

Rev03
Update: Dec,14,2021

DATASHEET

VEGF164, Rat (P. pastoris-expressed)

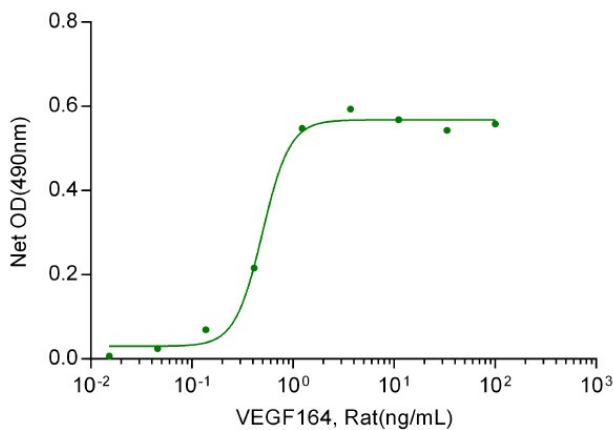
Cat. No.: Z02917

Product Introduction

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| Species | Rat |
| Protein Construction | Expressed with an N-terminal Met. VEGF164 (Ala27-Arg190) Accession # P16612-2 |
| Purity | > 95% as analyzed by SDS-PAGE |
| Endotoxin Level | < 1 EU/ μ g of protein by gel clotting method |
| Biological Activity | ED ₅₀ < 4.0 ng/ml, measured by cell proliferation assay of HUVEC. |
| Expression System | P. pastoris |
| Apparent Molecular Weight | ~38 kDa, on SDS-PAGE under non-reducing conditions. |
| Formulation | Lyophilized after extensive dialysis against PBS. |
| Reconstitution | It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH ₂ O or PBS up to 100 μ g/ml. |
| Storage & Stability | Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles. |

Examples

ED₅₀<4 ng/ml, measured by cell proliferation assay of HUVEC.



Background

Target Background : Vascular Endothelial Growth Factor A164 (VEGF-A164), a member of the cysteine knot growth factor, is one of major isoforms of VEGF-As. VEGF-As are endothelial cell-specific mitogens with angiogenic and vascular permeability-inducing properties. During maturation, rat VEGF-A is alternatively spliced to generate rVEGF-A120, rVEGF-A164 and rVEGF-A188 which correspond to hVEGF-A121, hVEGF-A165 and hVEGF-A189 in human, respectively (the numbers designate the amino acid residues). The active form of rVEGF-A164 is either a homodimeric or heterodimeric polypeptides which bind to the transmembrane tyrosine kinases receptors FLT1, FLK1 or KDR or to the non-tyrosine kinase neuropilin receptors NRP1/2.

Synonyms : Folliculostellate cell-derived growth factor; Glioma-derived endothelial cell mitogen; VEGF-164; Vascular Permeability Factor; VPF

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.