

## Supplementary information

Title:

### Dextran-g-Lauric Acid as IKK Complex Inhibitor Carrier

Chao-Ming Su <sup>a</sup>, Ching Lin <sup>a</sup>, Chen-Yü Huang <sup>b†</sup>, Jih-Chao Yeh <sup>a</sup>, Tien-Yao Tsai <sup>a</sup>, Tzong Rong Ger <sup>a†</sup>,  
Ming-Chen Wang <sup>a</sup>, Shyh-Liang Lou <sup>a†</sup>

<sup>a</sup>Department of Biomedical Engineering, College of Engineering, Chung Yuan Christian University, Chungli 32023, Taiwan, R.O.C.

<sup>b</sup>Department of Physics and Astronomy, Johns Hopkins University, MD 21218, USA.

† Co-corresponding authors.

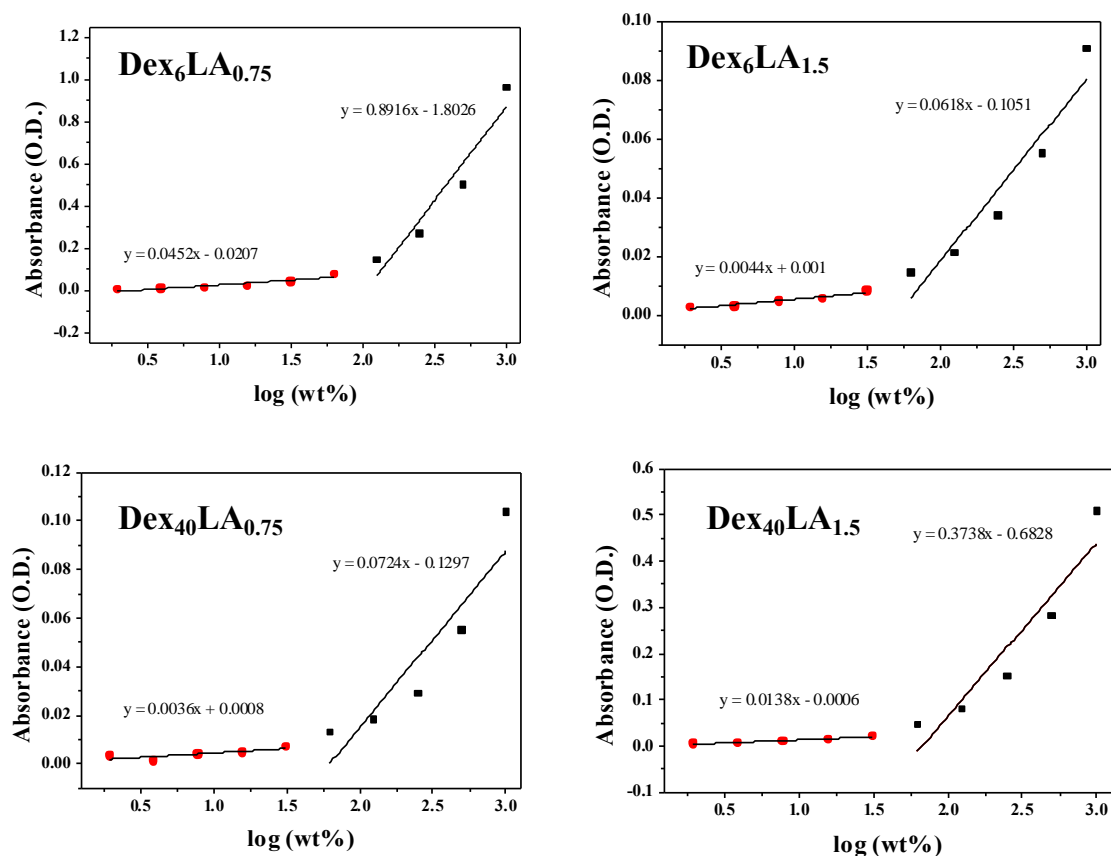
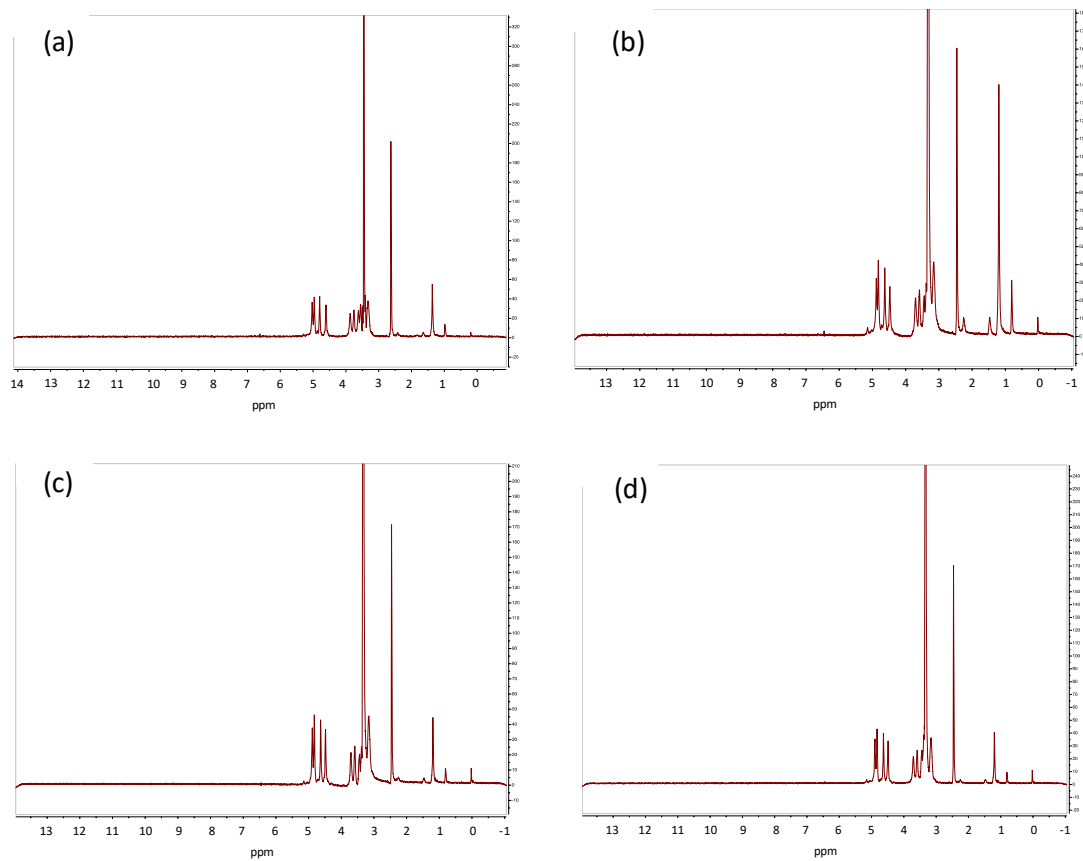


Fig. 1s. The CMC plots of DexLA.



**Fig. 2s.  $^1\text{H}$  NMR spectrum of dextran-g-lauric acid in  $\text{D}_2\text{O}$ . (a)  $\text{Dex}_6\text{LA}_{0.75}$ , (b)  $\text{Dex}_6\text{LA}_{1.5}$ , (c)  $\text{Dex}_{40}\text{LA}_{0.75}$ , and (d)  $\text{Dex}_{40}\text{LA}_{1.5}$ .**

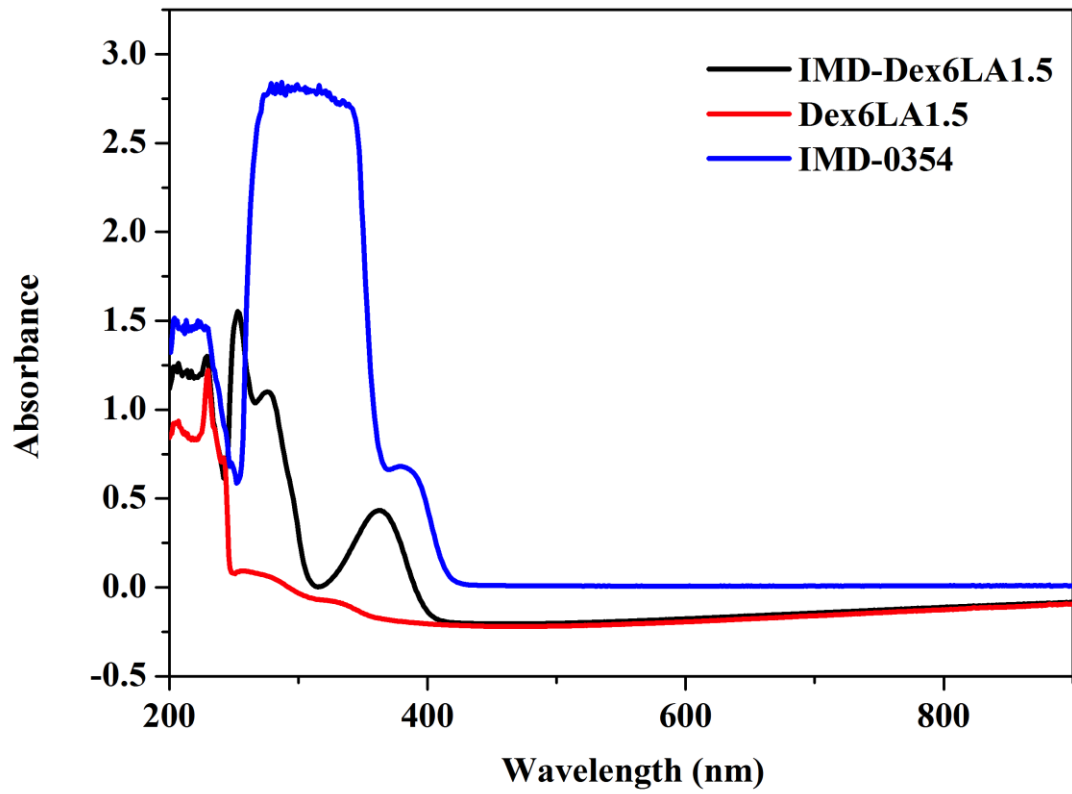


Fig. 3s. UV-Vis spectrum of IMD-Dex<sub>6</sub>LA<sub>1.5</sub>, Dex<sub>6</sub>LA<sub>1.5</sub> and IMD-0354.

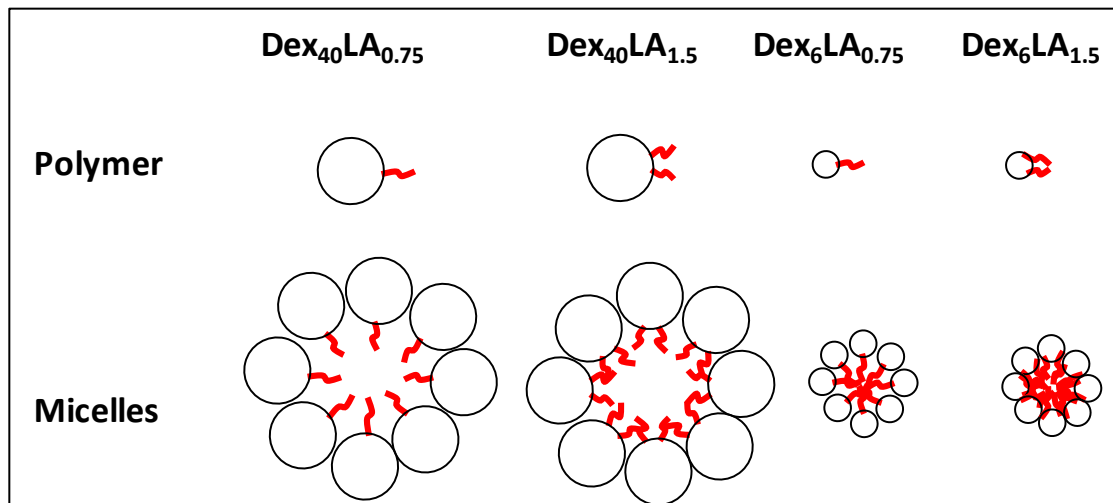


Fig. 4s. The structure of DexLA.

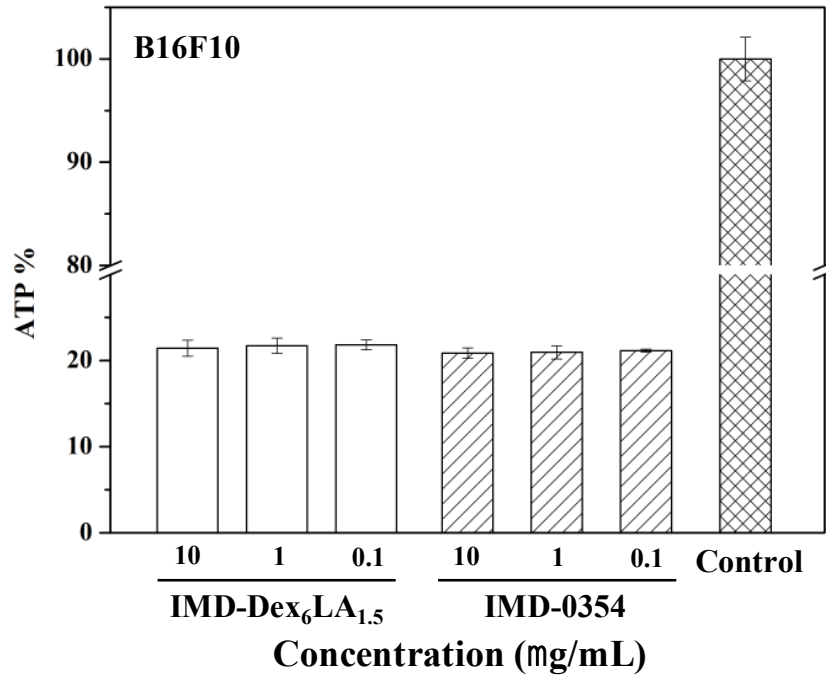


Fig. 5s. ATP analysis of B16F10 cell cultured with IMD-Dex<sub>6</sub>LA<sub>1.5</sub> or IMD-0354.

Table 1s. The drug loading of IMD-DexLA

Sample	Dex-LA:Drug (w/w)	EE (wt %)	DL (wt %)
Dex <sub>6</sub> LA <sub>1.5</sub>	20:1	93.75 %	4.67 %
Dex <sub>6</sub> LA <sub>1.5</sub>	10:1	91.58 %	9.15 %