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## Supplementary Material

# a) b) c) c)



S75 and Soybean oil

Figure S1. TEM images of nanoemulsions E1 (a) and E2 (b), and the structure of nanoemulsions (c).



**Figure S2.** Hemocompatibility test of nanoemulsions **E1** (a) and **E2** (b), deionized water and PBS were used as positive and negative controls, respectively.



Figure S3. In vitro fluorescence images (a) and quantitative analysis of FL intensity (b) of nanoemulsions E1 and E2 at different concentrations. The concentration of aza-BODIPY in the control group is  $2.5 \mu g/mL$ .



Figure S4. The digital photographs of nanoemulsions E1 and E2 in PBS and DMEM for 5 days.

# 2 Copies of <sup>1</sup>H/<sup>13</sup>C/<sup>19</sup>F NMR and HRMS Spectra of Compounds

## $^{1}\text{H}$ NMR of compound 1



0 -10 -20 -30 -40 -50 -60 -70 -80 -90 -100 -110 -120 -130 -140 -150 -160 -170 -180 -190 -20 fl (ppm)

## $^{1}\text{H}$ NMR of compound **2**



130 110 90 70 50 30 10 -10 -30 -50 -70 -90 -110 -130 -150 -170 -190 -210 -230 -21 f1 (ppm)

## $^{1}\text{H}$ NMR of compound **3**



## $^{1}H$ NMR of compound 4



20 10 0 -10 -20 -30 -40 -50 -60 -70 -80 -90 -100 -110 -120 -130 -140 -150 -160 -170 -180 -190 -200 -210 -220 -23 f1 (ppm)

## $^{1}\text{H}$ NMR of compound **5**



## <sup>19</sup>F NMR of compound **5**



20 10 0 -10 -20 -30 -40 -50 -60 -70 -80 -90 -100 -110 -120 -130 -140 -150 -160 -170 -180 -190 -2( f1 (ppm)



## <sup>19</sup>F NMR of compound **6**

20201223-jiangzx-6.2.fid	7	06
(F <sub>3</sub> C) <sub>3</sub> CO (F <sub>3</sub> C) <sub>3</sub> CO OC(CF <sub>3</sub> ) <sub>3</sub>	-71.2	-164
<sup>19</sup> F NMR.acetone-de.376MHz	l.	



10 0 -10 -20 -30 -40 -50 -60 -70 -80 -90 -100 -110 -120 -130 -140 -150 -160 -170 -180 -190 -200 -210 -220 -230 -240 f1 (ppm)















## $^{1}$ H NMR of compound **20**





#### HRMS of compound 21



## $^1\mathrm{H}$ NMR of compound **22**



# <sup>19</sup>F NMR of compound **22**



10 0 -10 -20 -30 -40 -50 -60 -70 -80 -90 -100 -110 -120 -130 -140 -150 -160 -170 -180 -190 f1 (ppm)









#### HRMS of compound 24



#### <sup>1</sup>H NMR of compound **25**



12.5 12.0 11.5 11.0 10.5 10.0 9.5 9.0 8.5 8.0 7.5 7.0 6.5 6.0



## $^{13}\mathrm{C}\ \mathrm{NMR}$ of compound $\mathbf{25}$



220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 f1 (ppm)

## HRMS of compound 25

