

Rev04
Update: Oct,11,2022

DATASHEET

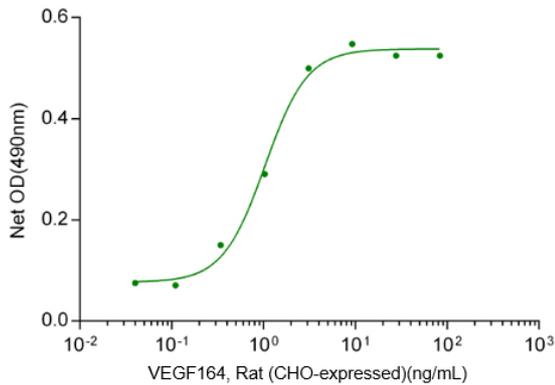
VEGF164, Rat (CHO-expressed)

Cat. No.: Z03006

Product Introduction

Species	Rat
Protein Construction	VEGF164 (Ala27-Arg190) Accession # P16612-2
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
Endotoxin Level	< 0.2 EU/μg of protein by gel clotting method
Biological Activity	ED ₅₀ < 4.0 ng/ml, measured in a cell proliferation assay using HUVEC cells, corresponding to a specific activity of >2.5 × 10 ⁵ units/mg
Expression System	CHO
Apparent Molecular Weight	35~48 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 μg/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 in a cell proliferation assay using HUVEC cells, corresponding to a specific activity of >2.5 x 10⁵ units/mg

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.