SibTech, Inc.

ctFLex

Product #SBT501

ctFLex is an engineered 20.3 kDa protein comprising human FLex (a T27-P182 fragment of Flt3 ligand) fused to an N-terminal Cys-tag via an 11-aa peptide linker. Complete sequence of ctFLex contains the following 180 amino acids:

MKESCAKKFQRQHMDSGGGGSMADIGSTQDCSFQHSPISSDFAVKIRELSDYLLQDYPVTVASNLQDEELCGALW
RLVLAQRWMERLKTVAGSKMQGLLERVNTEIHFVTKCAFQPPPSCLRFVQTNISRLLQETSEQLVALKPWITRQNF
SRCLELQCQPDSSTLPPPWSPRPLEATAP

Purification: ctFLex is expressed in bacteria, purified by ion-exchange chromatography to >95% purity, and lyophilized from 20 mM ammonium bicarbonate. Purified ctFLex migrates as a single band with an apparent molecular weight of 18 kDa in reducing SDS-PAGE.

Radiolabeling with ^{99m}Tc and other applications: After treatment with equimolar amounts of DTT, thiol group in Cys-tag becomes available for direct radiolabeling with ^{99m}Tc for SPECT imaging of Flt3 receptors, or site-directed conjugation of various payloads, including radionuclide chelators (1).

One vial contains 0.15 mg of essentially salt-free lyophilized scFLex

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

Stability: Lyophilized ctFLex is stable for 1 year at -20^{o}C. After reconstitution, ctFLex is stable for at least 6 months, if stored at -20^{o}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

Backer MV, Levashova Z, Levenson R, Blankenberg FG, Backer JM. Cysteine-containing fusion tag for site-specific conjugation of therapeutic and imaging agents to targeting proteins. *Methods in Molecular Medicine. Peptide-based Drug Design*. Humana Press, New York, NY. Ed: L. Otvos. Vol. 494, p.275-94, 2008.

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