Supporting Information

Polymer Nanoparticles with an embedded Phosphorescent Osmium(II) Complex for Cell Imaging

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Table S1 Selected bond distances (Å) and angles (deg) for $[Os(bpy)_2(L\text{^}L)]^{2+}(PF_6^-)_2$

$[Os(bpy)_2(L\text{^}L)]^{2+}(PF_6^-)_2$			
Os(1)-N(1)	2.134(4)	Os(1)-N(2)	2.090(4)
Os(1)-N(3)	2.111(4)	Os(1)-N(4)	2.077(4)
Os(1)-P(1)	2.2911(18)	Os(1)-P(2)	2.2844(18)
N(1)-Os(1)-N(2)	76.90(17)	N(1)-Os(1)-N(3)	79.81(16)
N(1)-Os(1)-N(4)	93.67(16)	N(2)-Os(1)-N(3)	93.49(16)
N(2)-Os(1)-N(4)	168.16(16)	N(3)-Os(1)-N(4)	77.63(16)
N(1)-Os(1)-P(1)	175.78(11)	N(1)-Os(1)-P(2)	100.83(12)
N(2)-Os(1)-P(1)	102.91(14)	N(2)-Os(1)-P(2)	89.43(12)
N(3)-Os(1)-P(1)	96.01(12)	N(3)-Os(1)-P(2)	177.08(12)
N(4)-Os(1)-P(1)	85.97(12)	N(4)-Os(1)-P(2)	99.47(12)
P(2)-Os(1)-P(1)	83.38(7)		

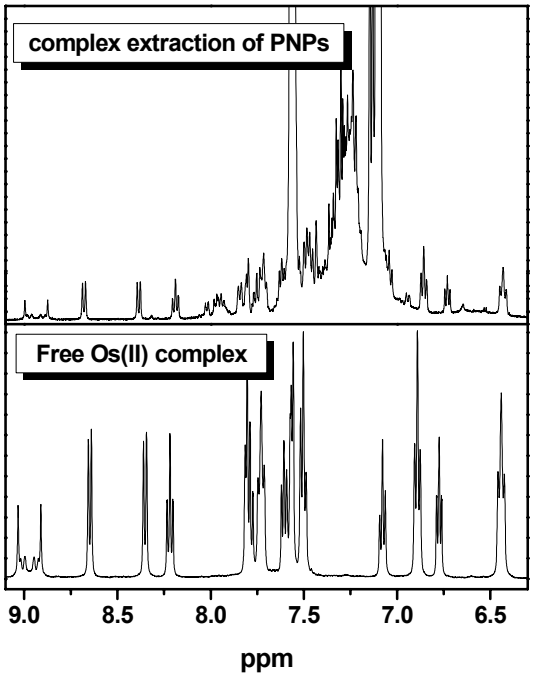

Figure S1 NMR spectra of free Os(II) complex $[Os(bpy)_2(L\text{^}L)]^{2+}(PF_6^-)_2$ and the complex extraction of PNPs using $CHCl_3$ (solvent: DMSO-d_6).

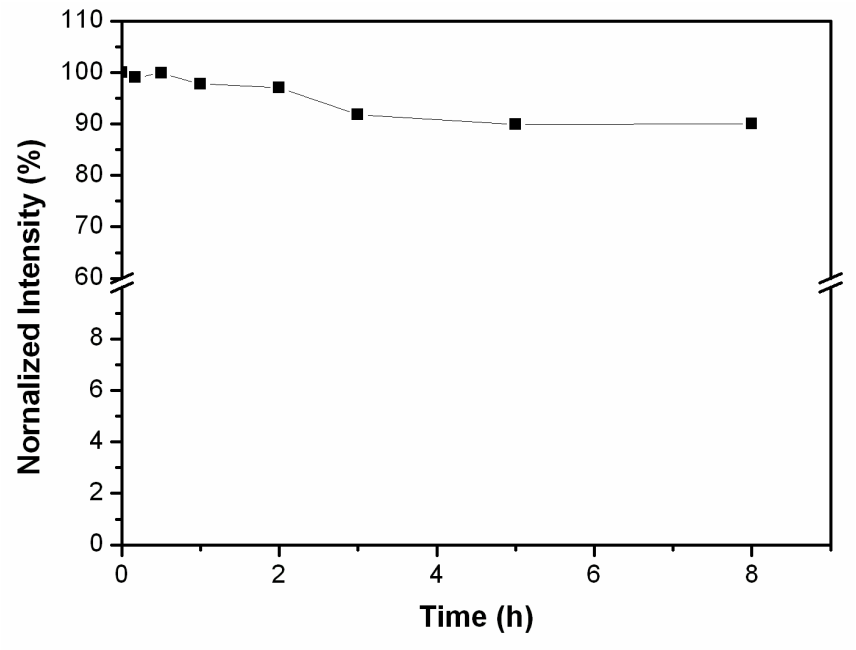

Figure S2. Photosatbility of PNPs in PBS solution under irradiation with UV light.

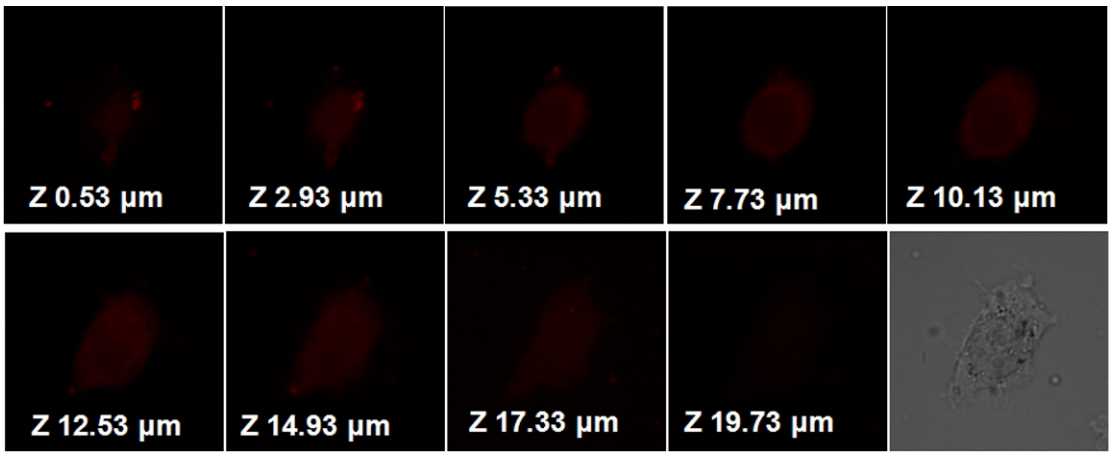

Figure S3 Z-scan images of the fixed KB cells incubated with 20 μM $[Os(bpy)_2(L\text{^}L)]^{2+}(PF_6^-)_2$ in DMSO/medium (1:49, v/v) for 30 min at 37 °C. λ_{ex} = 488 nm; λ_{em} = 600±20 nm.

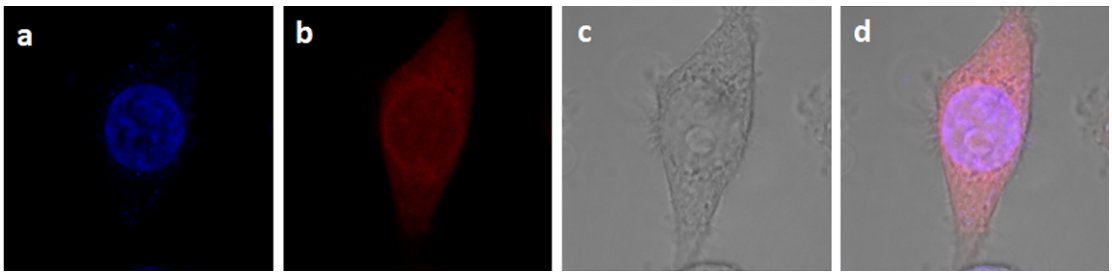

Figure S4. Confocal luminescence (*a* and *b*) and brightfield (*c*) images of the fixed KB cells stained with 20 μM $[Os(bpy)_2(L\hat{}L)]^{2+}(PF_6^-)_2$ and 0.5 μg/mL DAPI (λ_{ex} = 405 nm). The signals of DAPI and $[Os(bpy)_2(L\hat{}L)]^{2+}(PF_6^-)_2$ were collected from the blue channel (channel-1: 460 ± 20 nm) and red channel (channel-2: 600 ± 20 nm), respectively. Overlay of panels (*a*), (*b*) and (*c*) is shown in panel (*d*). Herein, to avoid the interference of DAPI in obtaining signal from $[Os(bpy)_2(L\hat{}L)]^{2+}(PF_6^-)_2$ in the cytoplasm, low concentration (0.5 μg/mL) of DAPI was used to stain the nuclei of KB cells.

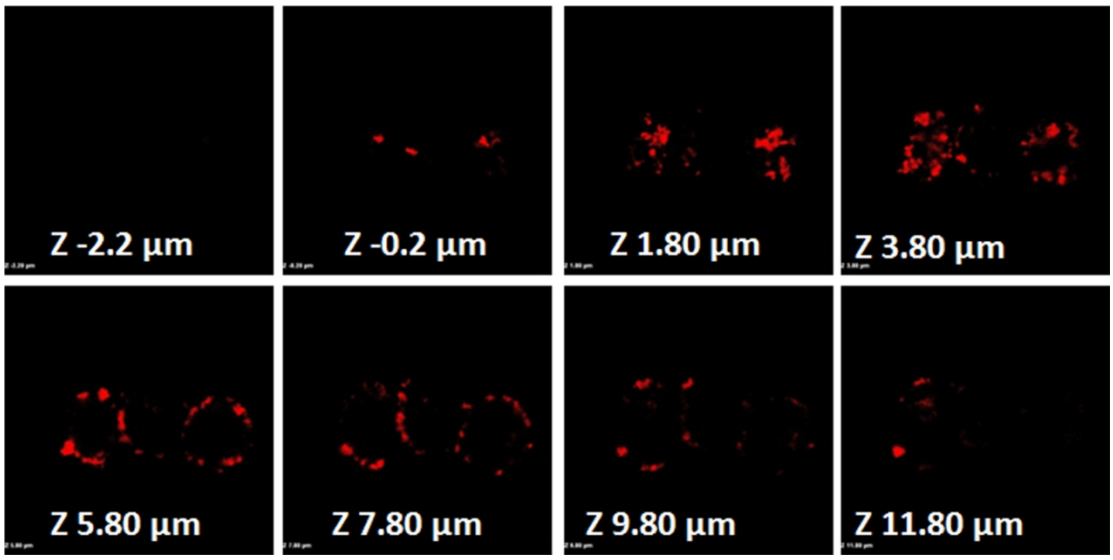

Figure S5. Z-scan images of the living KB cells incubated with 500 μg/mL PNPs in MEM for 10 min at 37 °C. (λ_{ex} = 488 nm).

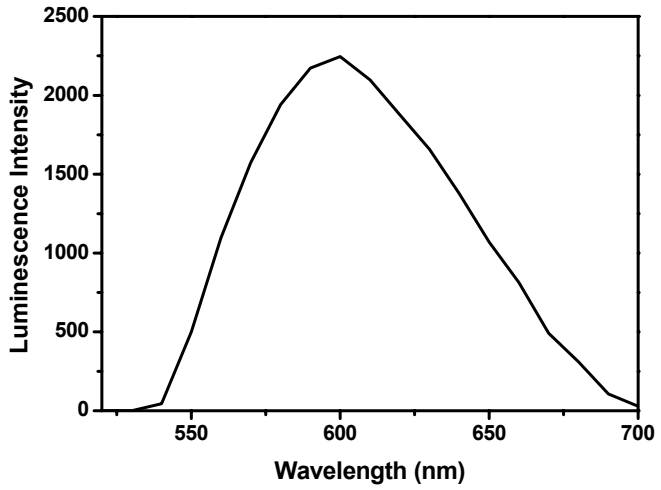

Figure S6. Photoluminescence spectrum obtained from the living KB cells incubated with 500 μg/mL PNPs in MEM solution for 10 min at 37 ºC. (λ_{ex} = 488 nm).

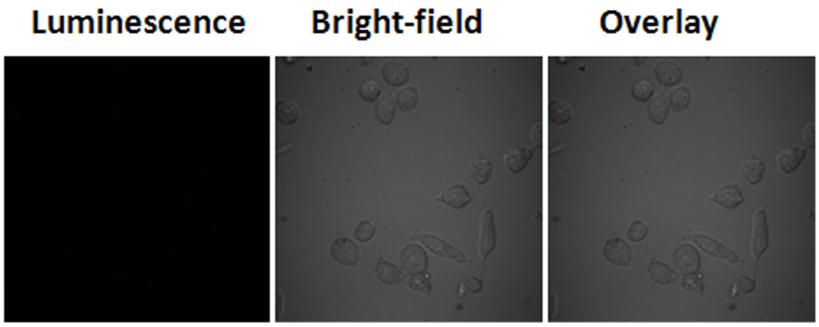

Figure S7. Confocal luminescence, bright-field, and overlay images of the KB cells incubated with MEM only at 37 ºC as blank.

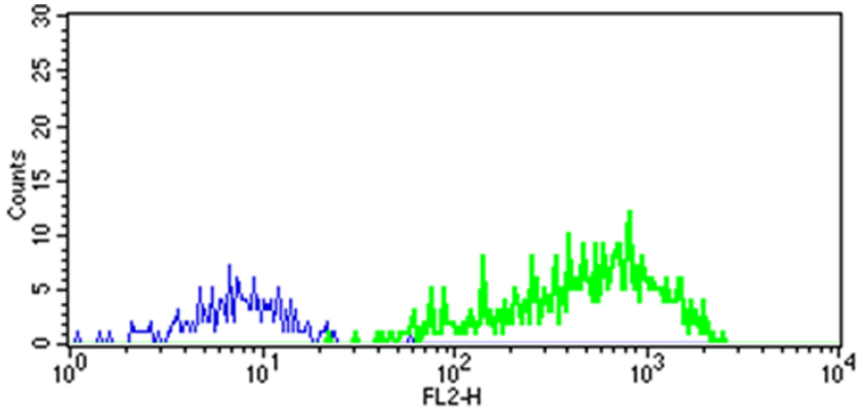

Figure S8. Flow cytometry analysis of KB cells incubated with or without 500 μg/mL PNPs in PBS (pH 7.4) for 10 min at 37 ºC