

# Curcumin I-SMA nanomicells as promising therapeutic tool to tackle bacterial infections

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## SUPPORTING INFORMATION

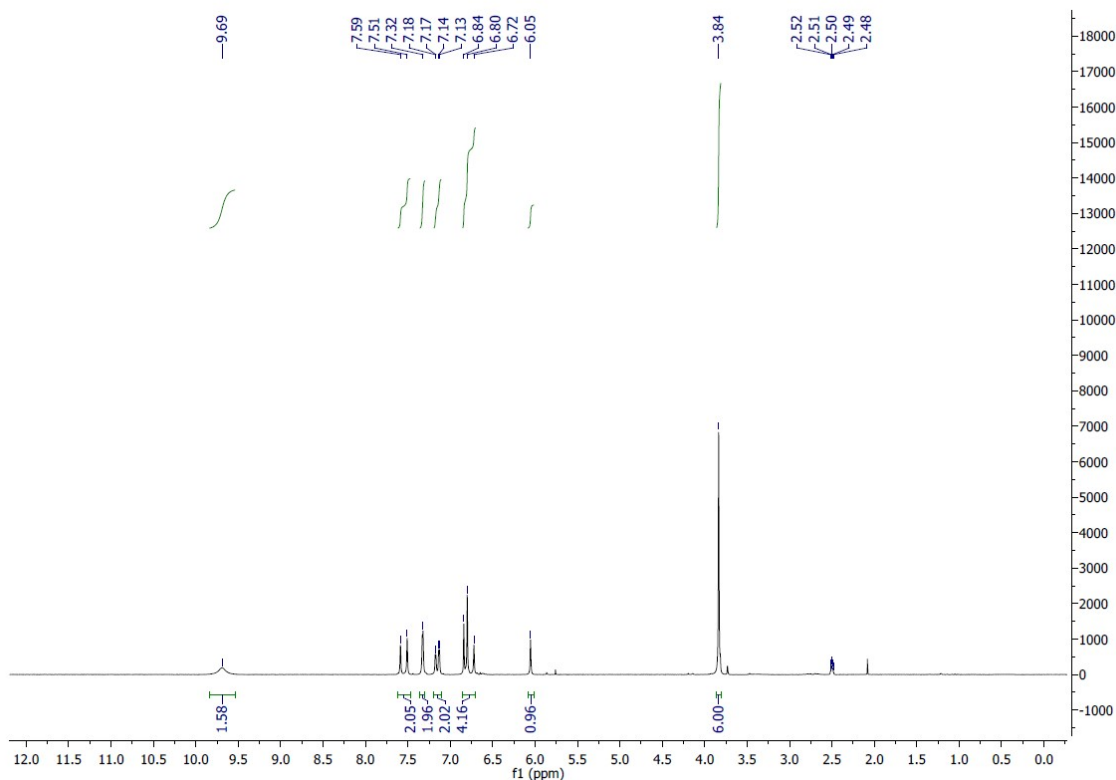
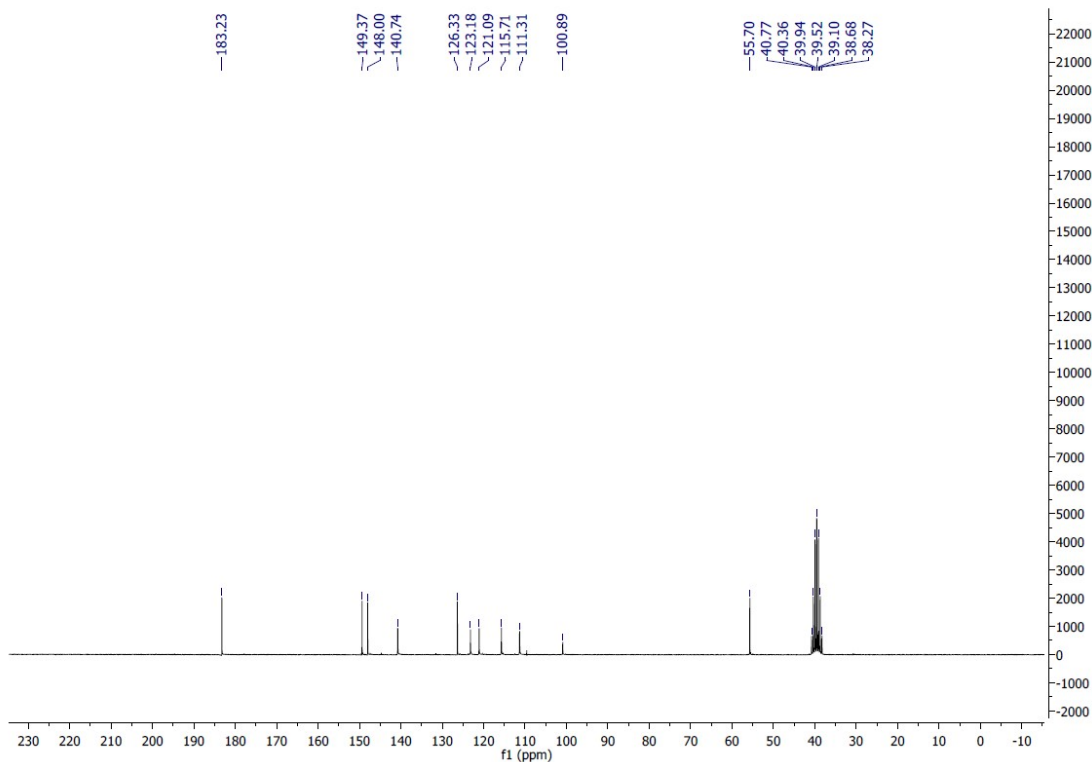
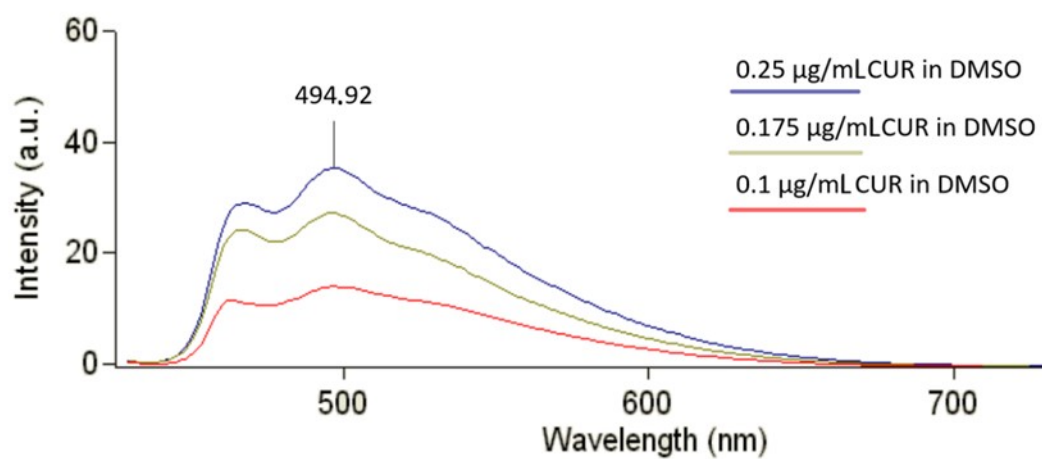


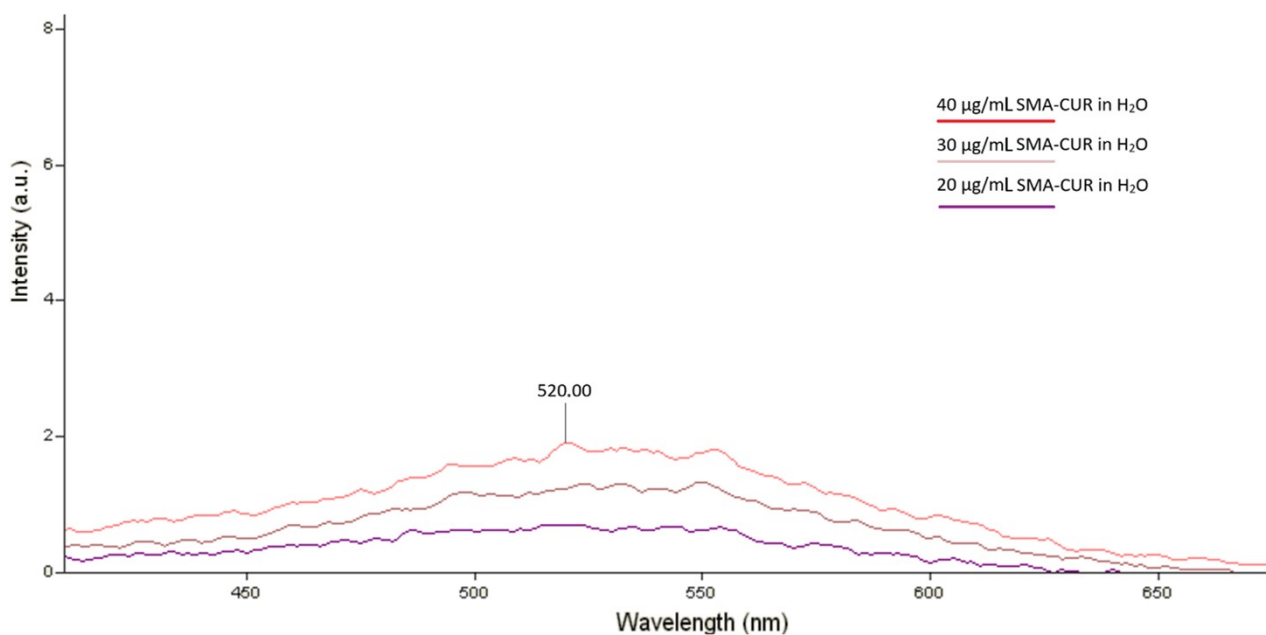
Figure S1. <sup>1</sup>H NMR (200 MHz, DMSO-d<sub>6</sub>) of CUR-I.



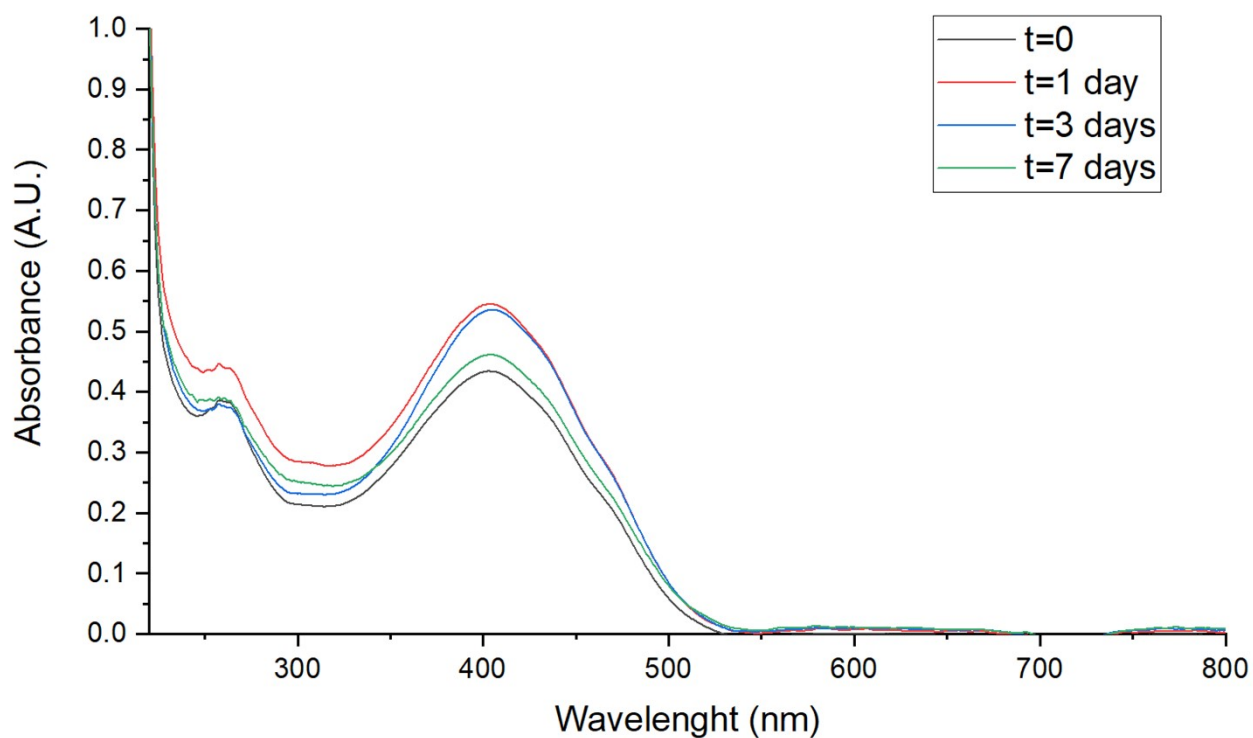
**Figure S2.**  $^{13}\text{C}$  NMR (50 MHz,  $\text{DMSO-}d_6$ ) of CUR-I.



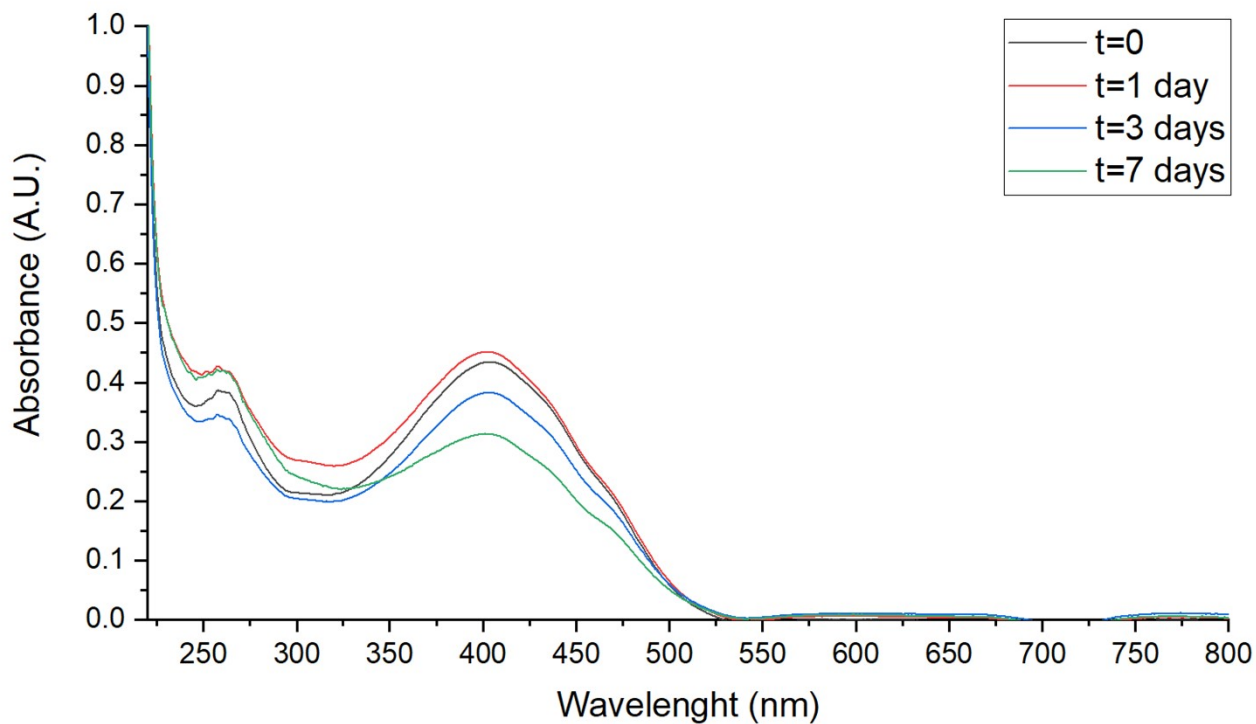
**Figure S3.** Fluorescence spectra of Curcumin I in  $\text{DMSO}$ . The emission spectra of curcumin were obtained by irradiation with a  $\lambda_{\text{exc}}$  of 405 nm and scanning from 425 to 780 nm.



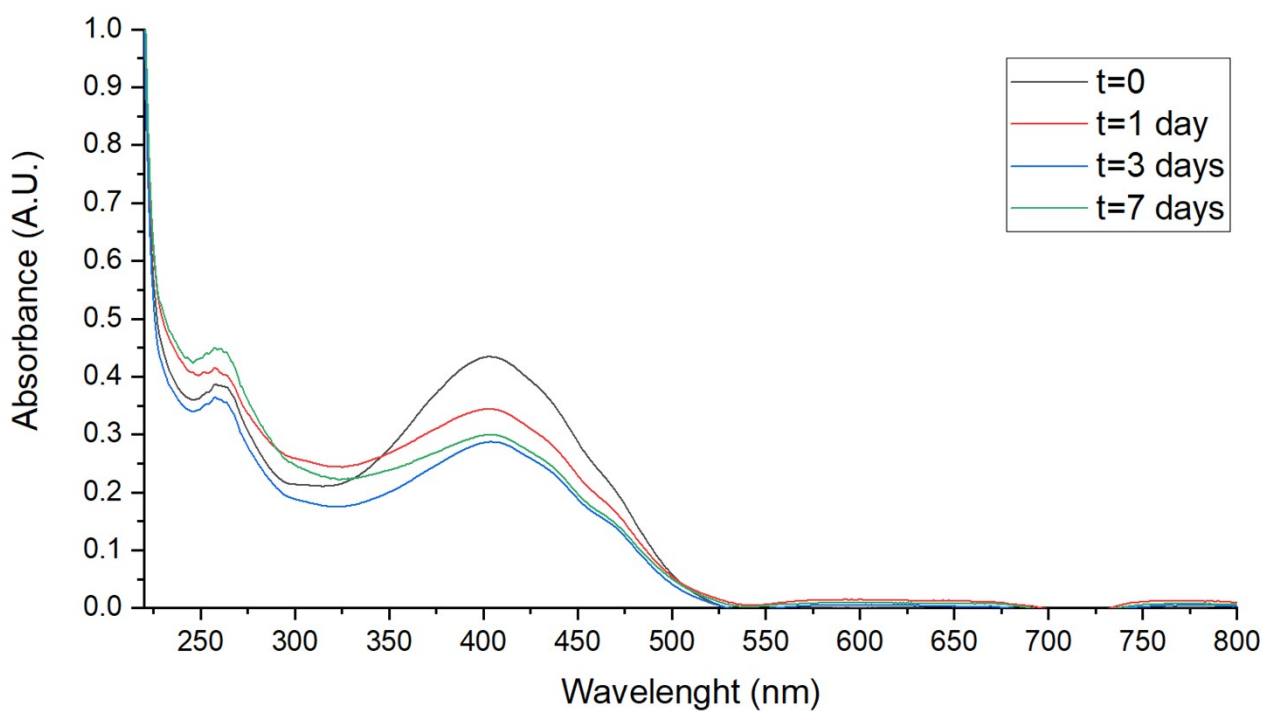
**Figure S4.** SMA-CUR in DDW. The emission spectra were obtained by irradiation with a  $\lambda_{exc}$  of 350 nm and scanning from 400 to 680 nm.



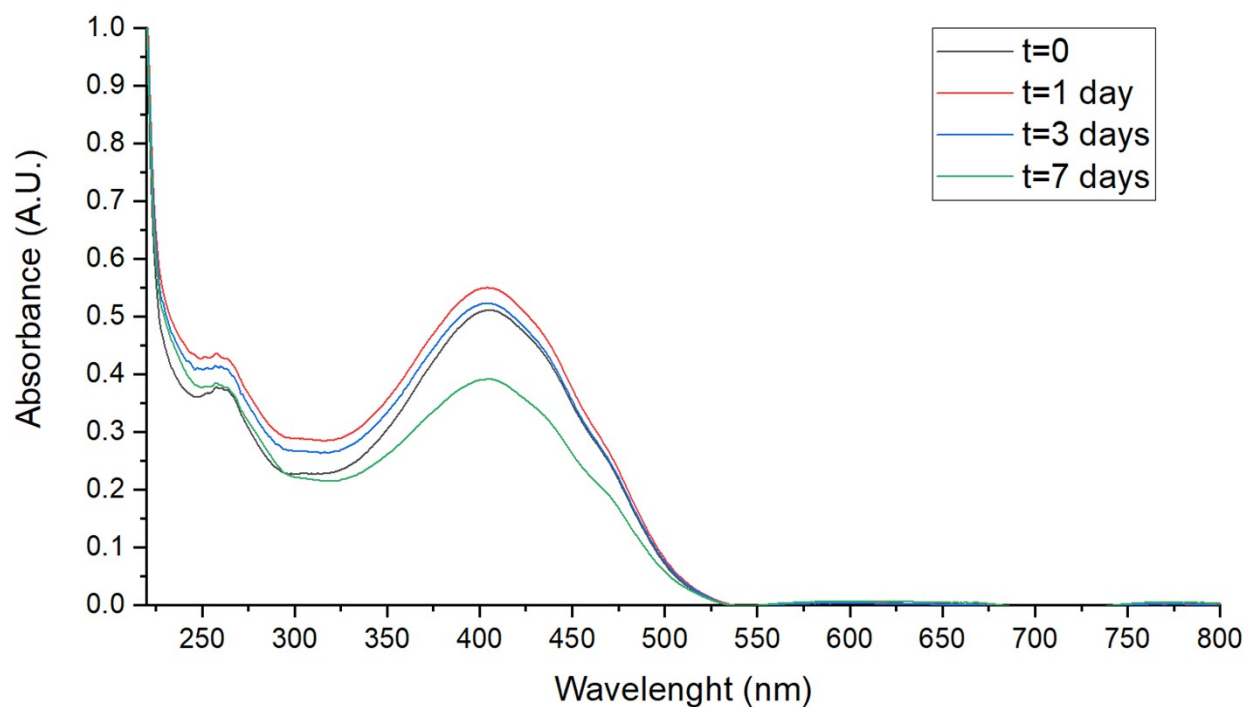
**Figure S5.** Stability studies by UV-vis of SMA-CUR in DDW at T = 4 °C. SMA-CUR = 60 µg/mL, path length 1 cm.



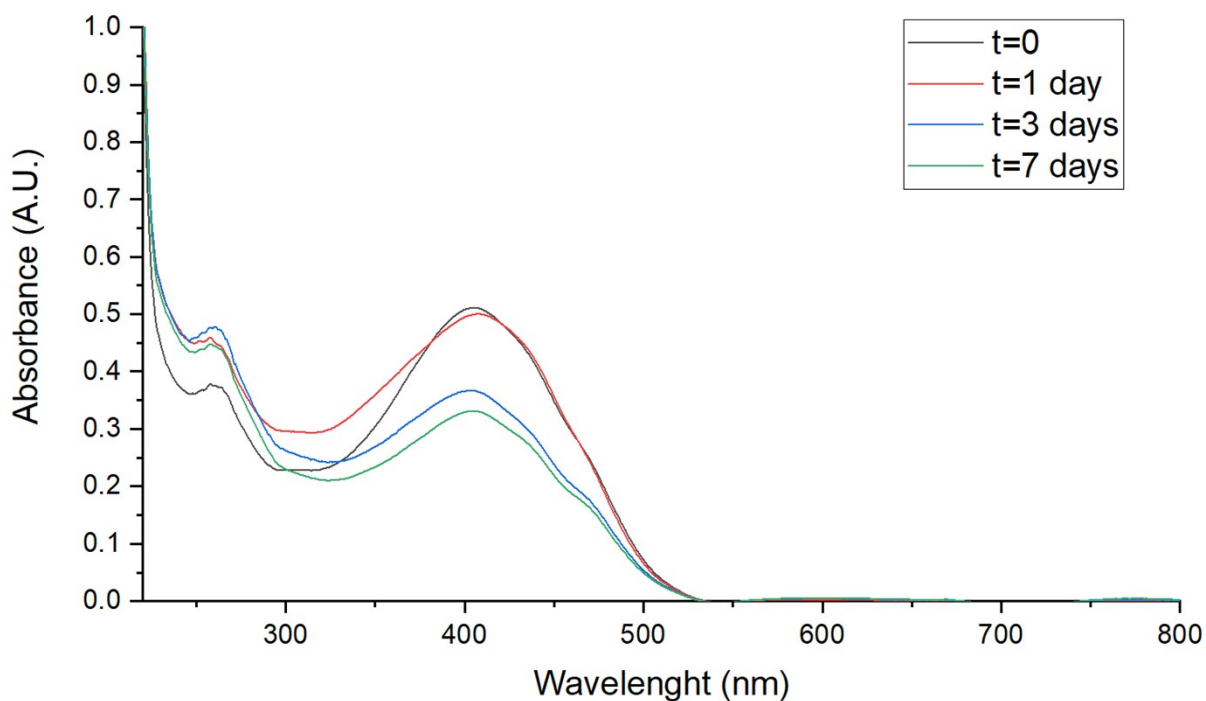
**Figure S6.** Stability studies by UV-vis of SMA-CUR in DDW at room temperature. SMA-CUR = 60  $\mu\text{g/mL}$ , path length 1 cm.



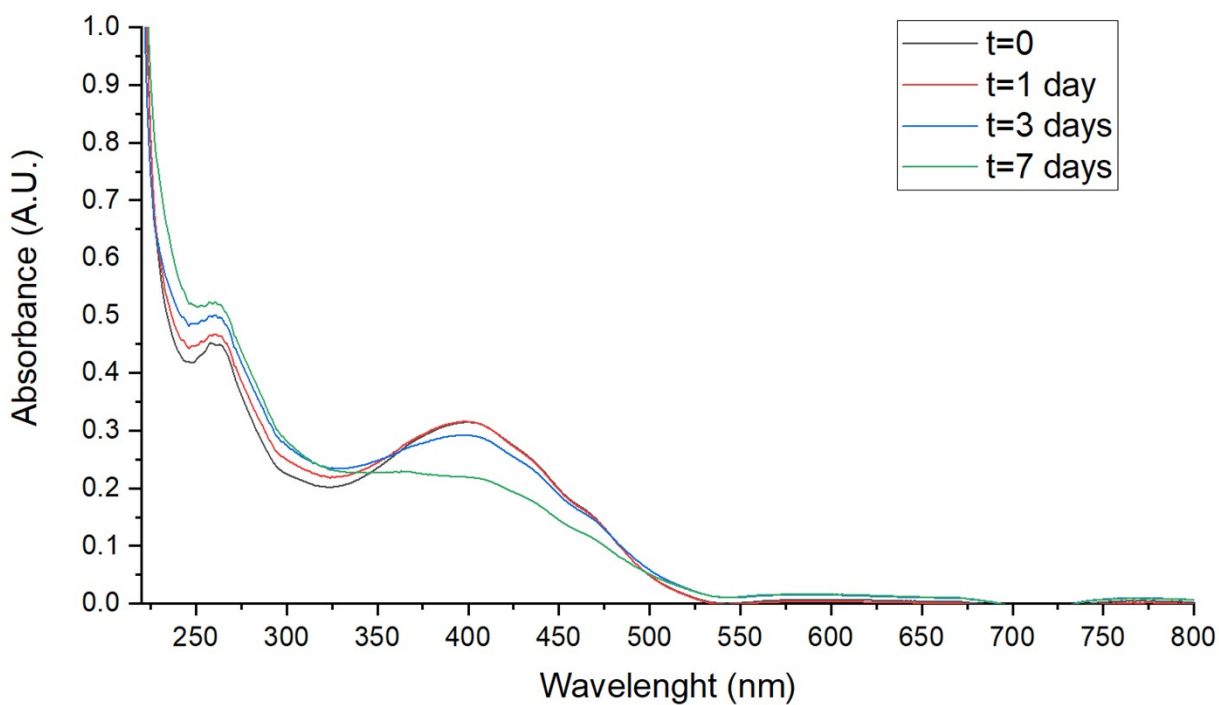
**Figure S7.** Stability studies by UV-vis of SMA-CUR in DDW at  $T = 37\text{ }^\circ\text{C}$ . SMA-CUR = 60  $\mu\text{g/mL}$ , path length 1 cm.



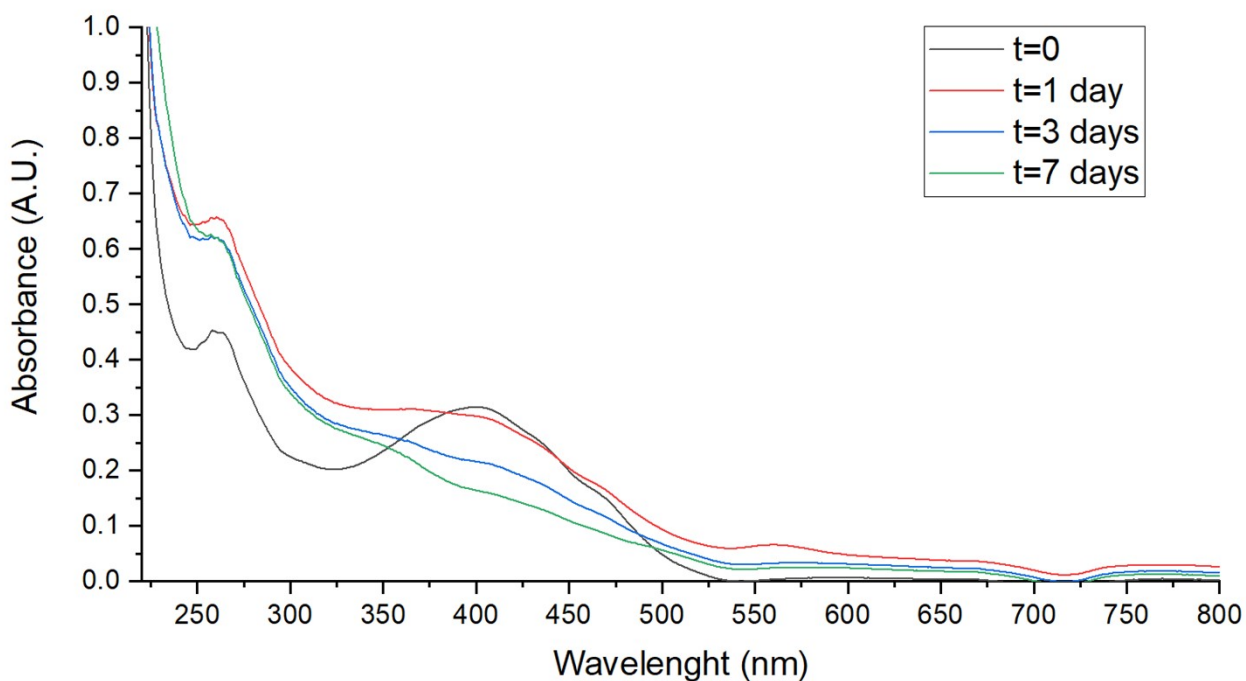
**Figure S8.** Stability studies by UV-vis of SMA-CUR in 0.9 wt % NaCl aqueous solution at room temperature. SMA-CUR = 60  $\mu\text{g}/\text{mL}$ , path length 1 cm.



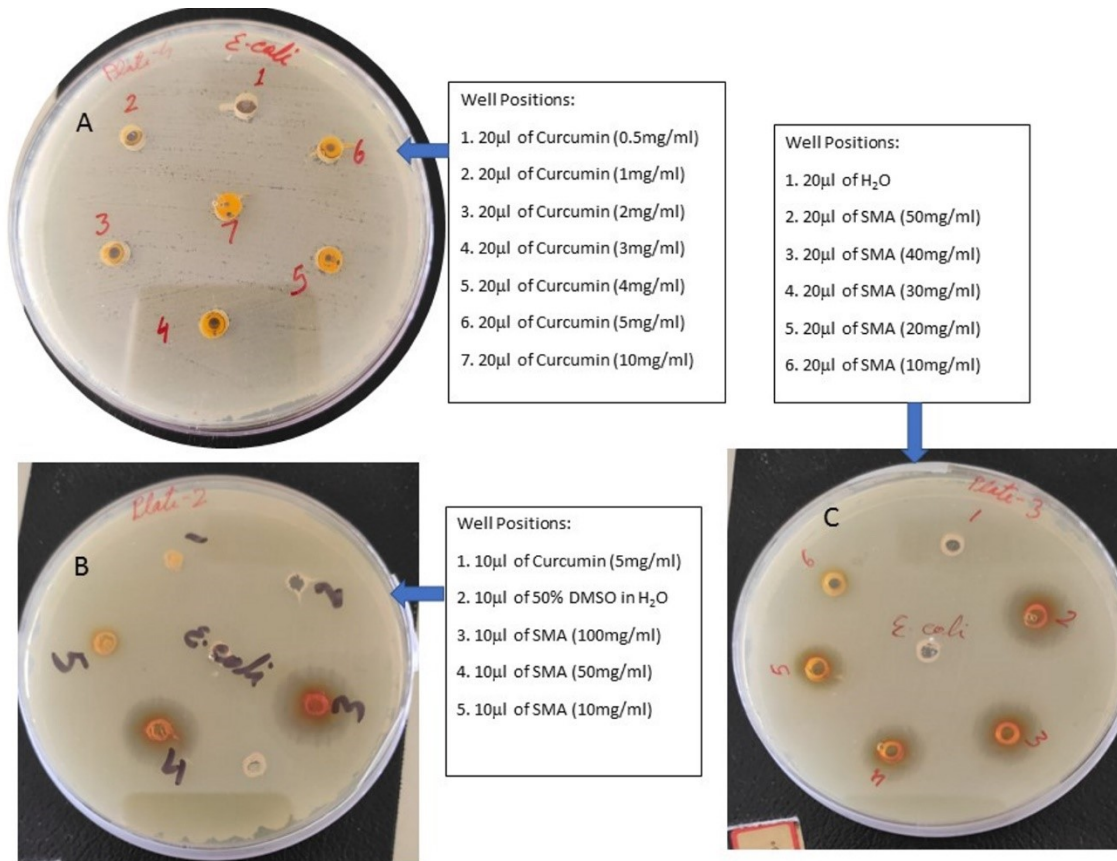
**Figure S9.** Stability studies by UV-vis of SMA-CUR in 0.9 wt % NaCl aqueous solution at  $T = 37\text{ }^{\circ}\text{C}$ . SMA-CUR = 60  $\mu\text{g}/\text{mL}$ , path length 1 cm.



**Figure S10.** Stability studies by UV-vis of SMA-CUR in PBS aqueous solution at room temperature. SMA-CUR = 60  $\mu\text{g}/\text{mL}$ , path length 1 cm.



**Figure S11.** Stability studies by UV-vis of SMA-CUR in PBS aqueous solution at T = 37 °C. SMA-CUR = 60  $\mu\text{g}/\text{mL}$ , path length 1 cm.



**Figure S12.** Preliminary screening for antibacterial potential of curcumin I and SMA-CUR micelles on *E. coli* isolate.