

## Electronic Supplementary Information (ESI)

### A copper complex that combats triple negative breast cancer by restraining angiogenesis

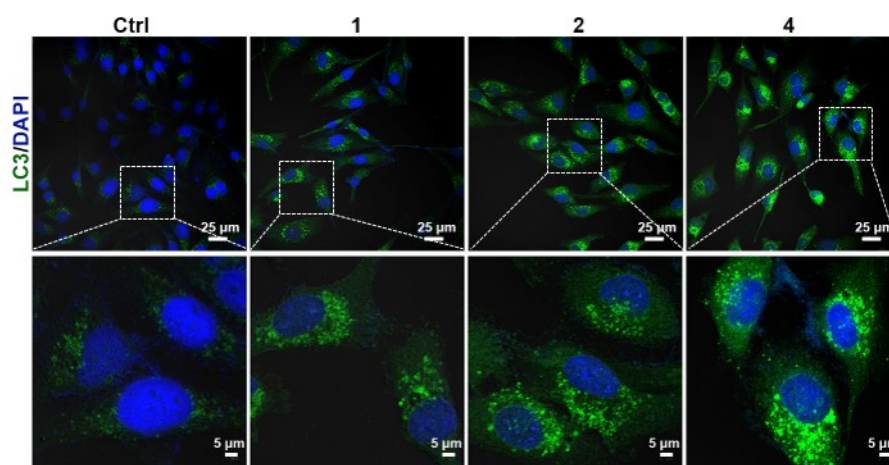
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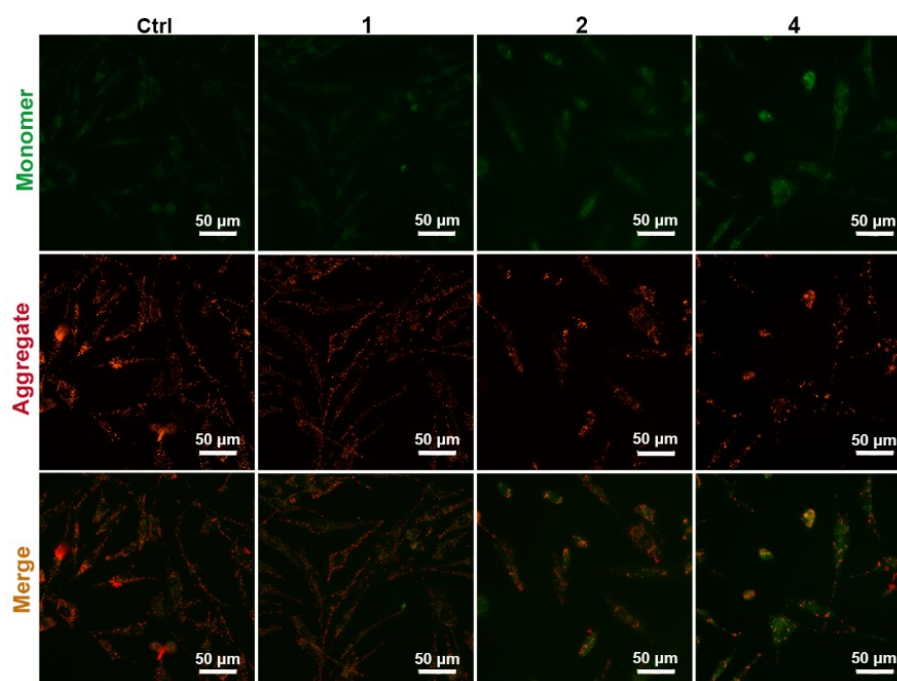
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### Supplementary figures

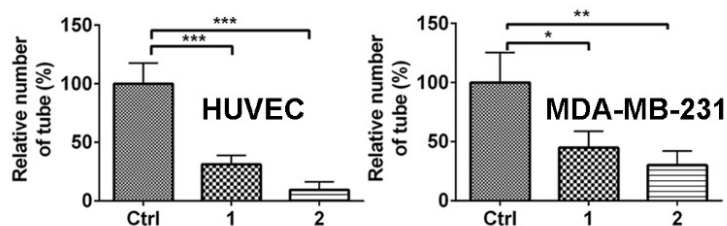


**Fig. S1** Images and zoomed-in images of LC3 detected by immunofluorescence staining in MDA-MB-231 cells after treatment with CPT8 (1, 2, 4 μM) for 48 h.

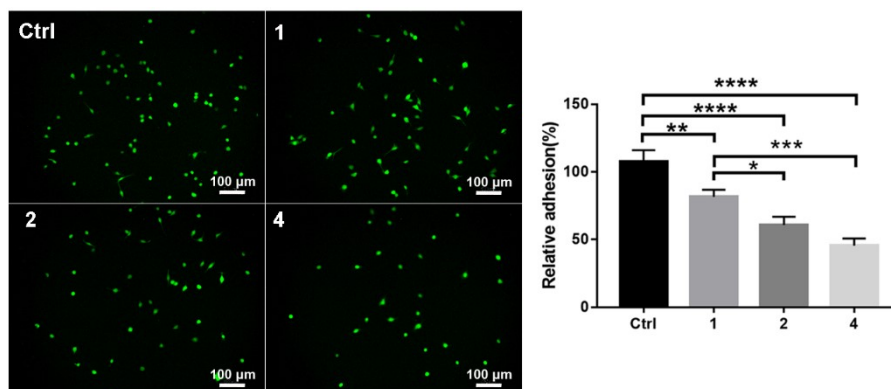


**Fig. S2** Fluorescence images of JC-1-stained MDA-MB-231 cells after CPT8 treatment (1, 2, 4 μM)

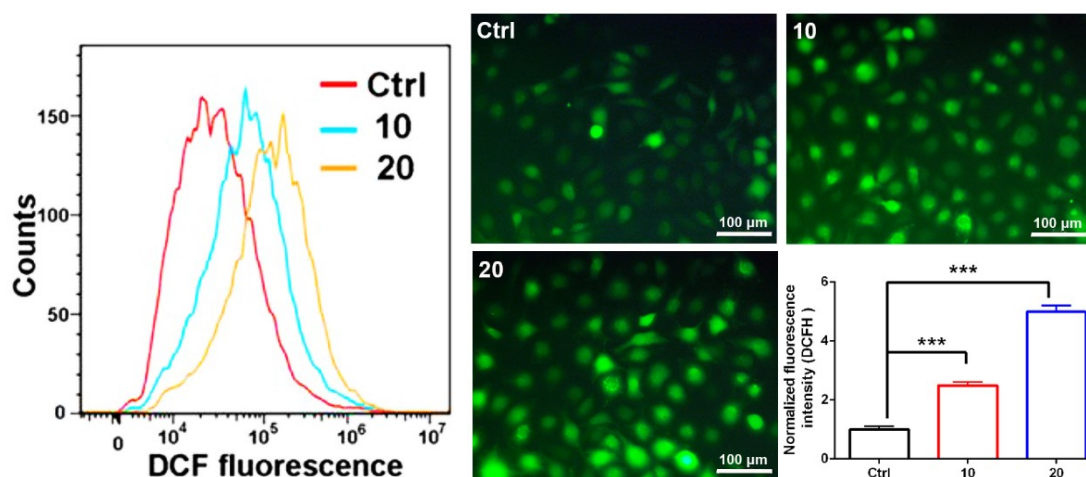
for 48 h.



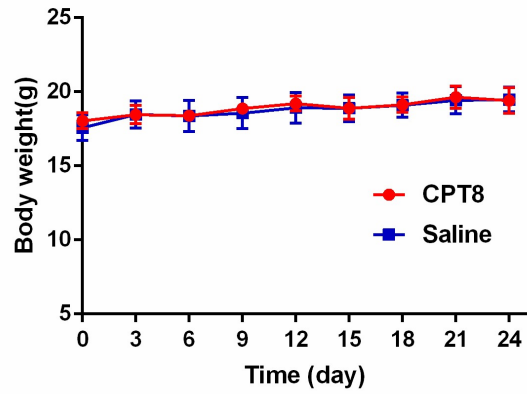
**Fig. S3** The percentage of average number of tubes formed by HUVEC and MDA-MB-231 cells after treatment with CPT8 (1, 2  $\mu$ M) for 12 h. \*P < 0.05, \*\*P < 0.01, \*\*\*P < 0.001.



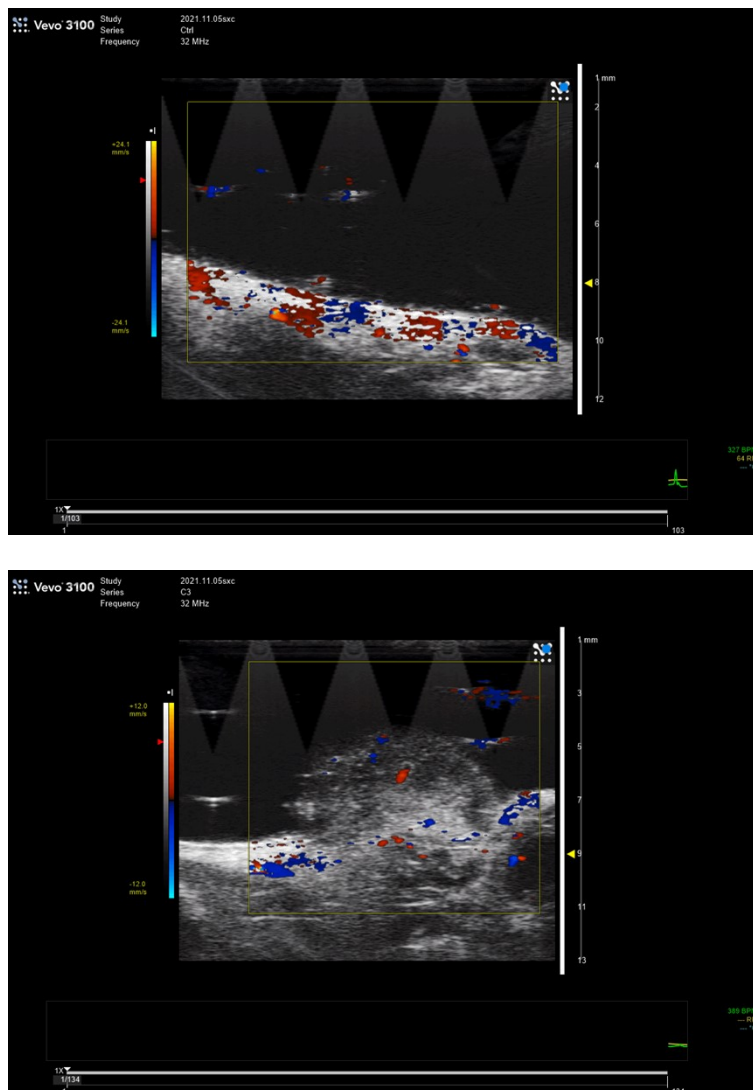
**Fig. S4** Representative photographs of CPT (1, 2, 4  $\mu$ M)-treated MDA-MB-231 cells adherent to HUVEC, and the number of fluorescently labelled MDA-MB-231 cells. \*P < 0.05, \*\*P < 0.01, \*\*\*P < 0.001, \*\*\*\*P < 0.0001.



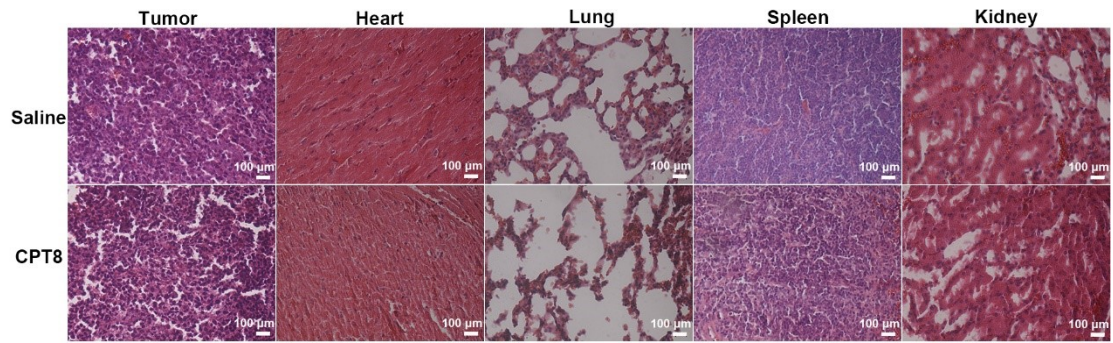
**Fig. S5** Generation of ROS in HUVEC detected by flow cytometry (left), fluorescence microscope, and quantitative analysis (right) of DCFH fluorescence after treatment with CPT8 (10, 20  $\mu$ M) for 24 h. \*P < 0.05, \*\*P < 0.01, \*\*\*P < 0.001.



**Fig. S6** Body weight of mice bearing MDA-MB-231 xenografted tumor after treatment with saline and CPT8 (3 mg kg<sup>-1</sup>) for 24 days.



**Fig. S7** Blood flow of saline- (top) and CPT8- (bottom) treated nude mouse detected by high-resolution in vivo imaging system under color doppler mode. (Blue: away from probe, Red: toward probe)



**Fig. S8** H&E staining of tumor, heart, lung, spleen, and kidney sections from nude mouse bearing MDA-MB-231 xenografts after treatment with saline and CPT8 ( $3 \text{ mg kg}^{-1}$ ) for 24 days.