Recombinant Human VEGF-A/VEGF121

Cat.No. MGF9017

Lot.No. Refer to Vial

Packaging: 10μg \ 50μg \ 500μg \ 1mg

Description

Recombinant Human Vascular Endothelial Growth Factor A is produced by our E.coli expression system and the target gene encoding Ala27-Arg147 is expressed. Human VEGF121, also known as Vascular endothelial growth factor A, VEGFA, Vascular permeability factor, VPF and VEGF, is a homodimeric, heparin-binding glycoprotein which belongs to the platelet-derived growth factor (PDGF)/vascular endothelial growth factor (VEGF) family. VEGF-A is a glycosylated mitogen that specifically acts on endothelial cells and has various effects, including mediating increased vascular permeability, inducing angiogenesis, vasculogenesis, permeabilization of blood vessels and endothelial cell growth, increasing microvascular permeability, promoting cell migration and inhibiting apoptosis. Alternatively spliced transcript variants of VEGF-A encod either secreted or cell-associated isoforms. The lymphangiogenesis may be promoted by upregulation of VEGF121, which may in turn act in part via induction of VEGF-C. It binds to the FLT1/VEGFR1 and KDR/VEGFR2 receptors, heparan sulfate and heparin. NRP1/Neuropilin-1 binds isoforms VEGF-165 and VEGF-145. Isoform VEGF165B binds to KDR but does not activate downstream signaling pathways, does not activate angiogenesis and inhibits tumor growth.

Amino acid sequence

MAPMAEGGGQNHHEVVKFMDVYQRSYCHPIETLVDIFQEYPDEIEYIFKPSCVPLMRCGGCCND
EGLECVPTEESNITMQIMRIKPHQGQHIGEMSFLQHNKCECRPKKDRARQEKCDKPRR

Endotoxin

Less than 0.1 ng/μg (1 IEU/μg) as determined by LAL test.

Origin

E.coli

Quality control

Greater than 95% as determined by reducing SDS-PAGE.

Formulation

Lyophilized from a 0.2 μM filtered solution of PBS,pH7.4

Dissolution

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in 1X PBS. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Store condition

Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at 4-7°C for 2-7 days.

Aliquots of reconstituted samples are stable at < -20°C for 3 months.

For Research Use Only. Not for use in diagnostic procedures.