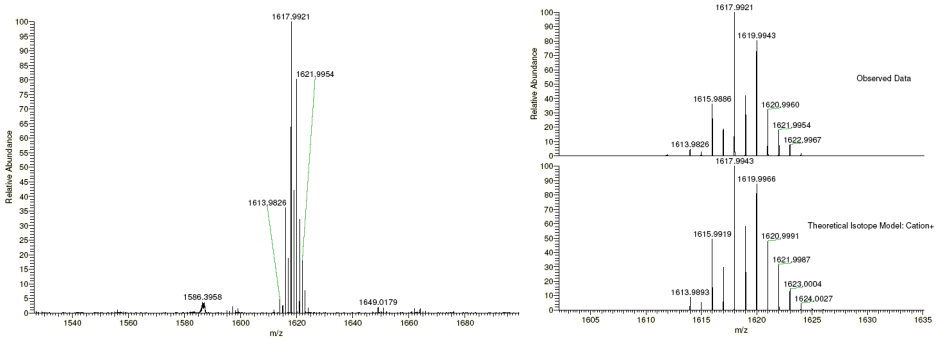
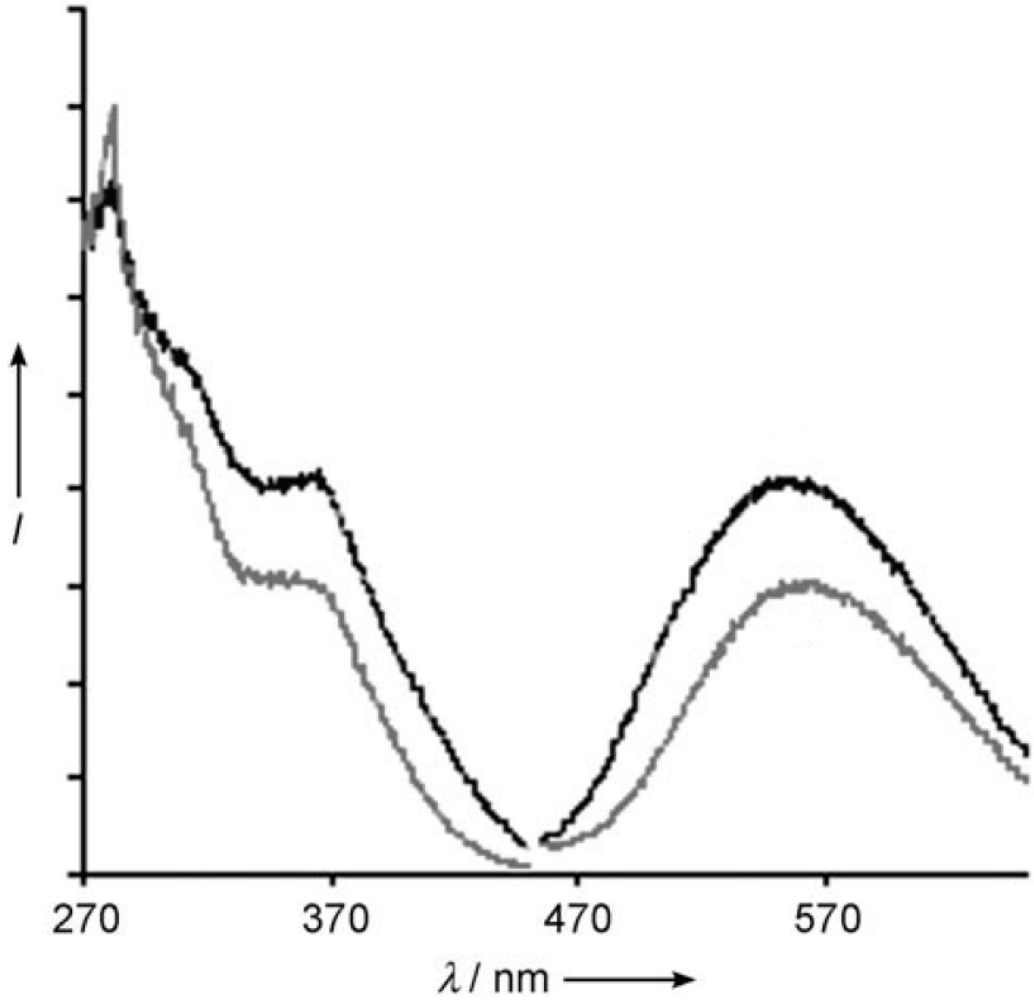
Supplementary Information.

Synthesis of **1**.
To a solution of **2** (106 mg, 1.7 x 10^{-4} mol) in acetonitrile (2 ml) was added potassium ^{t}-butoxide (20 mg, 1.7 x 10^{-4} mol) as a dry powder, and the resulting mixture was sealed under nitrogen and heated to 60 degrees for 12 hours with stirring. After this time the yellow solid product was collected by filtration, washed with water, (2 x 1 ml), acetonitrile (2 x 1 ml) and diethyl ether (2 x 1 ml) and dried under vacuum to give **1** (74 mg, 81 %) properties as previously reported.[5]
Synthesis of **Ag-1** from **1**.
To a solution of **1** (61 mg 3.9 x 10^{-5} mol) in DMSO (2 ml) was added $AgBF_4$ (10 mg, 5.1 x 10^{-5} mol) and the mixture was heated at 80 degrees for 12 hours. After cooling the reaction mixture was treated with diethyl ether and the precipitate collected by filtration and dried under vacuum to give **Ag-1** as a yellow solid (63 mg, 92%) properties as previously reported.[5]
Solutions of **Ag-1** for imaging were prepared as above, but heating for 30 minutes. A preliminary test in d^6-DMSO indicated essentially quantitative conversion in this time by the disappearance of the characteristic 3',5' doublets of **1** at δ 6.81, 6.59 and the appearance of the corresponding signals at δ 6.92, 6.70.
Synthesis of **Cu-1**.
To a solution of **1** (30 mg 1.9 x 10^{-5} mol) in DMSO (1 ml) was added $CuCl_2$ (4 mg, 2.9 x 10^{-5} mol) and the mixture was heated at 80 degrees for 12 hours. After cooling the reaction mixture was treated with diethyl ether and the precipitate collected by filtration and dried under vacuum to give **Cu-1** as a yellow-green solid (28 mg, 86 %). IR ν_{max} (nujol) 2015, 1908, 1884 (CO) 1670 (br, C=N) cm^{-1}; uv-vis λ_{max} 277 (π–π*) 362 (^{1}MLCT) nm; m/z (ES) 1617 (100%, $[C_{54}H_{30}N_9O_{12}Re_3Cu]^+$, M-2Cl),



Materials and methods for cell imaging studies.
Human cell incubation. Human adenocarcinoma cells (MCF-7), obtained from the European Collection of Cell Cultures, Porton Down,Wiltshire, UK, were maintained in Hepes modified minimum essential medium (HMEM) supplemented with 10% foetal bovine serum, penicillin and streptomycin. Cells were detached from the plastic flask using trypsin–EDTA solution, and suspended in an excess volume of growth medium. The homogenous cell suspension was then distributed into 1 ml aliquots with each aliquot being subject to incubation with the lumophores **1, Ag-1** final concentration 100 µg ml-1, at 4º C for 30 min. Cells were finally washed three times in phosphate buffer saline (PBS, pH 7.2), harvested by centrifugation (5 min, 800 g) and mounted on a slide for imaging. Preparations were viewed using a Leica TCS SP2 AOBS confocal laser microscope using X63 objective, with excitation at 405 nm and detection at 510–580 nm. Z-plane slices were used to record multiple single-plane views cell populations to estimate percentage uptake of lumophores.
Co-localisation experiments. MCF-7 adenocarcinoma cells were harvested as indicated above, resuspended in HMEM and incubated with both Ag-1 (final concentration 100 µg. ml-1) and the nucleolar-specific stain SYTO®RNASelect™ (final concentration 250 µM) for 1.5 h at 4° C. Cells were then washed three times in PBS, mounted and viewed as above by confocal microscopy. The excitation and detection wavelengths used for imaging were ex. 405 nm, em. 510-580 nm for **1, Ag-1** and ex. 488 nm, det. 520-540 nm for SYTO®RNASelect™.



Excitation and emission spectra of **1** (black)and **Ag-1** (grey)