Electronic Supplementary Material (ESI) for Journal of Materials Chemistry B.

High-bright fluorescent carbon dots and their application in selective nucleoli staining

(Supporting Information)

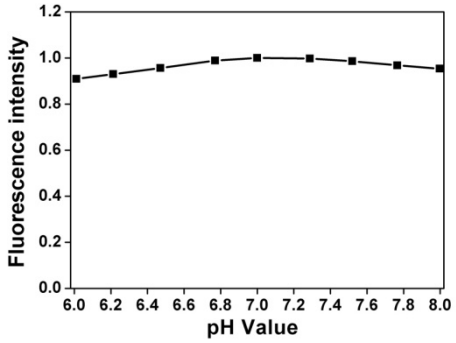

Fig.S1. The fluorescence intensity of FCDs in various pH with a range of 6.0～8.0.

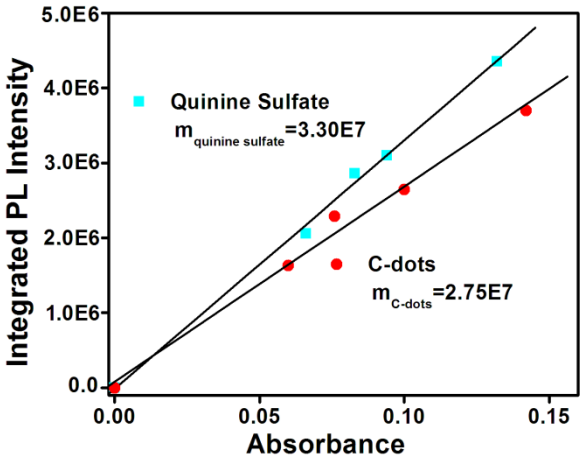

Fig.S2. Integrated fluorescence intensity versus absorbance plot of FCDs and quinine sulphate.

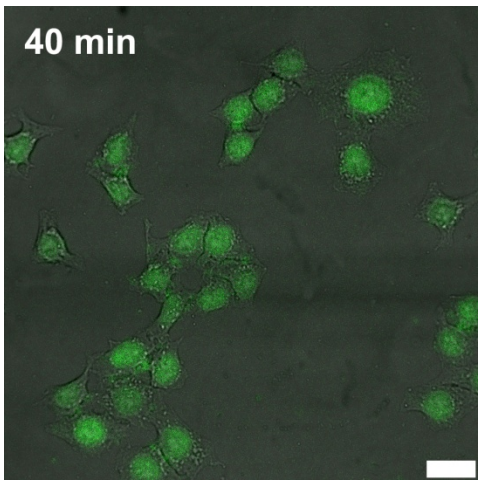

Fig.S3. The image of fluorescent cell images was captured by laser scanning (illuminating for 40 min). Scale bar=25 μm.

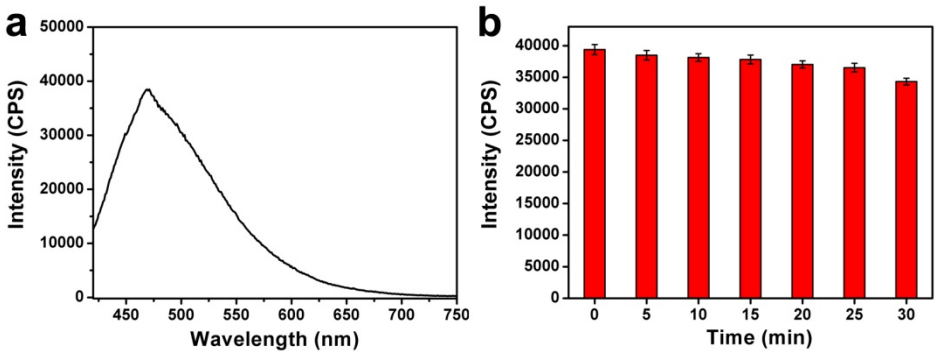

Fig.S4 (a) PL spectrum of FCDs-stained cells under 405 nm excitation (b) The fluorescence intensity of FCDs-stained cells which were illuminated with different period. The 300 W Xe lamp was used as irradiation source with two cut-off filters to get the 400-420 nm light. The FCDs-stained cells were illuminated for different period (0-30 min). The PL spectra of FCDs-stained cells were measured on a Horiba JobinYvon (FluoroMax 4) Luminescence Spectrometer with excitation wavelength at 405 nm.

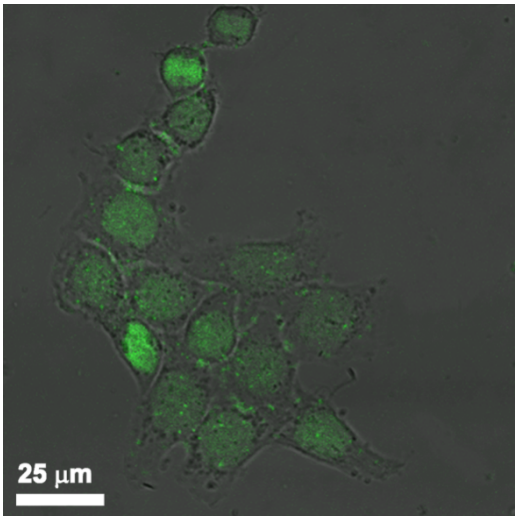

Fig.S5. The image of fluorescent cell images was captured by laser scanning confocal microscopy. The HeLa cell was stained by FCDs which was stored 3 months in room temperature.

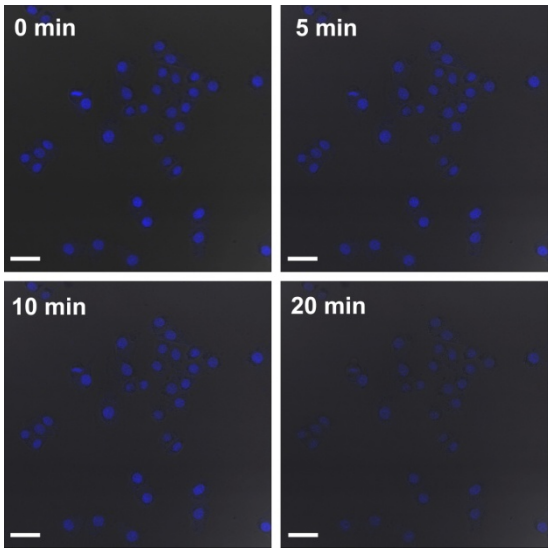

Fig.S6 The time-dependent stability comparisonoffluorescence signals of HeLa cell labelled by Hoechst. The fluorescence images were captured by laserscanning confocal microscopy in 0 min, 5 min, 10 min and 20 min, respectively. Scale bar=50 μm.