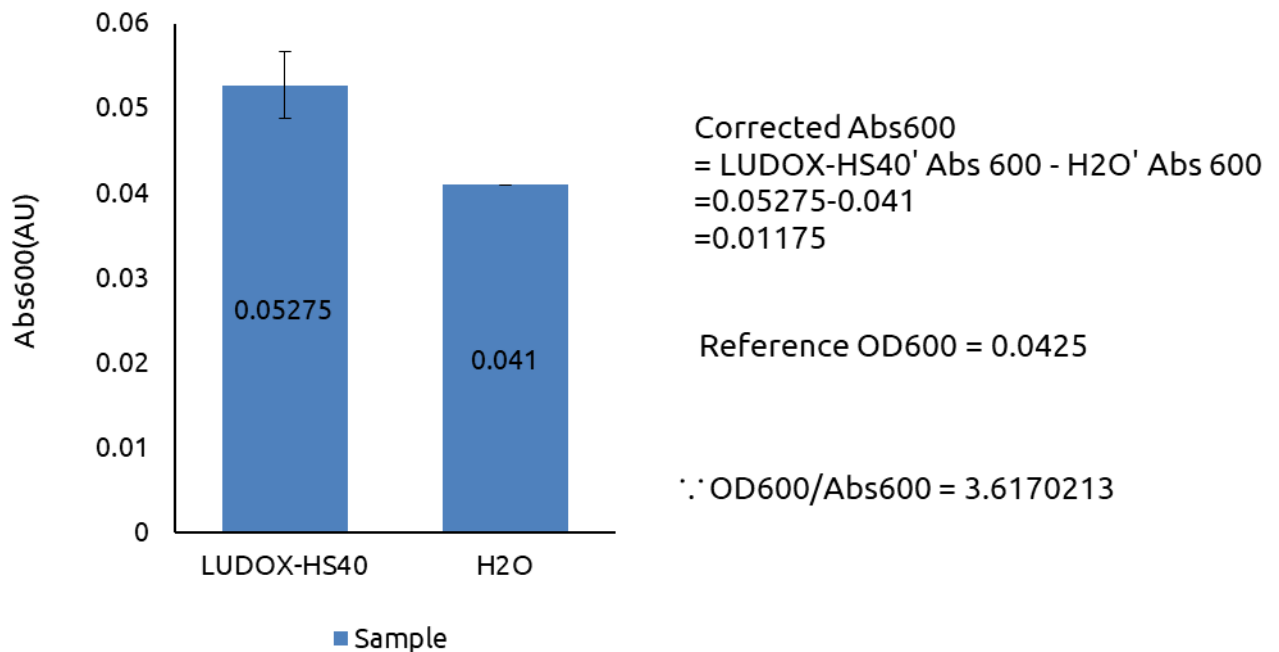
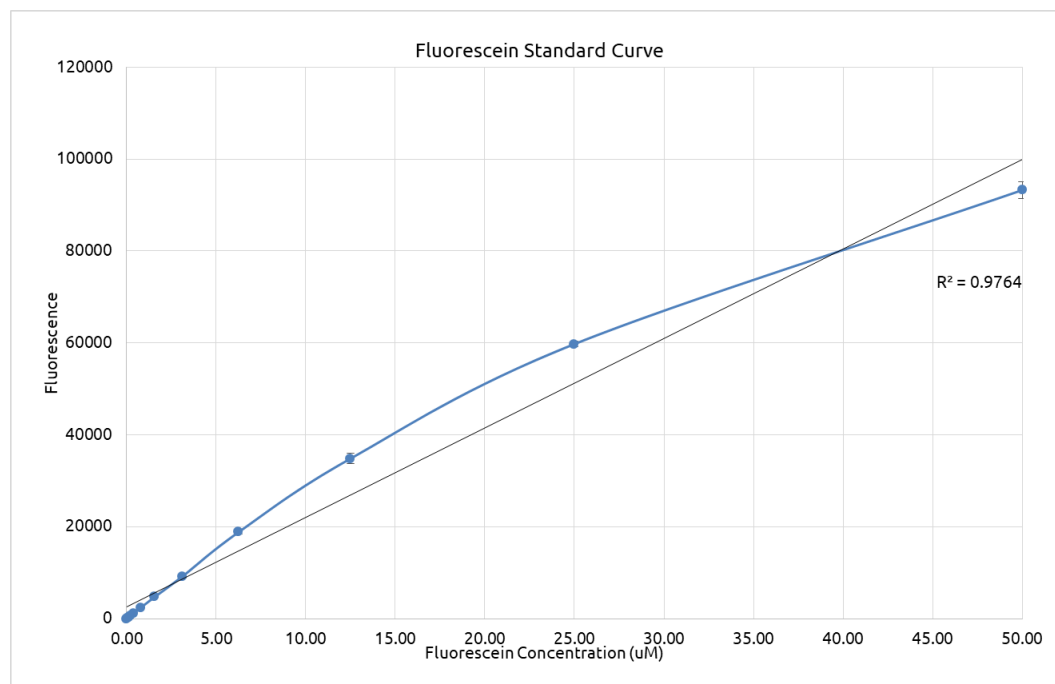


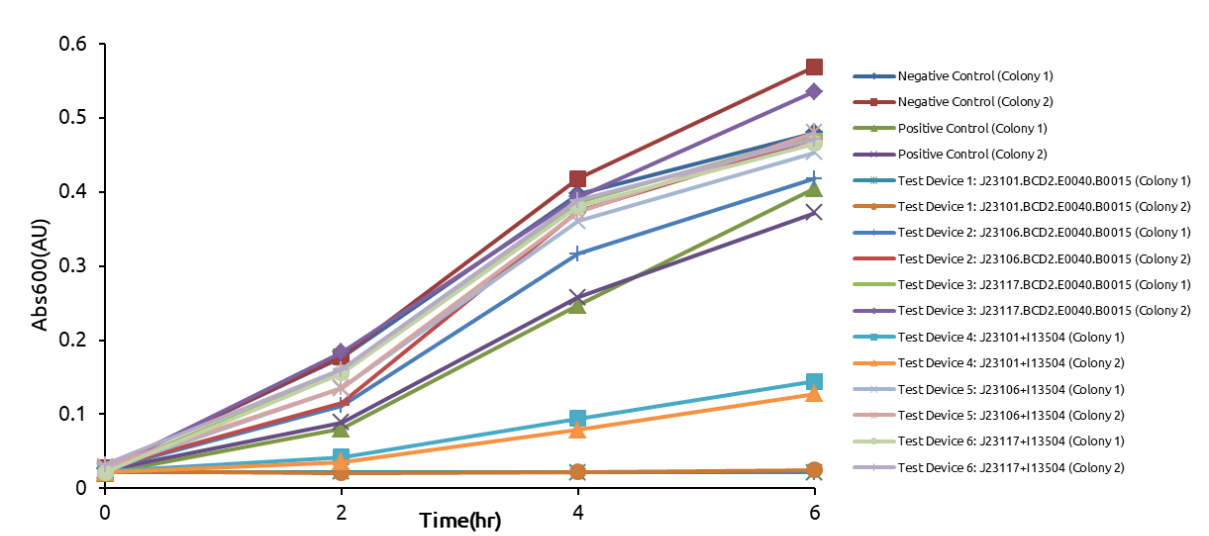
## Results



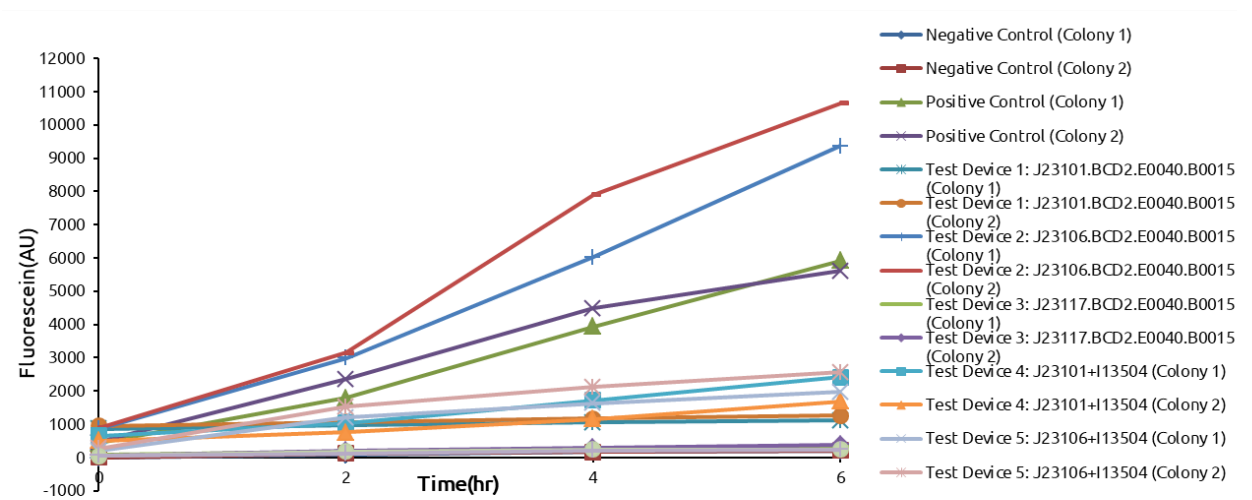
**Figure 1. OD600 Reference point.** A single point reference generated by measuring the OD 600 of LUDOX-S40, and we could obtain a ratiometric conversion factor to transform our absorbance data into a standard OD600 measu



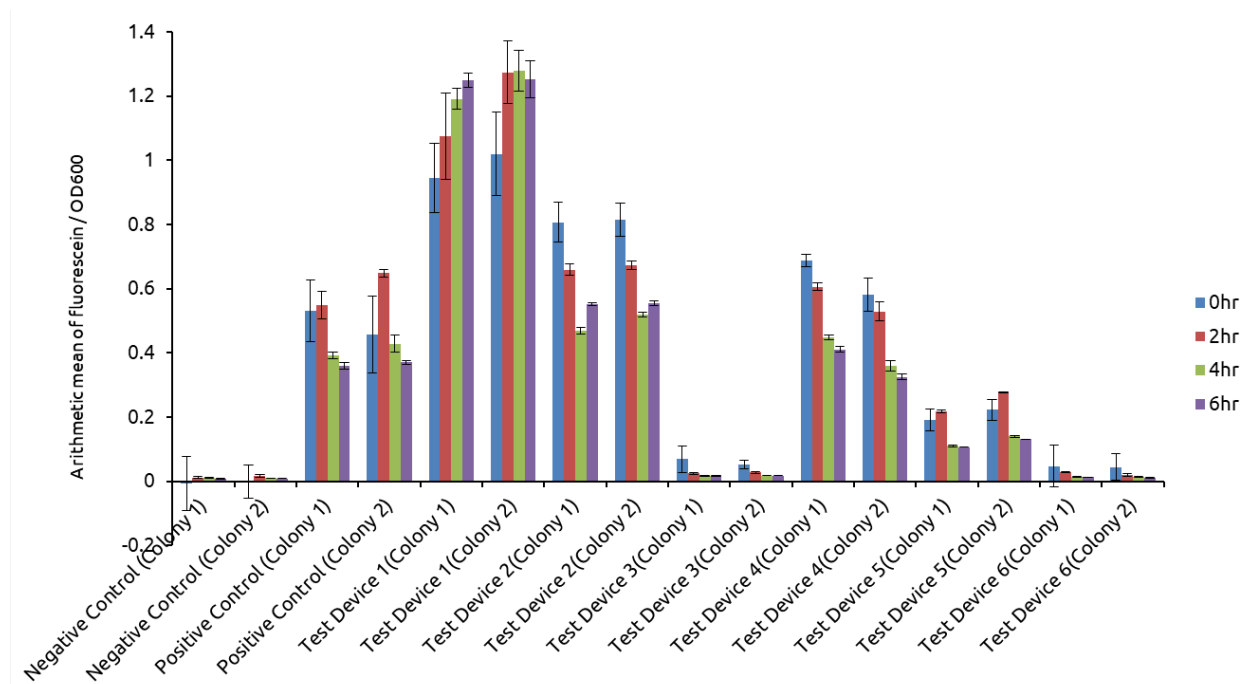
**Figure 2. A standard curve by measuring the fluorescence of serial dilutions of fluorescein (provided in kit) (uM).** There is a linear trend for increased fluorescence as fluorescein increases (Fluorescein Standard Curve:  $R^2=0.9764$ ). We used light at 515nm wavelength as emission, and light at 460 nm wavelength as excitation.



**Figure 3. The OD600 of the six test devices and both controls transformed into *E.coli* DH5- $\alpha$  and inoculated in LB broth was measured every other hour over a 6-hour period.**



**Figure 4. The fluorescence of the six test devices and both controls transformed into *E.coli* DH5- $\alpha$  and inoculated in LB broth was measured every other hour over a 6-hour period.**



**Figure 5.** The fluorescence readings for each test device or control was corrected for absorbance for each hour reading. In general, the ratio decreased over time for all samples.