

## Product Datasheet

# Recombinant VEGF164, Mouse (P.pastoris-expressed) (orb1494605)

<b>Catalog Number</b>	orb1494605
<b>Category</b>	Proteins
<b>Description</b>	<p>Vascular Endothelial Growth Factor (VEGF) is a potent growth and angiogenic cytokine. It stimulates proliferation and survival of endothelial cells, and promotes angiogenesis and vascular permeability. Expressed in vascularized tissues, Vascular Endothelial Growth Factor (VEGF) plays a prominent role in normal and pathological angiogenesis. Substantial evidence implicates Vascular Endothelial Growth Factor (VEGF) in the induction of tumor metastasis and intra-ocular neovascular syndromes. Vascular Endothelial Growth Factor (VEGF) signals through the three receptors; fms-like tyrosine kinase (flt-1), KDR gene product (the murine homolog of KDR is the flk-1 gene product) and the flt4 gene product. Recombinant mouse Vascular Endothelial Growth Factor A164 (rmVEGF-A164) produced in <i>Pichia pastoris</i> is a disulfide-linked homodimer containing two polypeptide chains of 165 amino acids each. A fully biologically active molecule, rmVEGF-A164 has a molecular mass of 39kDa analyzed by non-reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript</p>
<b>Form/Appearance</b>	Lyophilized after extensive dialysis against 25 mM HEPES and 150 mM NaCl, pH 7.0.
<b>Buffer/Preservatives</b>	Lyophilized after extensive dialysis against 25 mM HEPES and 150 mM NaCl, pH 7.0.
<b>Purity</b>	> 97% as analyzed by reducing SDS-PAGE
<b>Purification</b>	> 97% as analyzed by reducing SDS-PAGE
<b>Protein Sequence</b>	MAPTTE GEQKSHEVIK FMDVYQRSYC RPIETLVDIF QEYPDEIEYI FKPSCVPLMR CAGCCNDEAL ECVPTSESNI TMQIMRIKPH QSQHIGEMSF LQHSRCECRP KKDRTKPEKH CEPCSERRKH LRVQDPQTCK CSCKNTDSRC KARQLELNER TCRCDKPRR

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<b>MW</b>	39kDa, observed by non-reducing SDS-PAGE.
<b>Application notes</b>	Reconstituted in ddH2O at 100 µg/ml.
<b>Endotoxins</b>	1.0 EU/µg, determined by LAL method.
<b>Source</b>	P. pastoris
<b>Biological Activity</b>	Resuspend cells in assay media (Earle Salts 199X Gibco #11150, without h-EGF) containing 10 % HI-FBS and transfer 100 ul/well to assay plate (5,100 cells/well passage#2). Serial dilute murine VEGF in assay media containing 10 % HI-FBS and transfer 100ml/well to cells in assay plate. Final assay volume is 200 ml/well, containing 10 % HI-FBS, and murine VEGF as indicated 89 hours. Add 20 ml of Promega Substrate Cell Titer 96 Aqueous One Solution Reagent to each well, Incubate 37°C and read at OD 490 nm. The ED50 for the effect is typically 4.1 - 6.2 ng/ml.
<b>Storage</b>	Lyophilized recombinant mouse Vascular Endothelial Growth Factor A164 (rmVEGF-A164)remains stable up to 12 months at -80°C from date of receipt. Upon reconstitution, rmVEGF-A164 should be stable up to 4 week at 4°C or up to 6 months at -20°C.
<b>Note</b>	For research use only

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