

SibTech, Inc.

scVEGF/biotin

Product # SBT309

scVEGF/biotin is single-chain vascular endothelial growth factor, scVEGF, (SibTech product #SBT300), site-specifically derivatized with biotin.

Synthesis: scVEGF/biotin is synthesized by site-specific conjugation of Biotin-maleimide (Sigma) to C4 residue of Cys-tag in scVEGF. scVEGF/biotin is purified by gel-filtration and lyophilized from 20 mM ammonium bicarbonate.

Purity: This preparation contains >98% pure protein that migrates as a single band with an apparent molecular weight of 29,000 daltons in reducing SDS-PAGE.

Functional activity in tissue culture: The ability of scVEGF/biotin to bind to and activate VEGF receptor VEGFR-2 is tested *in vitro* on 293/KDR human transformed embryonic kidney cells expressing 2.5×10^6 VEGFR-2/cell (SibTech product #SBT021.293). Relative to unmodified scVEGF, scVEGF/biotin displays more than 95% VEGF activity.

Field of use: scVEGF/biotin can be linked to various biotinylated payloads via streptavidin and used for targeted delivery of these payloads to VEGFR-overexpressing angiogenic vasculature.

One vial contains 0.15 mg of essentially salt-free lyophilized scVEGF/biotin

Reconstitution: To insure full recovery, centrifuge the vial briefly before opening. Reconstitute in 0.1 ml of sterile PBS, to a final concentration of 1 mg/ml. We do not recommend using less than 0.1 ml for reconstitution.

Stability: scVEGF/biotin is stable for 1 year at -20°C . After reconstitution, scVEGF/Cy is stable and functionally active for at least 6 months, if stored at -20°C and for 1-2 days at 4°C . Multiple thawing-freezing should be avoided.

Safety warnings: For research use only. Not for human use. Not recommended or intended for diagnosis in humans or animals. As all chemicals should be considered as potentially hazardous, it is advisable to wear suitable protective clothing, such as laboratory overalls, safety glasses and gloves. Care should be taken to avoid contact with skin or eyes. In case of contact with skin or eyes, wash immediately with water.