Data Sheet (Cat.No.TMPS-00178)

TargetMol

VEGF164 Protein, Mouse, Recombinant (E. coli)

General Information

Synonyms:	Glioma-derived endothelial cell mitogen;VPF;VEGF-164;Vascular Permeability Factor; Folliculostellate cell-derived growth factor
Protein Construction:	Ala27-Arg190
Species:	Mouse
Expression Host:	E. coli
Accession:	Q00731-2
Molecular Weight:	~19.4 kDa (Reducing conditions)

QC Testing

Biological Activity:	The ED 50 < 5.0 ng/ml, measured by a cell proliferation assay using HUVEC Cells, corresponding to a specific activity of > 2.0 × 10 5 units/mg.
Purity:	> 98% as determined by SDS-PAGE
Endotoxin:	< 0.2 EU/μg of protein as determined by the LAL method.
Formulation:	Lyophilized from a 0.2 μm filtered solution in PBS.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in sterile deionized water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

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.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Vascular Endothelial Growth Factor (VEGF) was initially purified from media conditioned by normal bovine pituitary folliculo-stellate cells and by a variety of transformed cell lines as a mitogen specific for vascular endothelial cells. It was subsequently found to be identical to an independently discovered vascular permeability factor (VPF), which was previously identified in media conditioned by tumor cell lines based on its ability to increase the permeability of capillary blood vessels. Three mouse cDNA clones, which arise through alternative splicing and which encode mature mouse monomeric VEGF having 120, 164, or 188, amino acids, respectively,

have been identified. Two receptor tyrosine kinases (RTKs), Flt-1 and Flk-1 (the mouse homologue of human KDR), both members of the type III subclass of RTKs containing seven immunoglobulin-like repeats in their extracellular domains, have been shown to bind VEGF with high affinity. The roles of the homodimers of KDR, Flt, and the heterodimer of KDR/Flt in VEGF signal transduction remain to be elucidated. In vivo, VEGF has been found to be a potent angiogenesis inducer.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481