. Over-expression 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	<p>VEGFB Human Recombinant produced in <i>E. coli</i> is a double, non-glycosylated, polypeptide chain containing 207 amino acids (22-207) and having a molecular mass of 21.6 kDa.</p> <p>The VEGFB is fused to 20 amino acid His Tag at N-terminus and purified by proprietary chromatographic techniques.</p>
Source	<i>Escherichia coli</i>
Biological Activity	Determined by the dose-dependent induction of choline acetyl transferase activity in rat basal forebrain primary septal cell cultures was found to be in the range of 20-50 ng/ml.
Amino Acid Sequence	<u>MGSSHHHHHH SSGLVPRGSH</u> MPVSQPDAPG HQRKVVSWID VYTRATCQPR EVVVPLTVEL MGTVAKQLVP SCVTVQRCGG CCPDDGLECV PTGQHQVRMQ ILMIRYPSSQ LGEMSLEEHS QCECRPKKKD SAVKPDRAAT PPHRPQPRSV PGWDSAPGAP SPADITHPTP APGPSAHAAP STTSALTPGP AAAAADAAS SVAKGGA
Formulation	The protein solution contains 20mM Tris-HCl buffer (pH7.5) and 10% glycerol.
Storage	Store at 4°C in entire vial will be used within 2-4 weeks. Store frozen at -20°C for longer period of time. Please avoid freeze-thaw cycles.
Purity	> 90% pure by SDS-PAGE.