Electronic Supplementary Material (ESI) for Dalton Transactions.

Supplementary Information

Facile rhenium-peptide conjugate synthesis using a one-pot derived $Re(CO)_3$ reagent

Kullapa Chanawanno,[a] Joel Caporoso, [a] Vinay Kondeti, [a] Sailaja Paruchuri, [a] Thomas C. Leeper, [a] Richard S. Herrick[b] and Christopher J. Ziegler[a]

[a]Department of Chemistry, University of Akron, OH 44325-3601, USA

[b]Department of Chemistry, College of the Holy Cross, Box C, Worcester, MA 01610- 2395, USA

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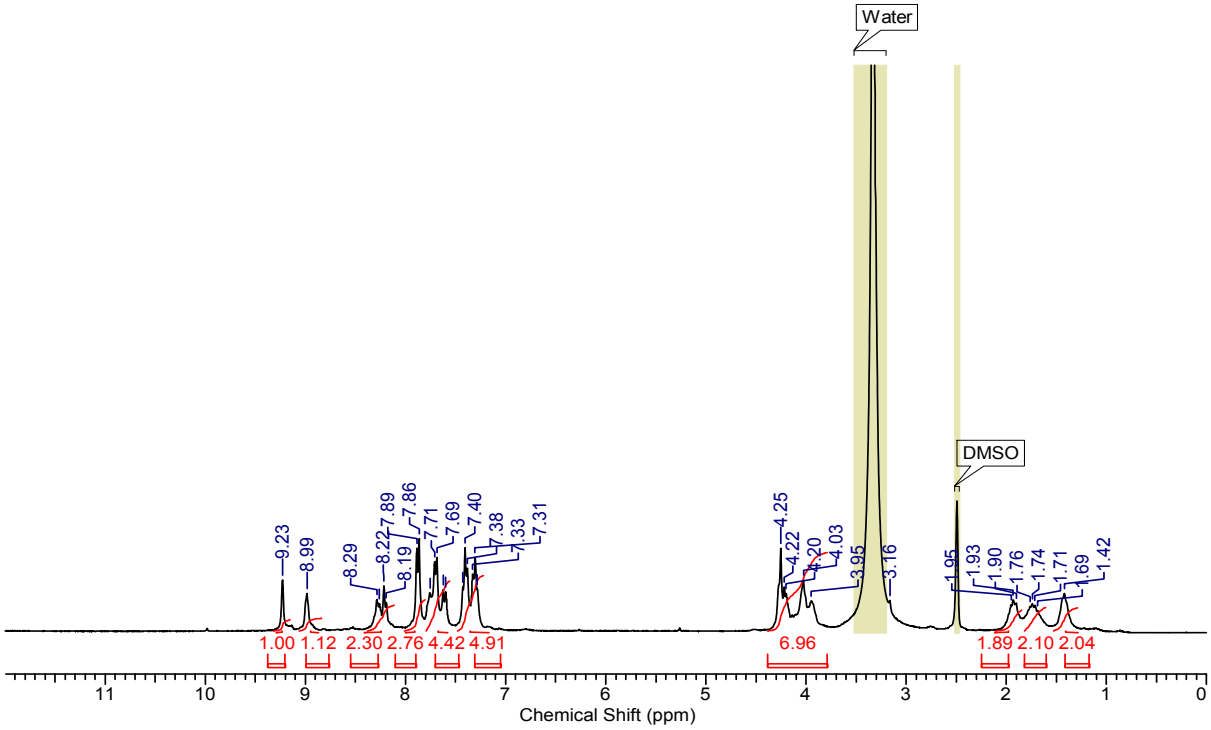

Figure S1 ^{1}H NMR of compound **1** (500 MHz, DMSO-d_6)

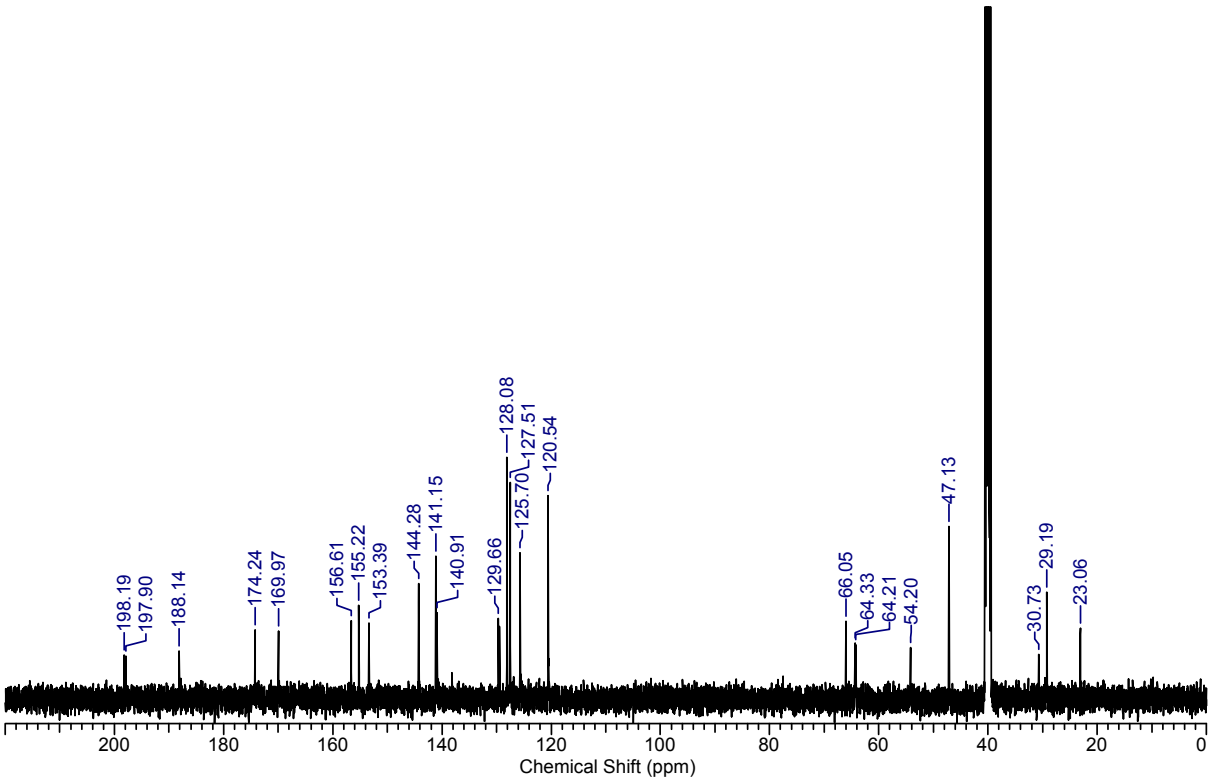

Figure S2 ^{13}C NMR of compound **1** (125 MHz, DMSO-d_6)

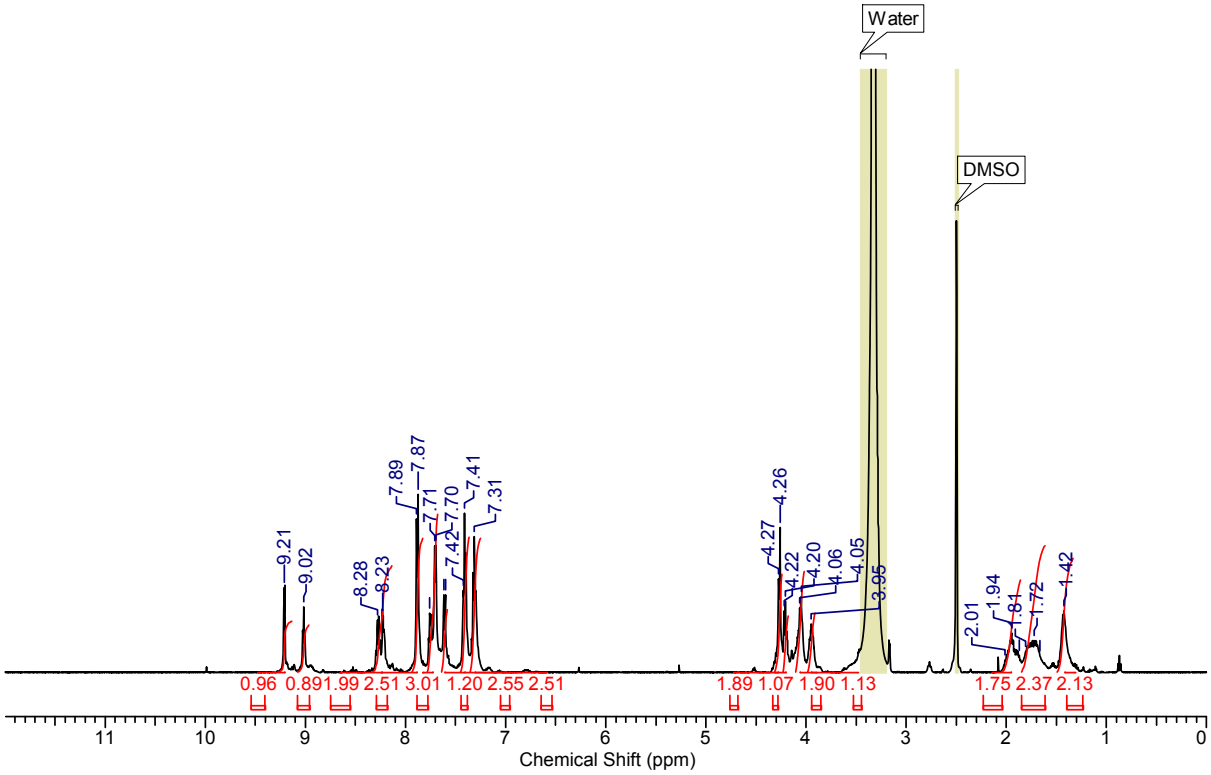

Figure S3 ^{1}H NMR of compound **2** (500 MHz, DMSO-d_6)

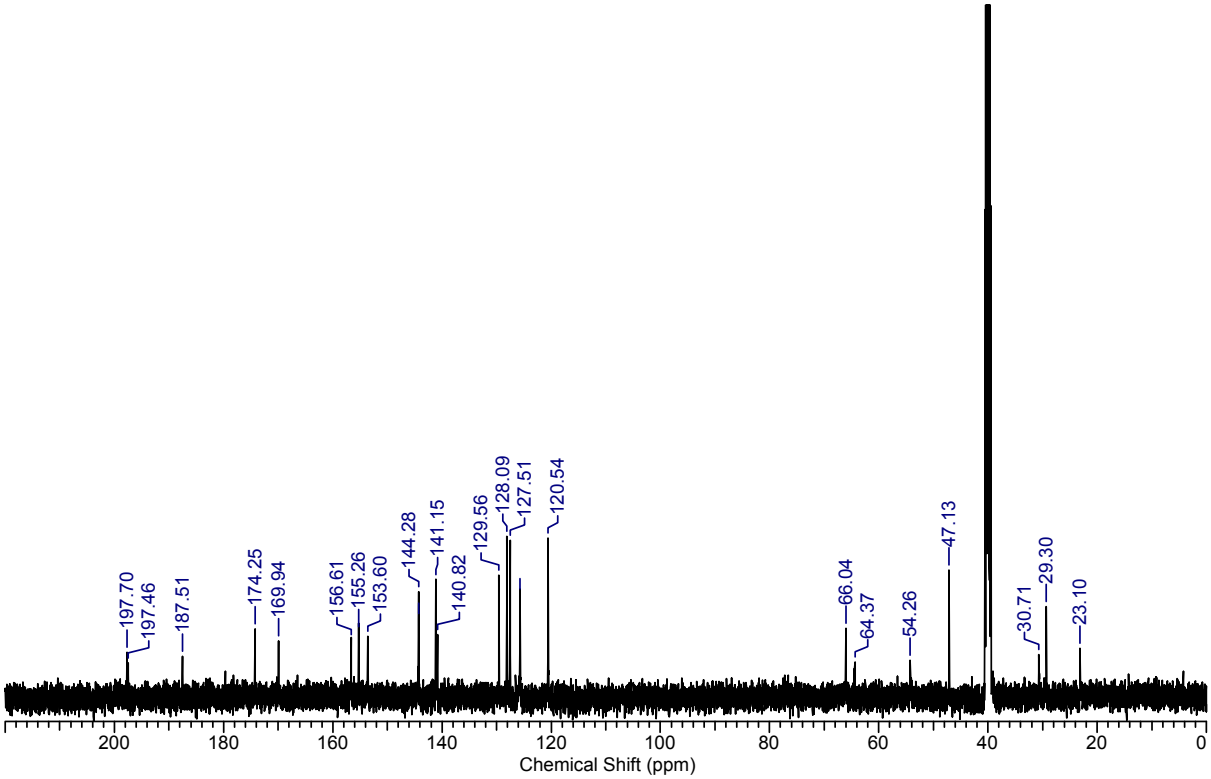

Figure S4 ^{13}C NMR of compound **2** (125 MHz, DMSO-d_6)

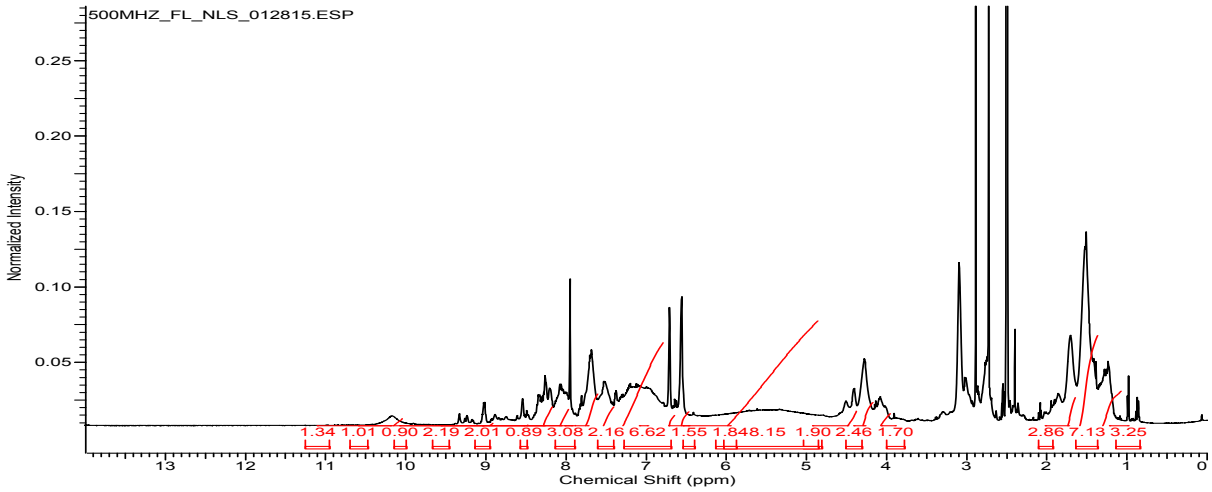

Figure S5 ^{1}H NMR of compound **4** (crude, 500 MHz, DMSO-d_6)

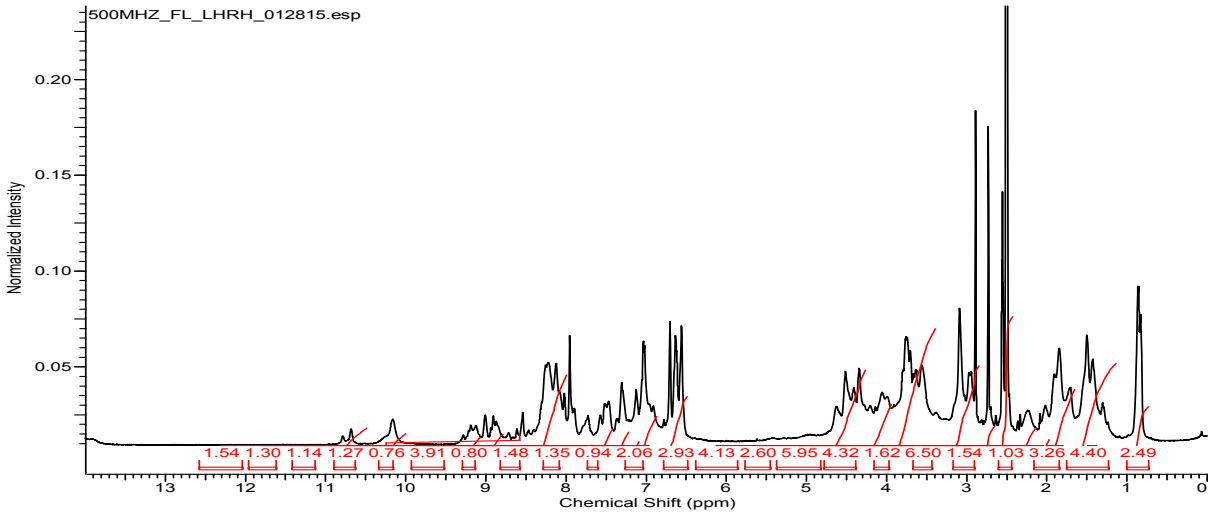

Figure S6 ^{1}H NMR of compound **5** (crude, 500 MHz, DMSO-d_6)

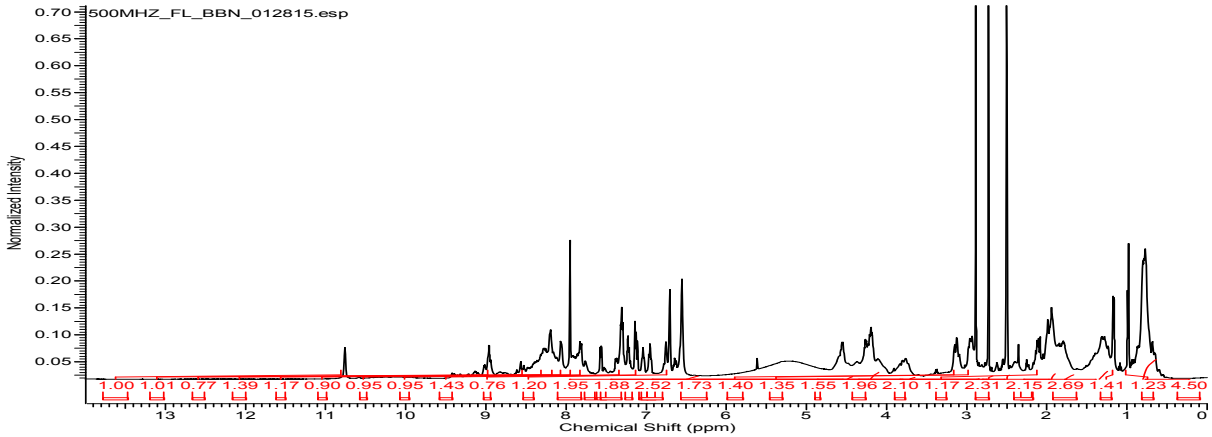

Figure S7 ^{1}H NMR of compound **6** (crude, 500 MHz, DMSO-d_6)

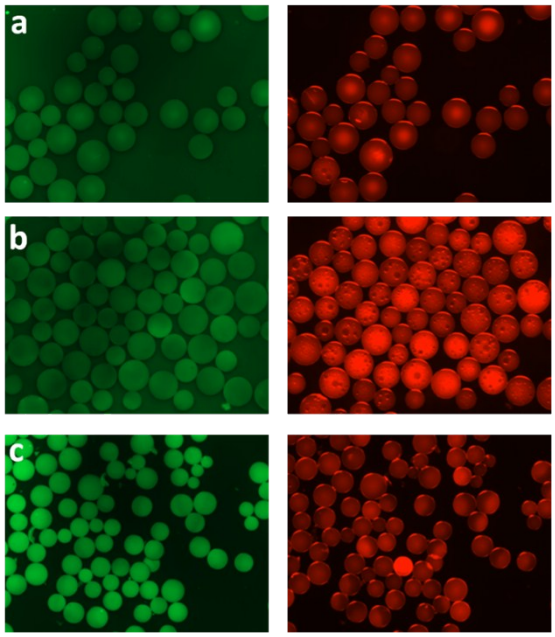

Figure S8 Fluorescent images of peptide appended beads. Left column: 470 nm excitation. Right column: 594 nm excitation for compound **4** (a), **5** (b), and **6** (c).

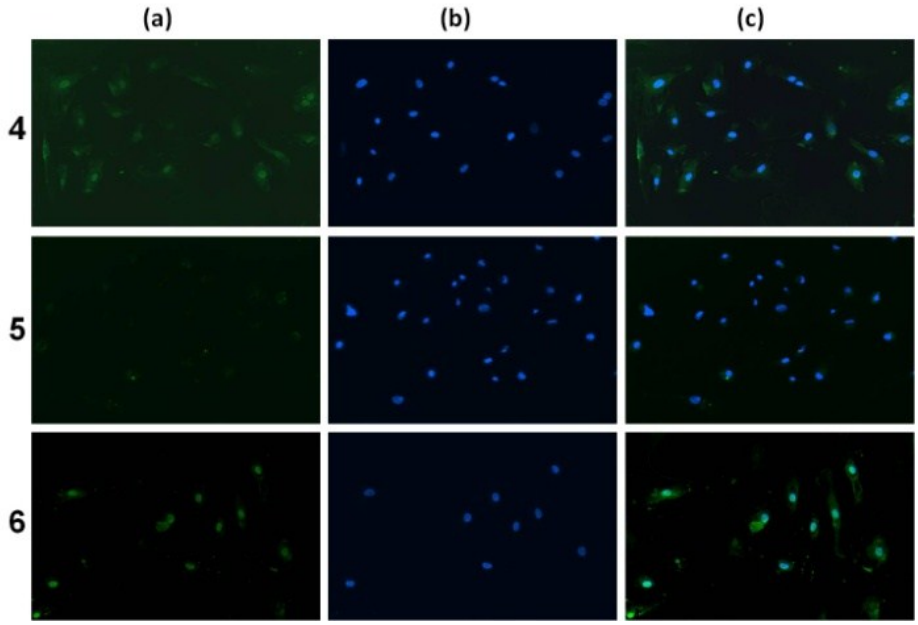

Figure S9 Fluorescent micrographs of HUVECs incubated with 5 µM of compound 4 (first row), 5 (second row), and 6 (third row) for 24 hours. Images were achieved in 470 nm excitation (a), DAPI (b), and merged (c) modes.

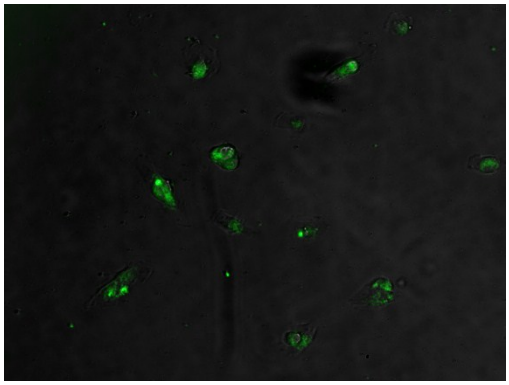

Figure S10 Overlaid image (transmitted and GFP mode) of diseased human lung fibroblasts (DHLF) incubated with 20 µM of compound **3** for 24 hours. DHLF were maintained in DMEM medium with 10% FBS/BS/l-glutamine/ 25,000 (DHLF) cells per well.

DHLF is more vulnerable to all peptides than HUVEC. We observed large amount of dead cells at 80, 40, and 20 µM incubation.

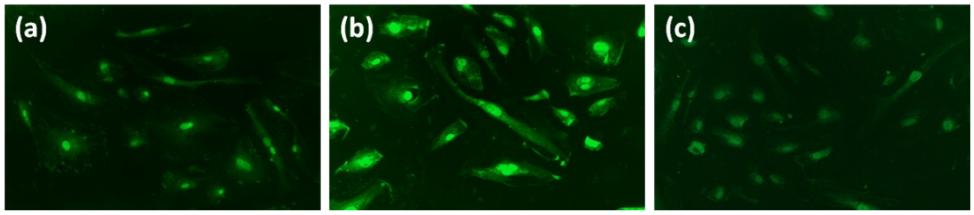

Figure S11 Fluorescent micrographs of 24-h-incubated HUVECs with 80 µM of compound **4** (a), **5** (b), and **6** (c) after one week.

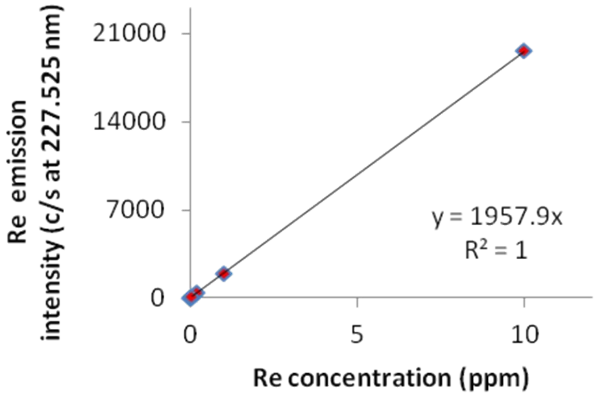

Figure S12 Rhenium emission intensity and rhenium uptake concentration calibration curve from ICP experiment. Relative standard deviations of replicate measurements (N = 3) of single calibration points are <6%.