SUPPORTING INFORMATION

For the Manuscript Entitled

"Optical Imaging of Tumors with Copper-Labeled Organic Cations by Targeting Mitochondria"

by

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RUNNING TITLE: Copper-Labeled Rhodamine Derivatives for Tumor Imaging

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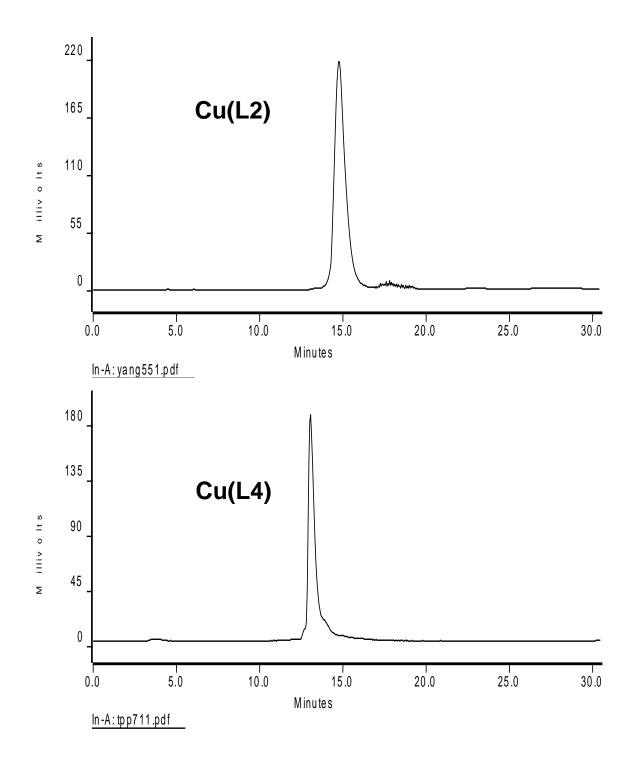


Figure SI1. Typical HPLC chromatograms for of Cu(L2) and Cu(L4) to demonstrate their HPLC purity.

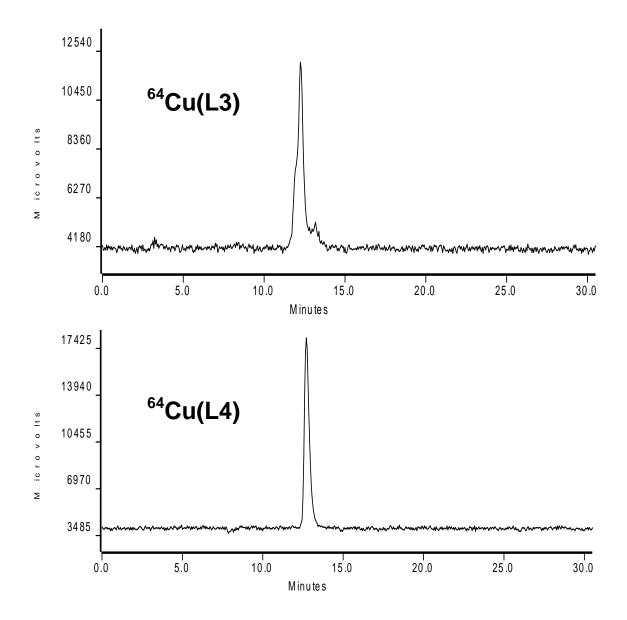


Figure SI2. Radio-HPLC chromatograms for ⁶⁴Cu(L3) and ⁶⁴Cu(L4) to illustrate their radiochemical purity.

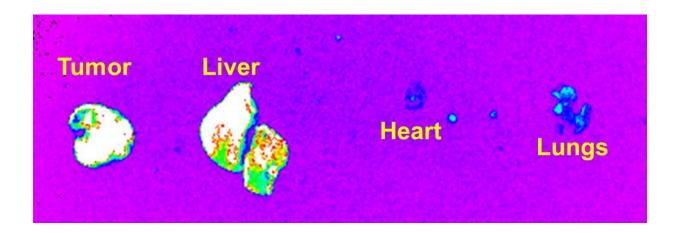


Figure SI3. Optical images of the tumor, liver, heart and lungs extracted from an athymic nude mouse bearing U87MG glioma xenografts (tumor size: 200 mg) 4 h after (left) injection of Cu(L2). The animal was administered with 0.5 mg of Cu(L2) in 100 µL PBS via the tail vein injection. No acute toxicity was observed during and after imaging studies. These images were acquired with a Kodak Imaging Station (In-Vivo FX, Eastman Kodak Company) using excitation at 555 nm and emission at 600 nm in combination with CCD camera immediately after removal or organs. Attempts were made to quantify the fluorescent intensity in the extracted organ tissues, but fluorescent intensity always fluctuated depending on the orientation of the organs to be imaged due to significant tissue attenuation of the fluorescent light.