

^{99m}Tc SPECT imaging agent based on cFLFLFK for the detection of FPR1 in inflammation

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HPLC traces

HPLC was undertaken on an Agilent 1100 semi-preparative system, with a C-18 reverse phase column.

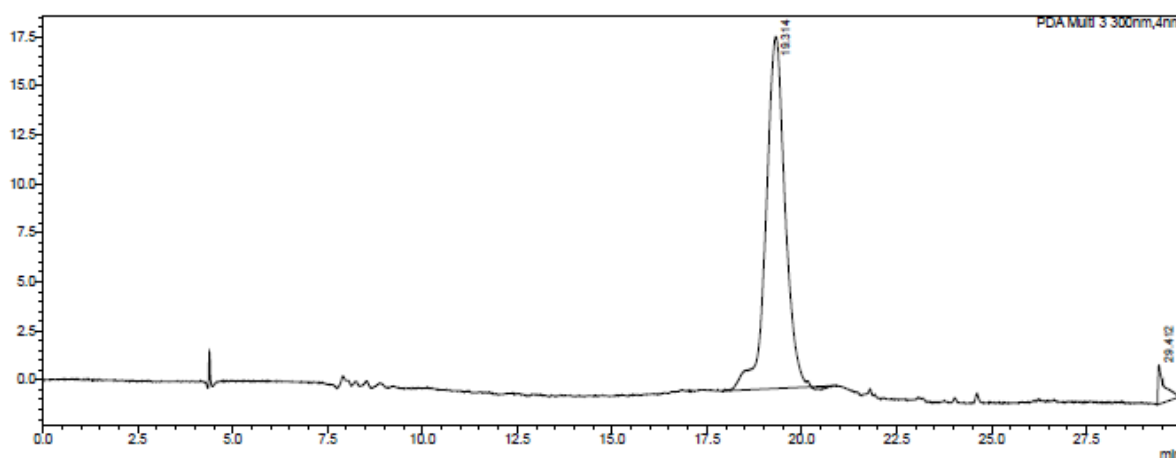


Figure 1. Analytical HPLC trace for **3**, cFLFLFK-PEG-NH₂, using a C18 reverse phase column with a gradient of H₂O 0.1% TFA: MeCN starting at 95:5 to 5:95 over 30 minutes. **3** has a retention time 19 minutes

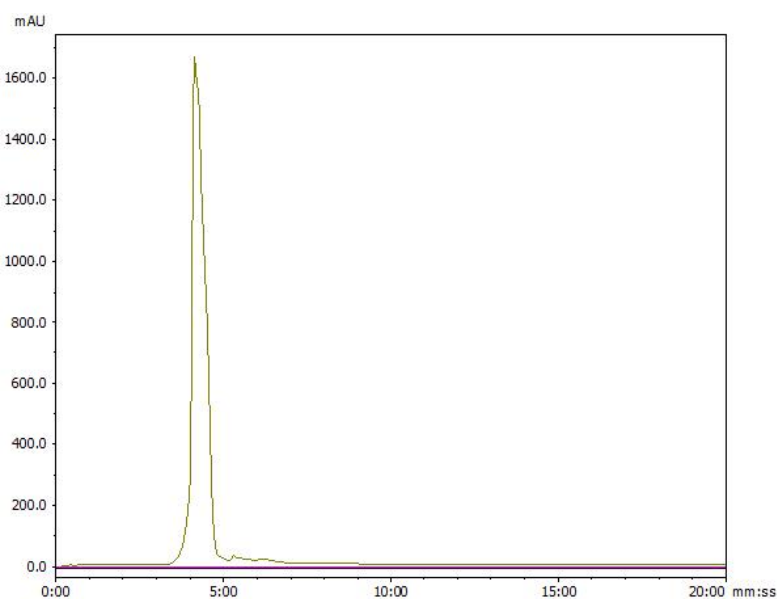


Figure 2. Analytical HPLC trace for **4**, cFLFLFK-PEG-TG, using a C18 reverse phase column with a gradient of H₂O 0.1% TFA: MeCN starting at 50:50 to 5:95 over 20 minutes. **4** has a retention time 4.5 minutes

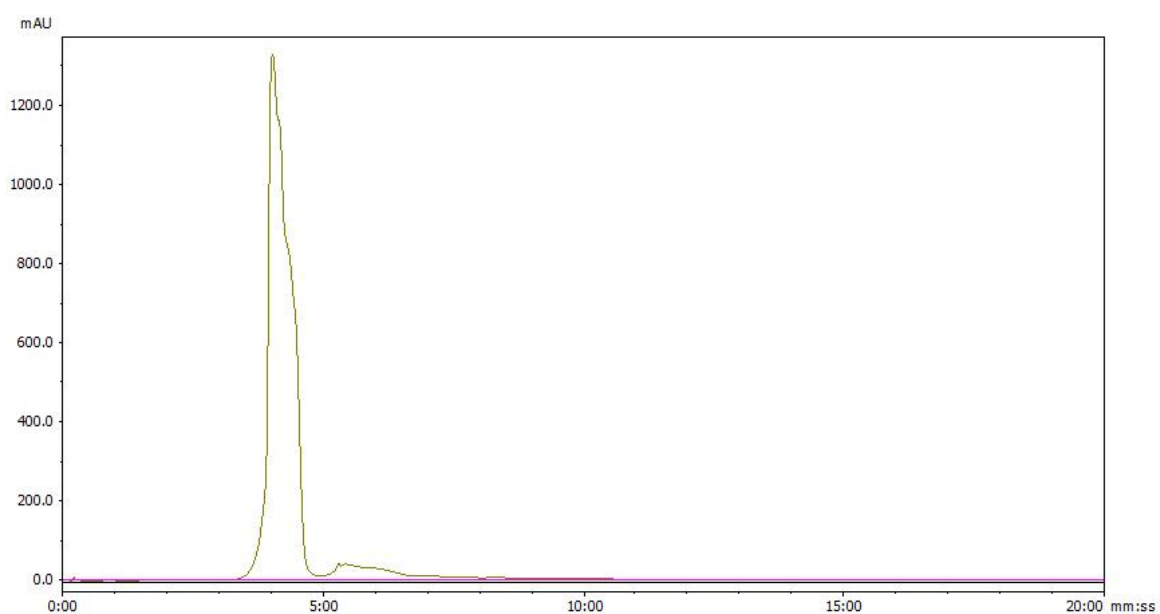


Figure 3. Crude analytical HPLC trace for **Re.1**, cFLFLFK-PEG-TG Re, using a C18 reverse phase column with a gradient of H₂O 0.1% TFA: MeCN starting at 50:50 to 5:95 over 20 minutes. **Re.1** has a retention time of 4 minutes

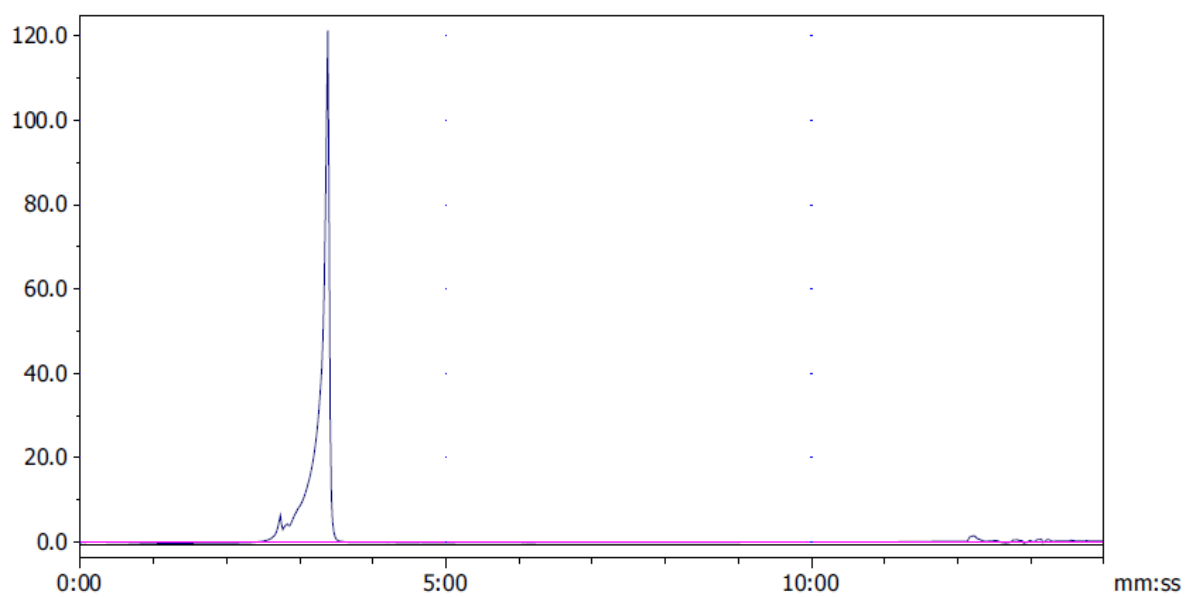


Figure 4. Analytical HPLC trace for **Re.tetraglycine**, using a C18 reverse phase column with an isocratic solvent system of H₂O 0.1% TFA: MeCN 95:5 over 20 minutes. **Re.tetraglycine** has a retention time of 3.2 minutes

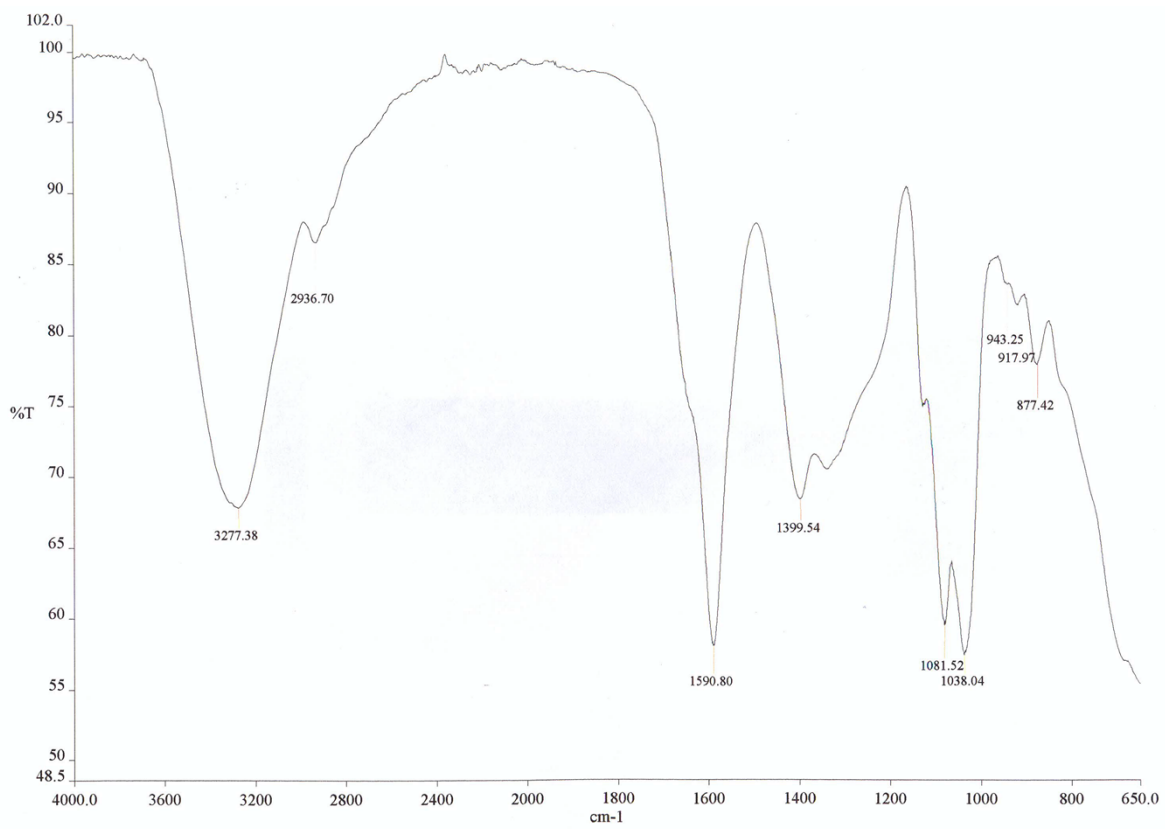


Figure 5. IR spectrum for *Re.tetraglycine* (nujol mull)

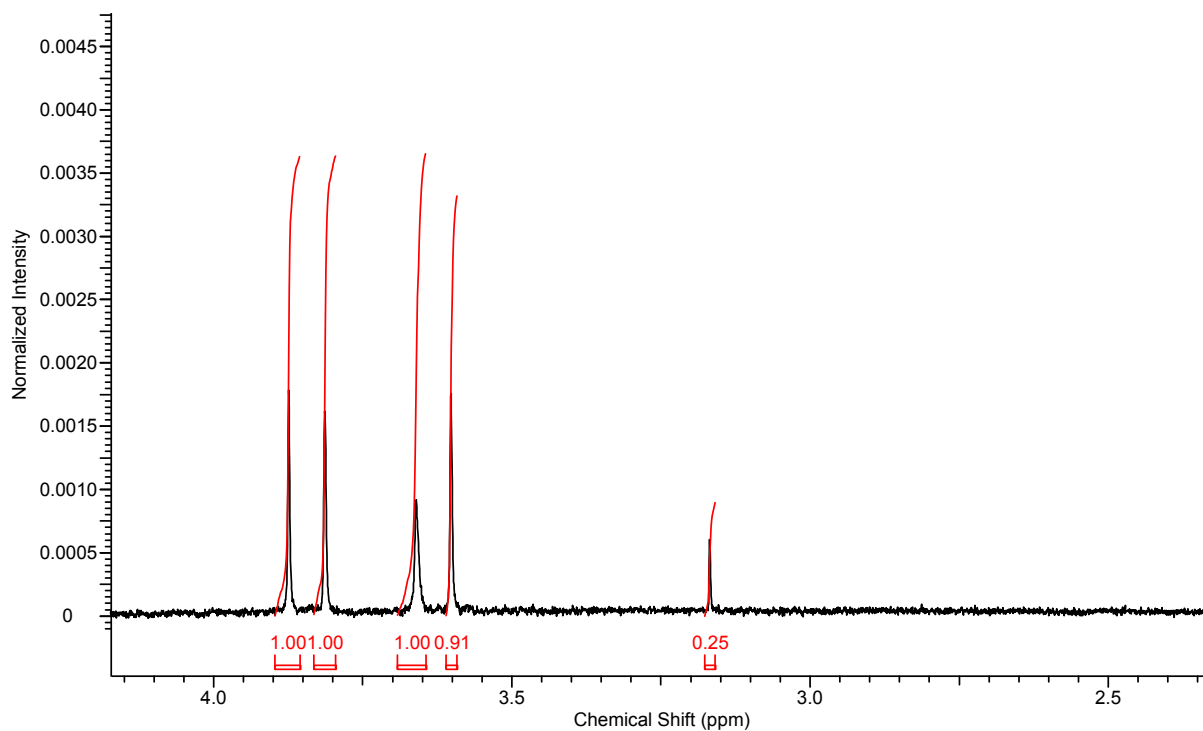


Figure 6. ^1H NMR spectrum of *Re.tetraglycine* in D_2O

Radiolabelling experiments

The solution was passed down a G-10 Sephadex column to purify (2.1 ml), fractions of 0.5 ml were taken and tested for radioactivity in a gamma counter.

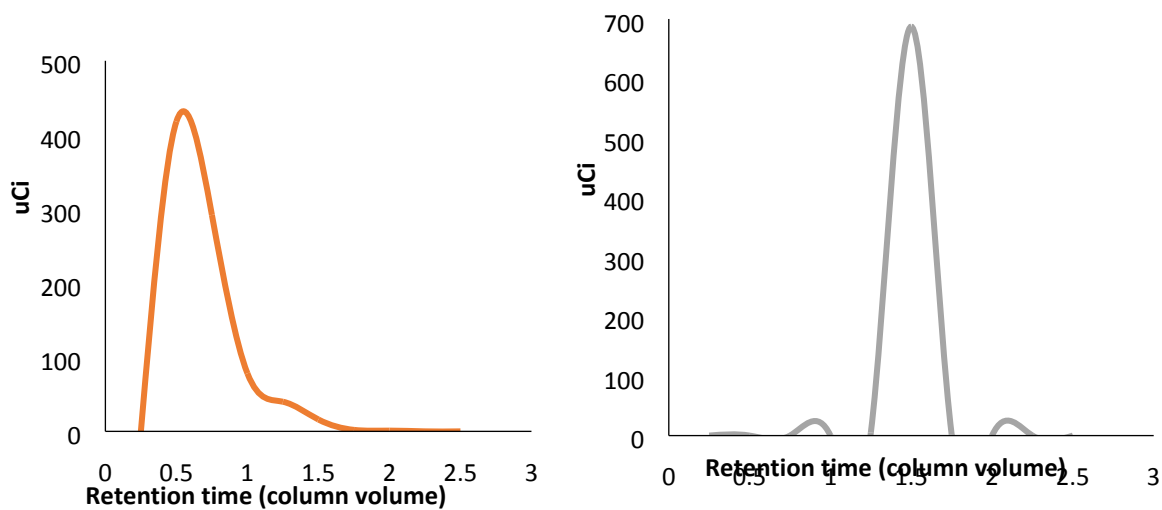


Figure 7. Gamma trace for *Tc.1* (left) and $^{99\text{m}}\text{TcO}_4^-$ (right) using a G-10 Sephadex column with H_2O .

