## SibTech, Inc.

## Inactivated scVEGF

Product #SBT301-IN

Inactivated scVEGF is functionally inactive derivative of scVEGF (SibTech product #SBT301). It can be site-specifically derivatized on C4-thiol group in Cys-tag with the same payloads and through the same procedures as scVEGF. Derivatized inactivated scVEGF can serve as a control protein for non-specific (non-receptor mediated) binding/uptake.

**Inactivation:** For inactivation, ε-amino group of 12-14 lysine residues in a scVEGF are derivatized with NHS-biotin. The resulting protein is purified by gel-filtration and lyophilized from 20 mM ammonium bicarbonate.

**Functional activity:** Functional activity is tested *in vitro* using 293/KDR human transformed embryonic kidney cells expressing 2.5x10<sup>6</sup> VEGFR-2/cell (SibTech product #SBT021.293). Inactivated scVEGF displays no VEGF activity.

## One vial contains 0.15 mg of essentially salt-free lyophilized inactivated scVEGF

**Reconstitution:** To insure full recovery, centrifuge the vial briefly before opening. Reconstitute in 0.15 ml of a buffer of your choice, to a final concentration of 1 mg/ml. We do not recommend using less than 0.15 ml for reconstitution.

**Stability:** Lyophilized inactivated scVEGF is stable for at least 1 year at -20°C. After reconstitution, inactivated scVEGF is stable for at least 6 months, if stored at -20°C or below. 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.

## References

1. Backer MV, Levashova Z, Patel V, Jehning BT, Claffey K, Blankenberg FG, Backer JM. Molecular imaging of VEGF receptors in angiogenic vasculature with single-chain VEGF driven probes. *Nature Med*, 13, 504-509, 2007