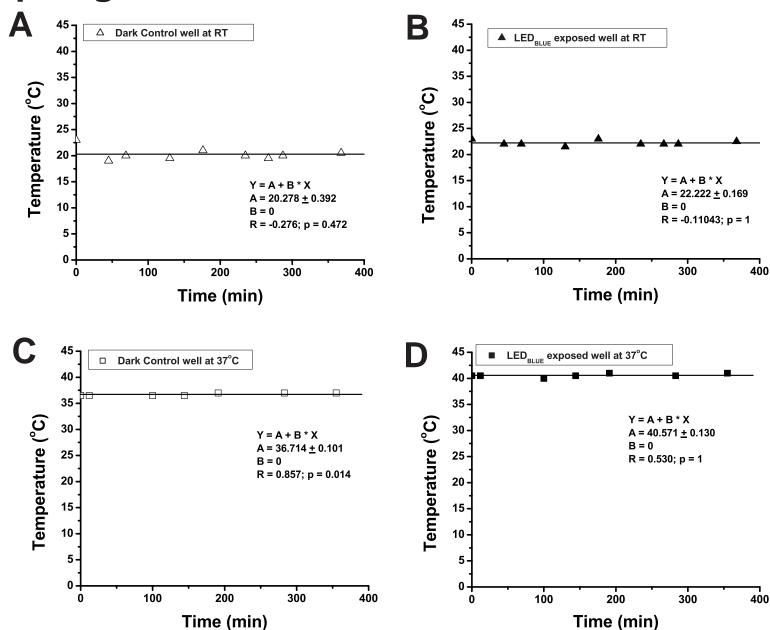
## Supp. Fig. 2



Supplementary Figure S2. Minimal local heating effects of LED arrays on cell culture environment. The LED<sub>470 nm</sub> (blue) array was used to evaluate effects on the temperature of culture medium. (A) Shows the temperature within 96-well culture arrays when the array is kept at room temperature (~ 20°C) in the dark. There is no change from 20°C over time in the dark.

(B) Shows the temperature of culture medium over time when the blue LED array is operated at room temperature. Temperature in the wells increases by about 2°C. (C). Shows the temperature within 96-well culture arrays when the array is operated at cell culture growth temperature (37°C) in the dark. There is no change from 37°C over time in the dark. (D) Shows the temperature of culture medium over time when the blue LED array is operated at 37°C.

Temperature in the wells increases by about 3°C. In all cases the slope of the fitted line is essentially zero, which indicates thermal stability over the course of LED stimulus measures.

These small increases in temperature do not promote an increase in cytotoxicity relative to dark controls (see Figs. 6-8). A constant voltage of 12VDC and output current 1.0 A (12 Watts electrical output) was used to power the array.