

Supporting Information

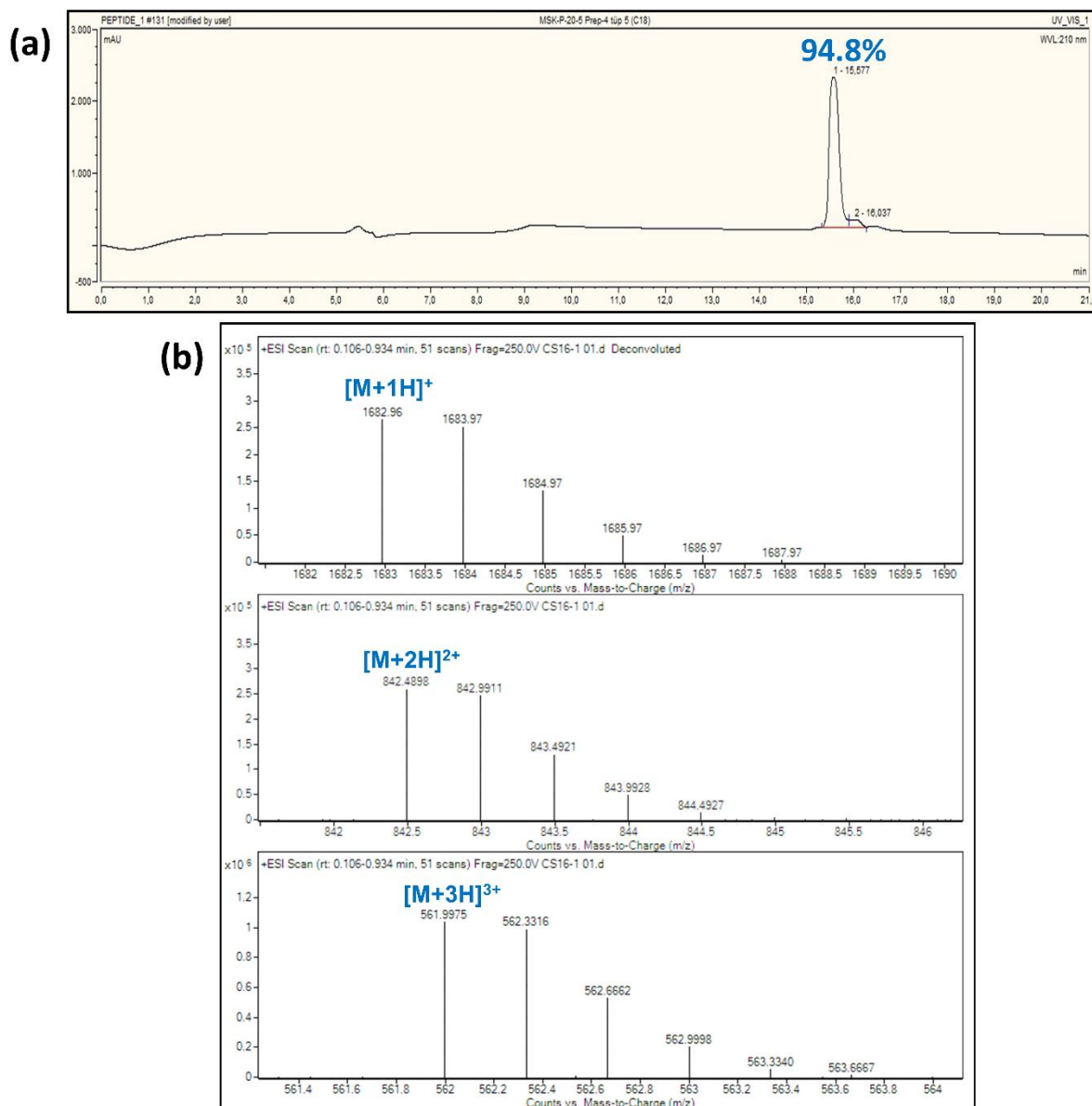


Figure 1. RP-HPLC chromatogram for purity percent at 214 nm (a) and mass spectral (LC/MS-High Resolution Quadrupole Mass Time-of-Flight (Q-TOF) (HRMS)) profiles (b) of PSMA-563 peptide-GRFLTGGTGRLLRIS

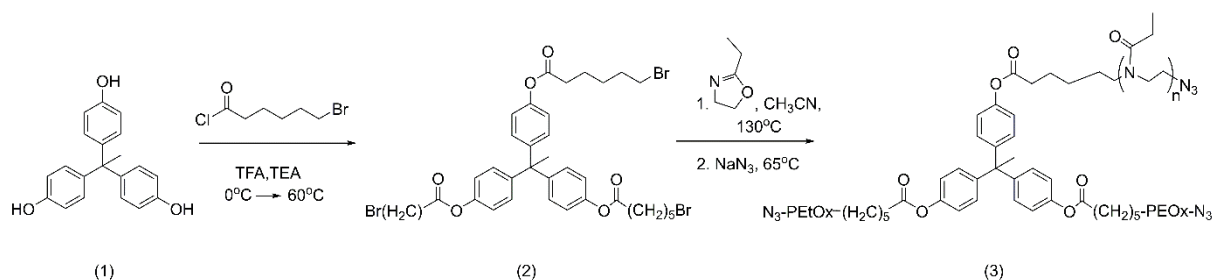


Figure 2. The reaction scheme of initiator and star-shaped Poly(2-ethyl-2-oxazoline) (PEtOx).

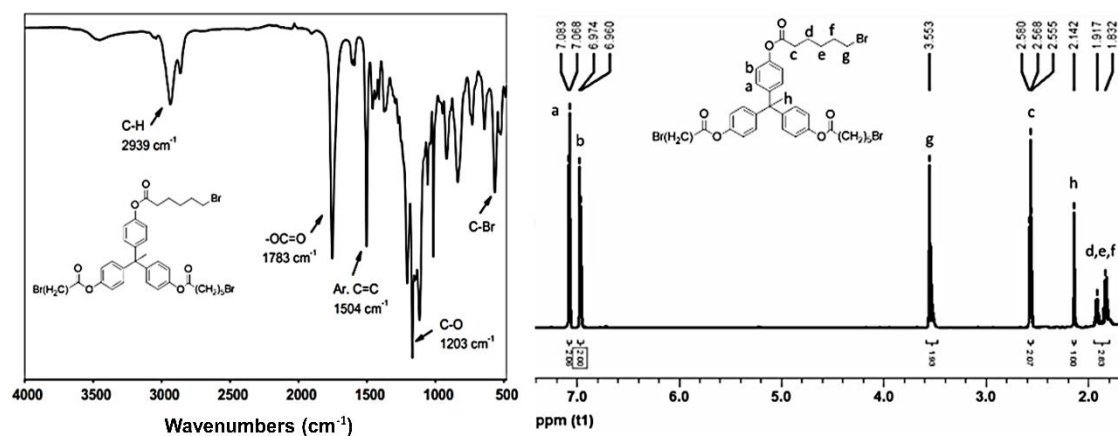


Figure 3. $^1\text{H-NMR}$ and FT-IR spectra of ethane-1,1,1-triyltris (benzene-4,1-diyl) tris (6-bromohexanoate)

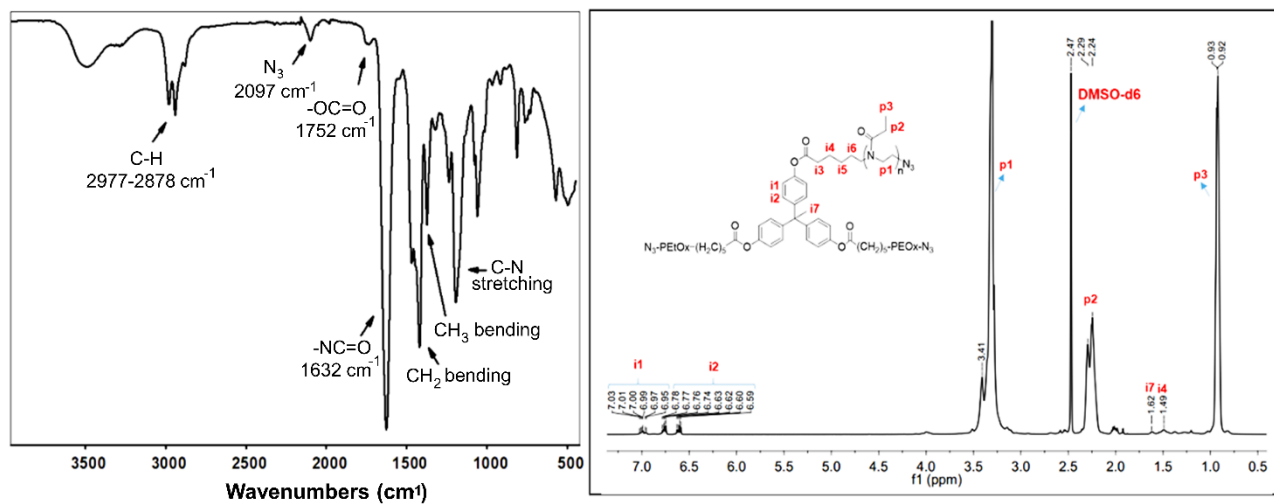


Figure 4. FT-IR and $^1\text{H-NMR}$ spectra of star-shaped PEtOx

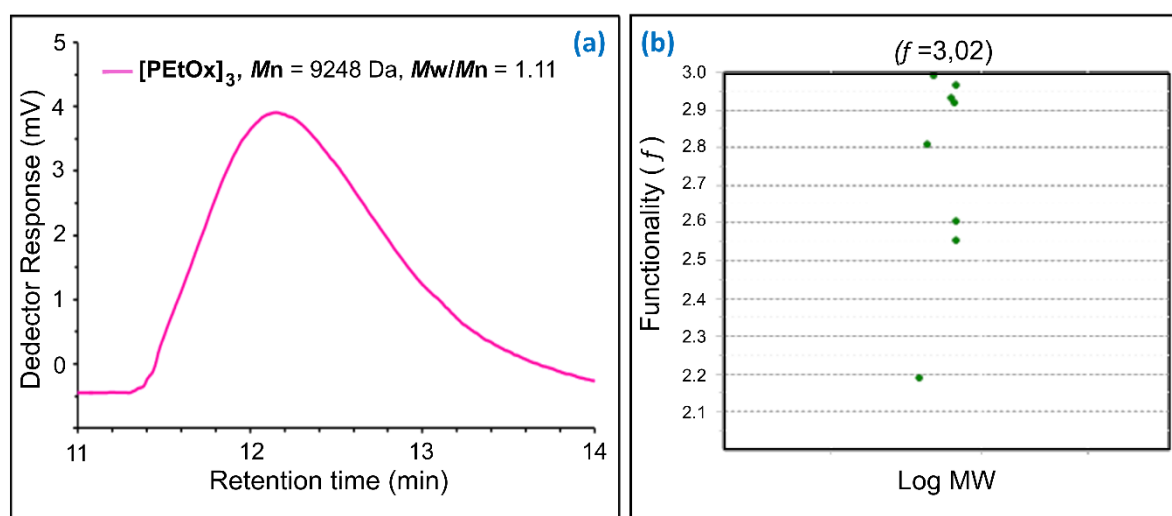


Figure 5. (a) GPC Chromatogram of star-shaped PEtOx and (b) functionality (number of arms of the polymer) graph

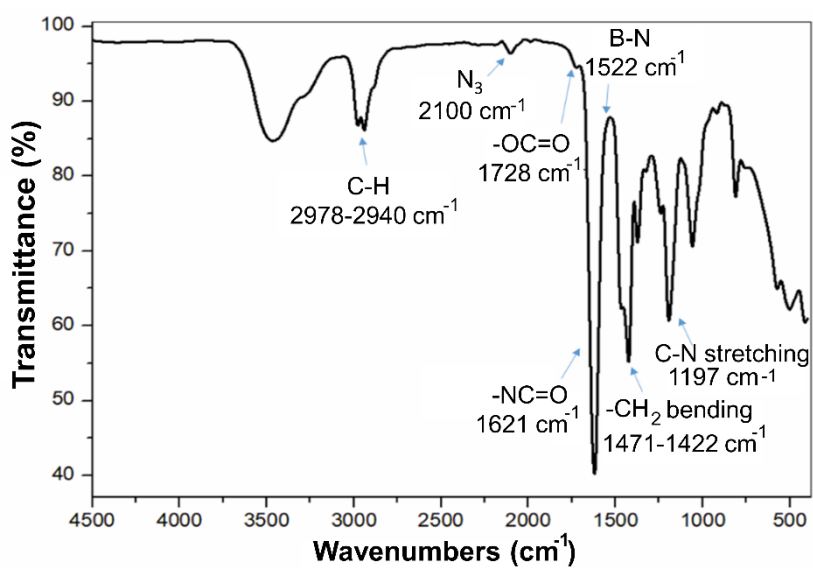


Figure 6. FT-IR spectrum of Bodipy-derived fluorescent dye conjugated star-shaped PEtOx

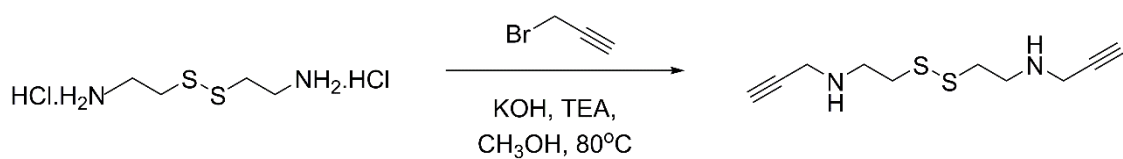


Figure 7. Reaction scheme for the synthesis of N, N'-(disulfandiylbis(ethane-2,1-diyl)) bis(prop-2-yn-1-amine).

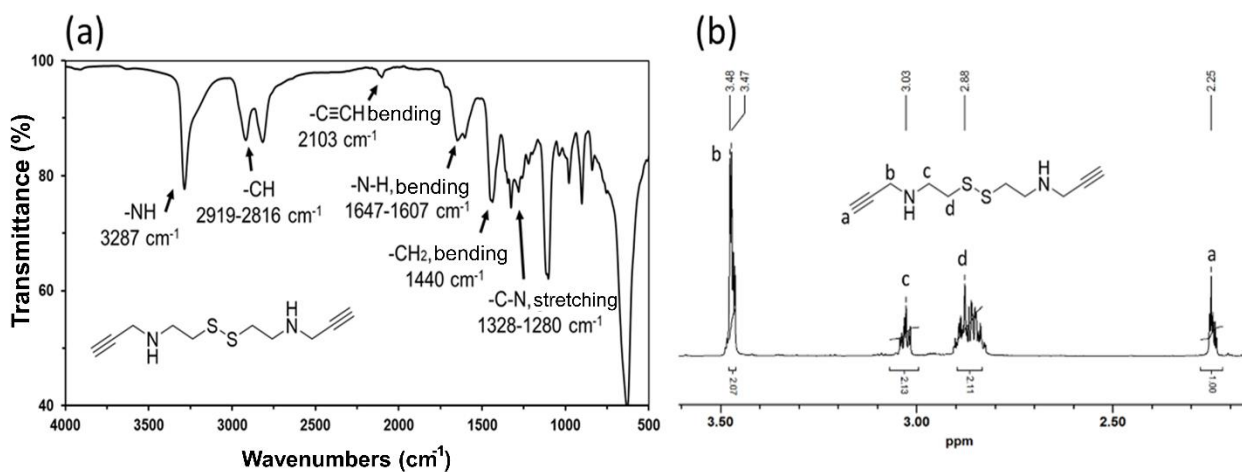


Figure 8. FT-IR and ^1H -NMR spectra of the N, N'-(disulfandiylbis(ethane-2,1-diyl)) bis(prop-2-yn-1-amine) crosslinker

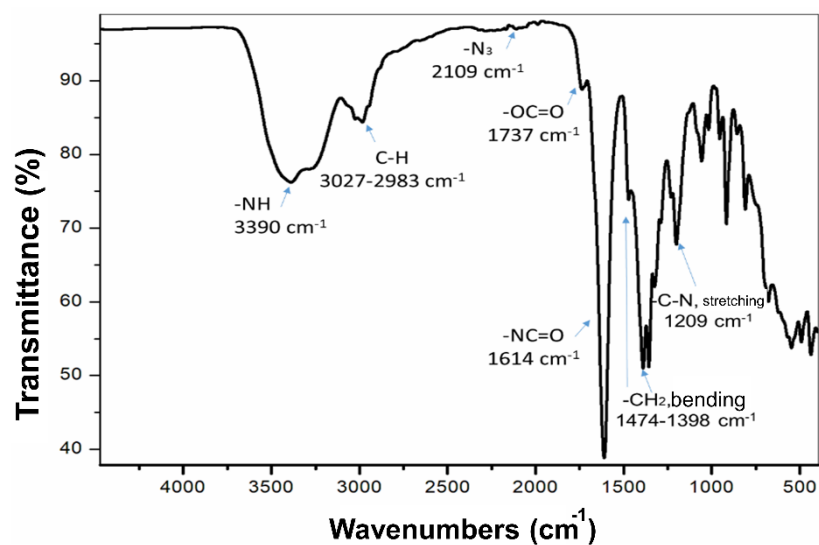


Figure 9. FT-IR spektrum of Bodipy-derived fluorescent dye conjugated nanogel formulation

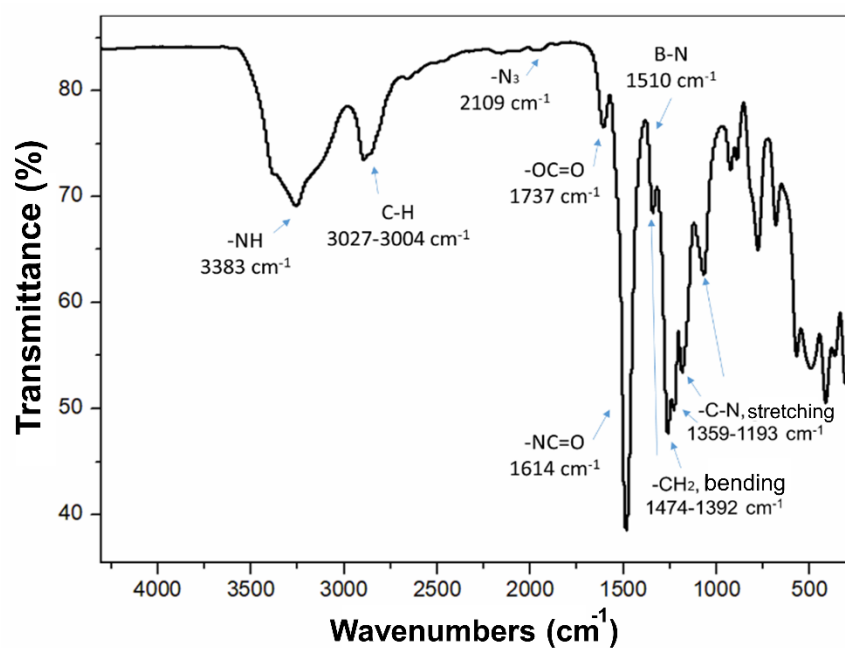


Figure 10. FT-IR spektrum of Bodipy-derived fluorescent dye and PSMA-563 peptide conjugated nanogel formulation

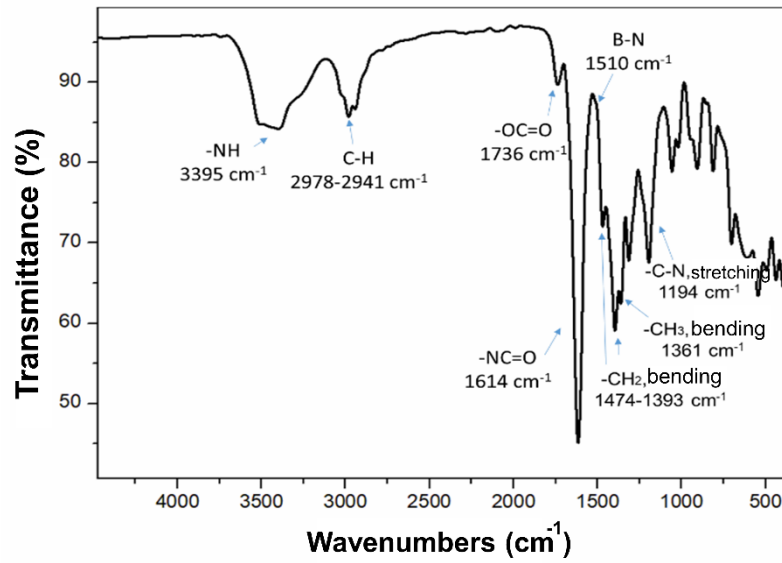


Figure 11. FT-IR spektrum of Bodipy-derived fluorescent dye conjugated nanogel formulation containing active ingredient (SGK636)

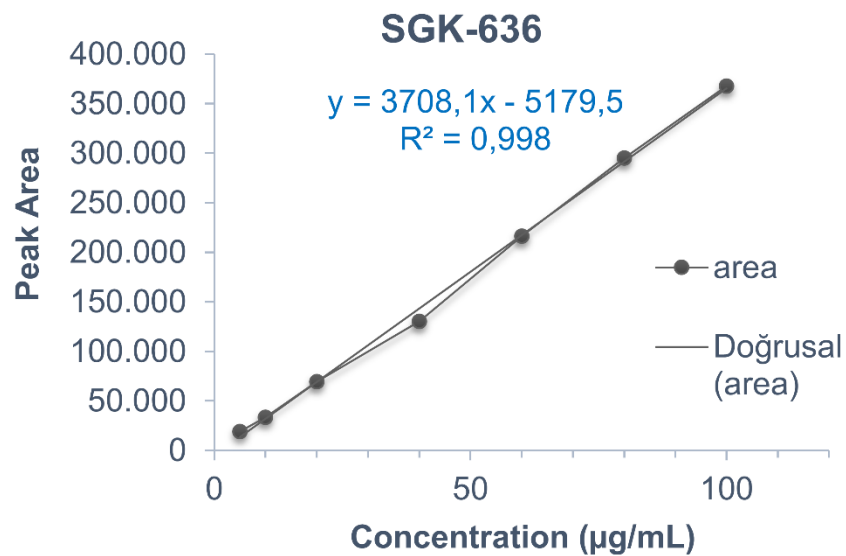


Figure 12. Calibration curve of nanogel formulations containing SGK-636 active ingredient between 5 - 100 mg/mL ($\lambda = 332$ nm)