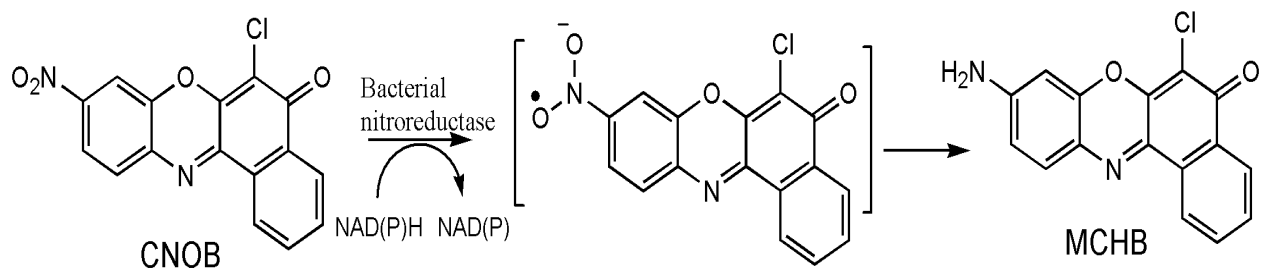
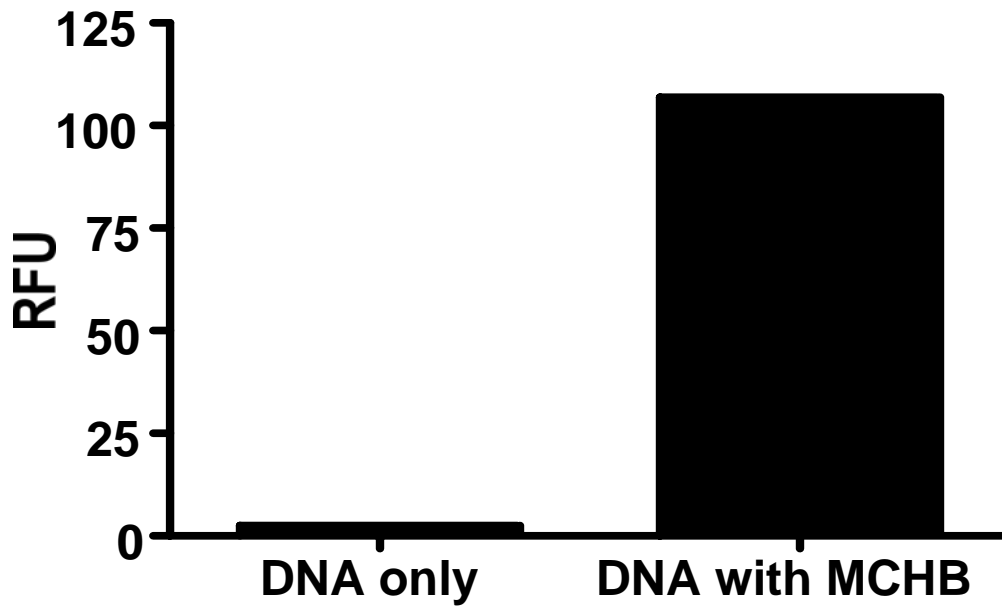
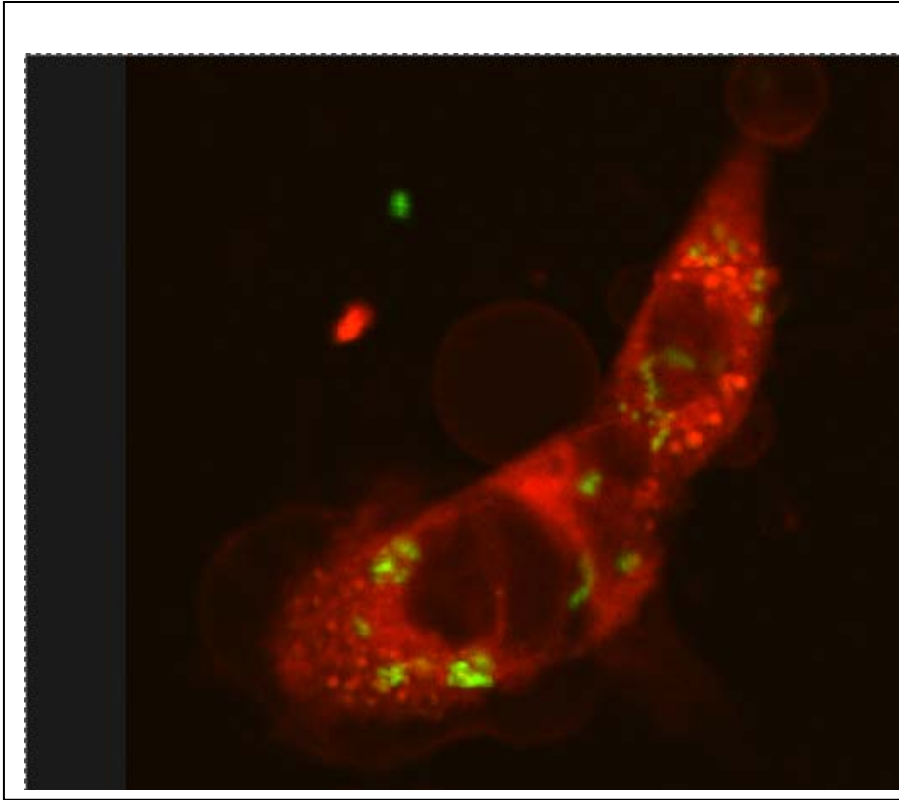


Supplementary Figures

Supplementary Figure 1. *6-chloro-9-nitro-5-oxo-5H-benzo[a]phenoxazine* (CNOB), its nitro-radical form, and reduced product, *9-amino-6-chloro-5H-benzo[a]phenoxazine-5-one* (MCHB).

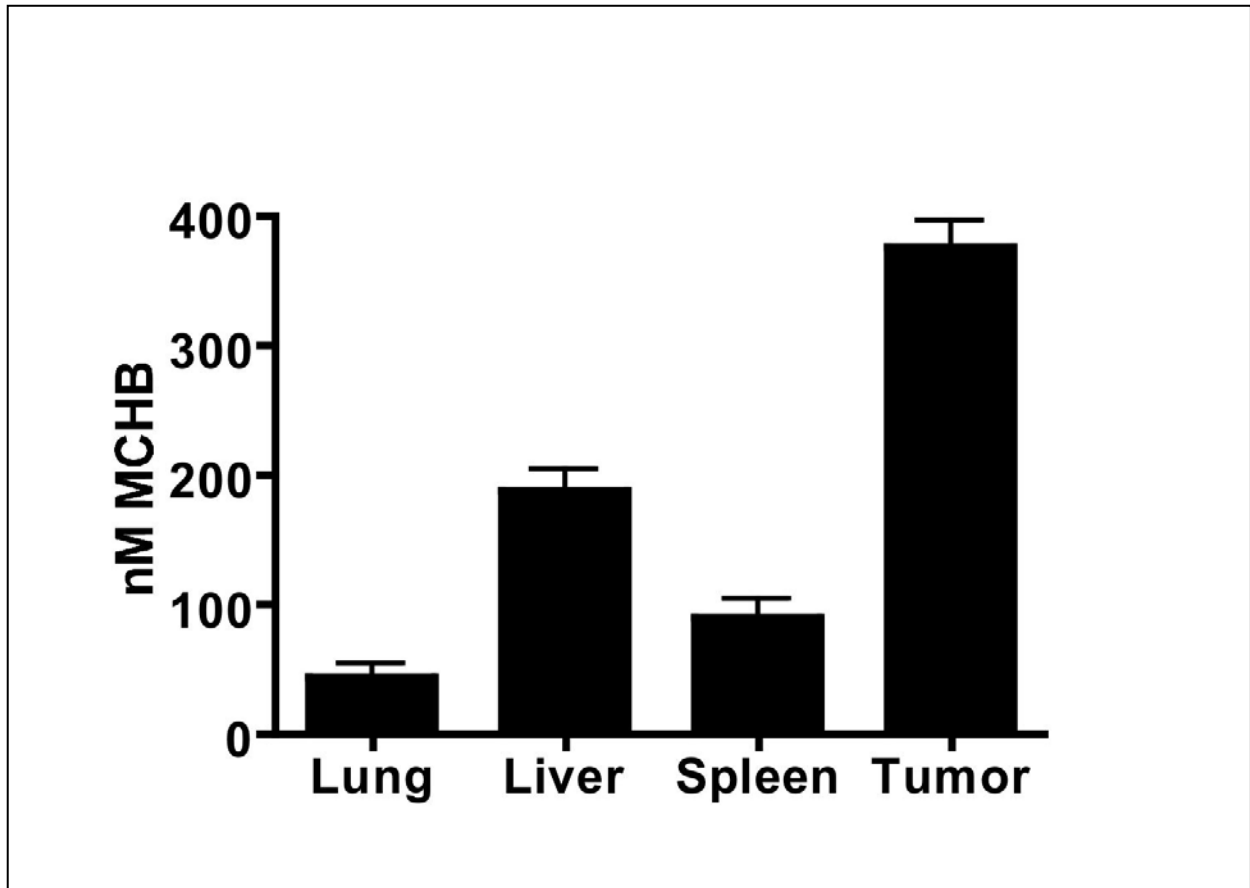


Supplementary Fig 2. MCHB binds to DNA. 1 μ g of pUC19 plasmid DNA was mixed with 1 μ M MCHB, or Tris buffer (control) for 10 minutes. MCHB fluorescence was read in a plate reader.



Supplementary Fig 3. Attached JC cells were infected with SL7838-*chrR6* bacteria expressing GFP (MOI of 10 CFU/cell) for 30 minutes before extracellular bacteria were washed off and gentamycin added to the medium at $20 \mu\text{g ml}^{-1}$. CNOB ($15 \mu\text{M}$) was added and fluorescence was read by confocal microscopy after 30 minutes ($60\times$ magnification). Note focal distribution of MCHB fluorescence in the cytoplasm.

Supplementary Fig 4. Video showing rotation of the reconstructed cell spheroid of Fig. 3d.



Supplementary Fig 5. Determination of MCHB biodistribution following intravenously delivery of SL7838-*chrR6* and CNOB in mice implanted with untransfected 4T1 tumors (not generating endogenous ChrR6). Animals were sacrificed 8 hours after CNOB injection, and tissues harvested. 1 mg of each tissue was ground in 100 μ l of PBS, centrifuged at 500 rpm for 5 minutes and the supernatant fluorescence (Ex 575nm Em 625 nm) was determined. MCHB concentrations were determined from a standard curve.