Supporting Information

Sirtuin 6 (SIRT6) regulates redox homeostasis and downstream signaling events in human articular chondrocytes

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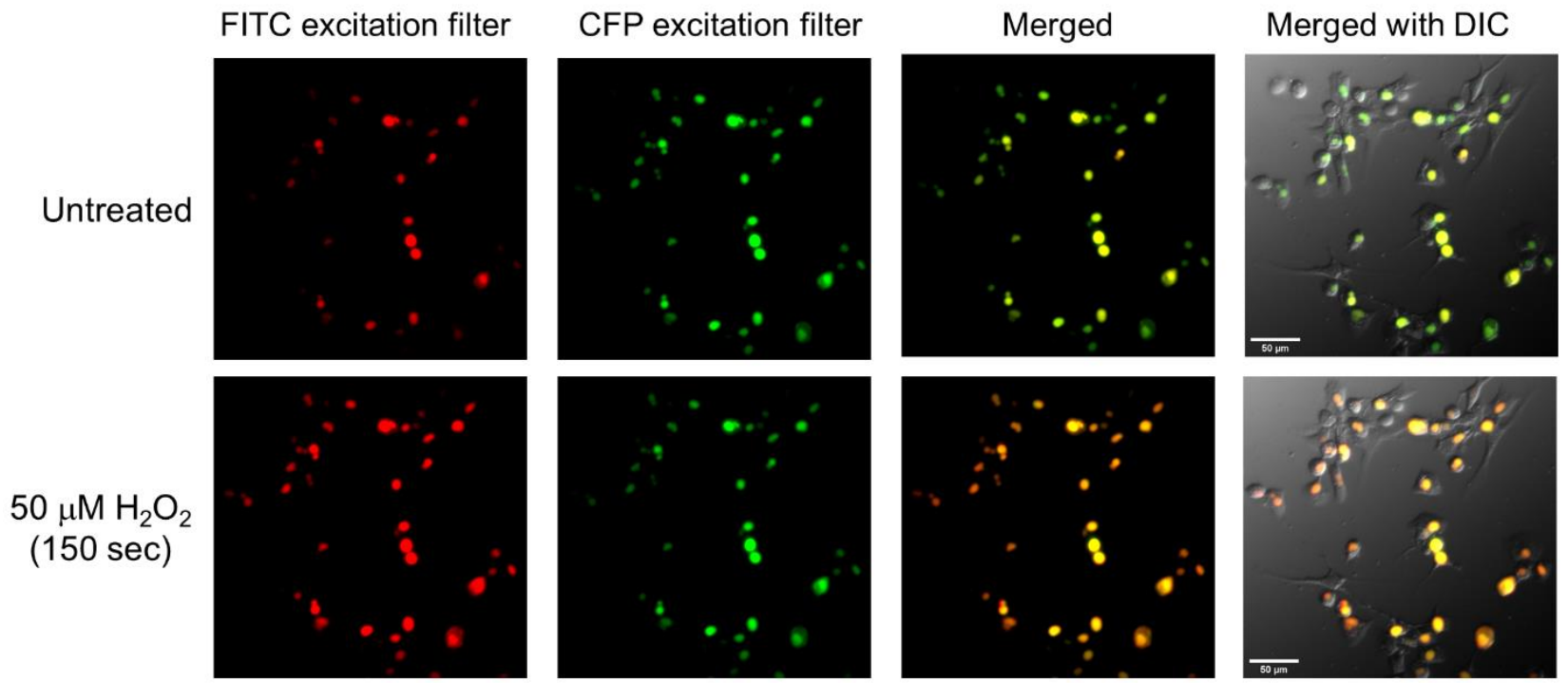
Material Included

Supplementary Figure 1. Validation of the NLS-HyPer-DAAO measurement of H_2O_2.

Supplementary Figure 2. Identification of nuclear ROI using CellProfiler software for subsequent measurement of fluorescence intensity and determination of H_2O_2 generation.

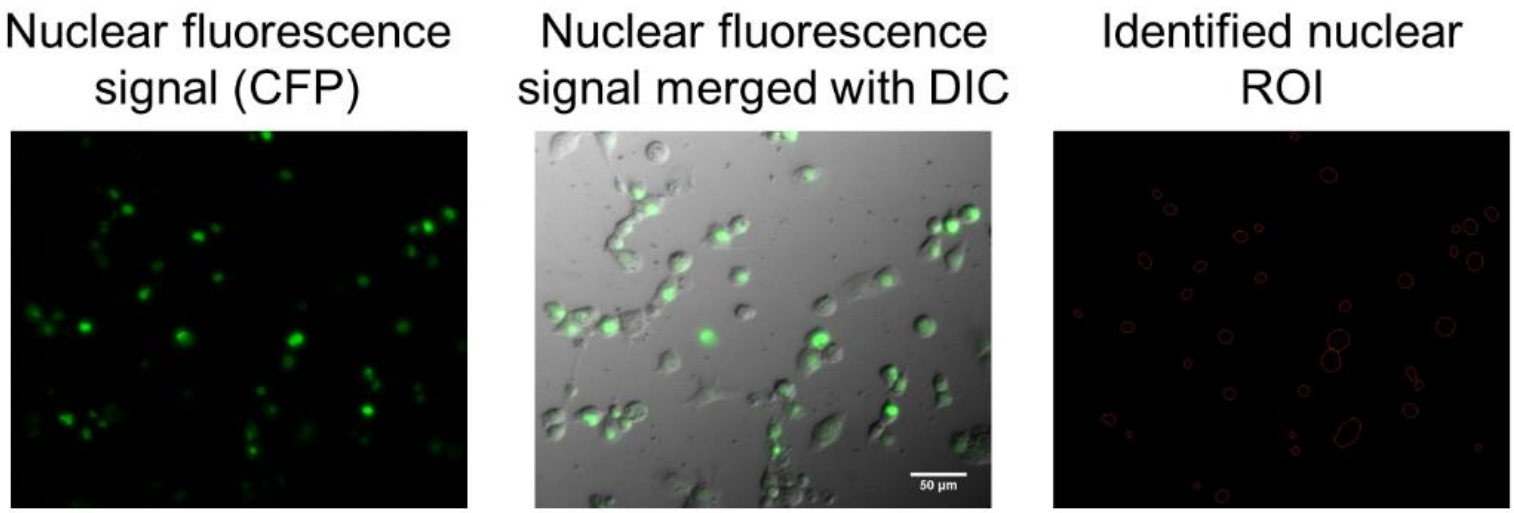
Supplementary Figure 3. Expression and nuclear localization of NLS-HyPer-DAAO.

Supplementary Figure 1.



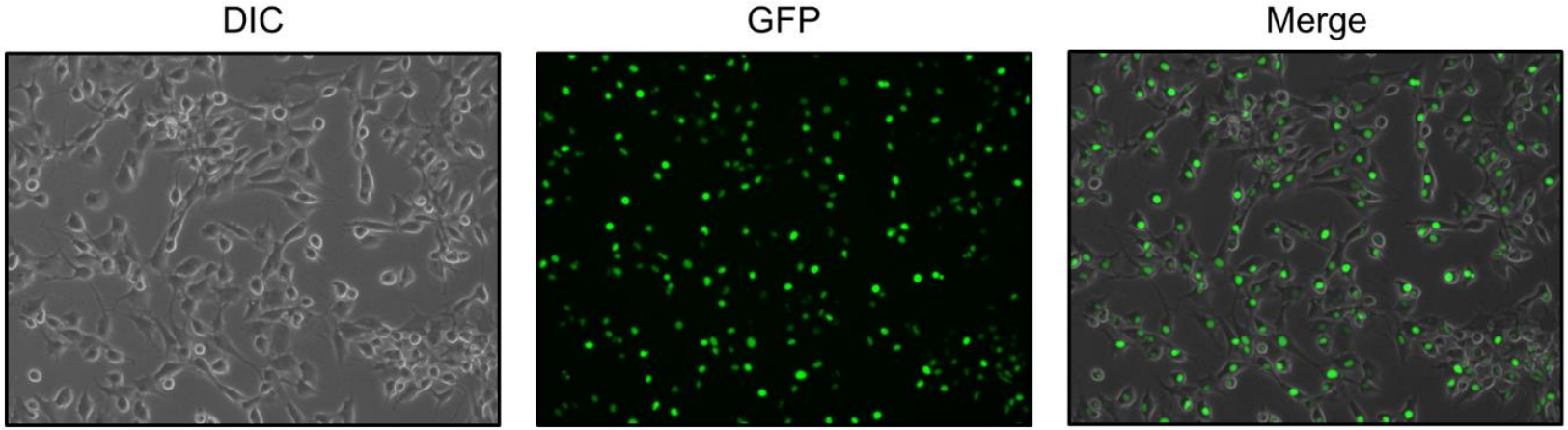
Supplementary Figure 1. Validation of the NLS-HyPer-DAAO measurement of H_2O_2. Human chondrocytes were transduced with NLS-HyPer-DAAO for 48 hours and then treated with 50 μM H_2O_2. An increase in fluorescence emission intensity with FITC excitation filter (red), which is most notable on the merged image, demonstrates that the HyPer probe is oxidized in response to exogenously added H_2O_2.

Supplementary Figure 2.



Supplementary Figure 2. Identification of nuclear ROI using CellProfiler software for subsequent measurement of fluorescence intensity and determination of H_2O_2 generation.

Supplementary Figure 3



Supplementary Figure 3. Expression and nuclear localization of NLS-HyPer-DAAO. Human chondrocytes were transduced with the adenoviral vector encoding NLS-HyPer-DAAO for 48 hours and nuclear fluorescence was detected using an EVOS m5000 imaging system at 20x magnification.