

Supplemental Information

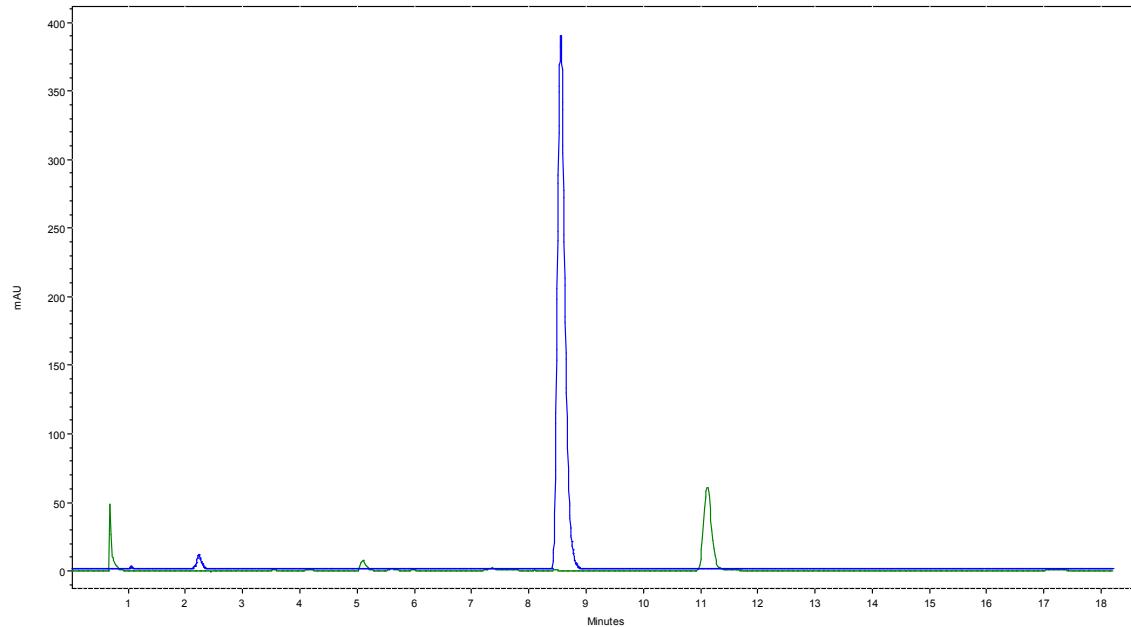


Figure 1: RadioHPLC chromatogram of $[^{18}\text{F}]$ F-Py-TFP prosthetic group. Radioactive peak is in blue, and UV at 254 is in green.

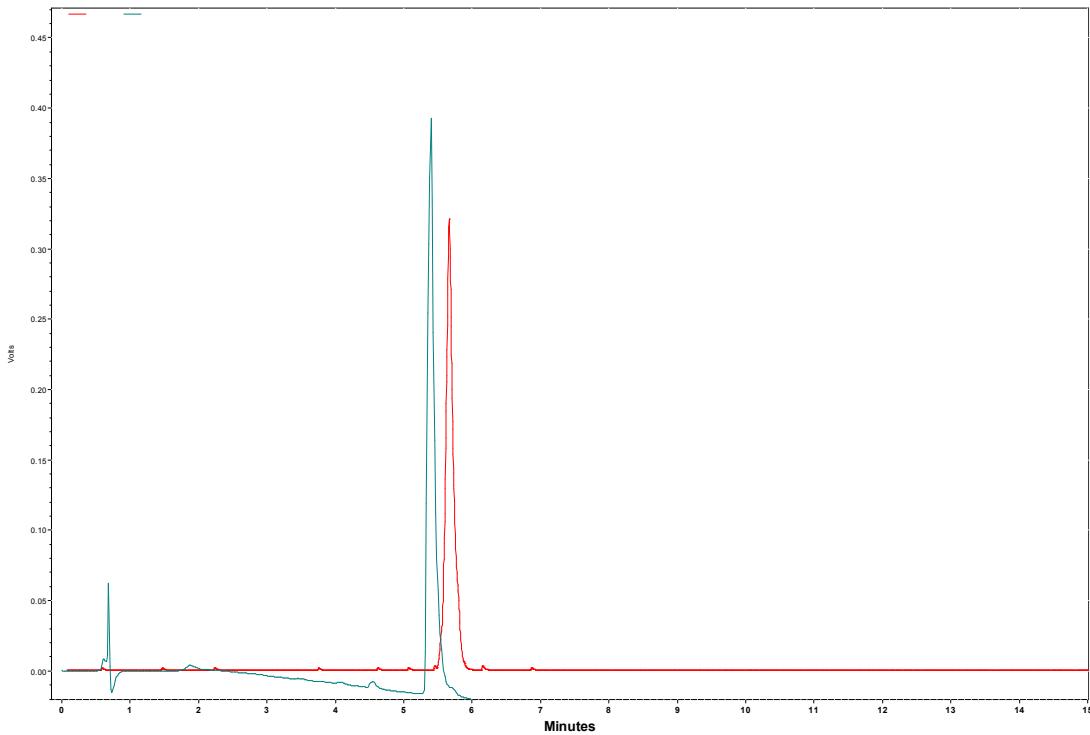


Figure 2: RadioHPLC chromatogram of purified $[^{18}\text{F}]\text{F-Py-YGGFL}$, spiked with $[^{19}\text{F}]\text{cold}$ standard. Red is radioactive peak, green is UV at 254nm

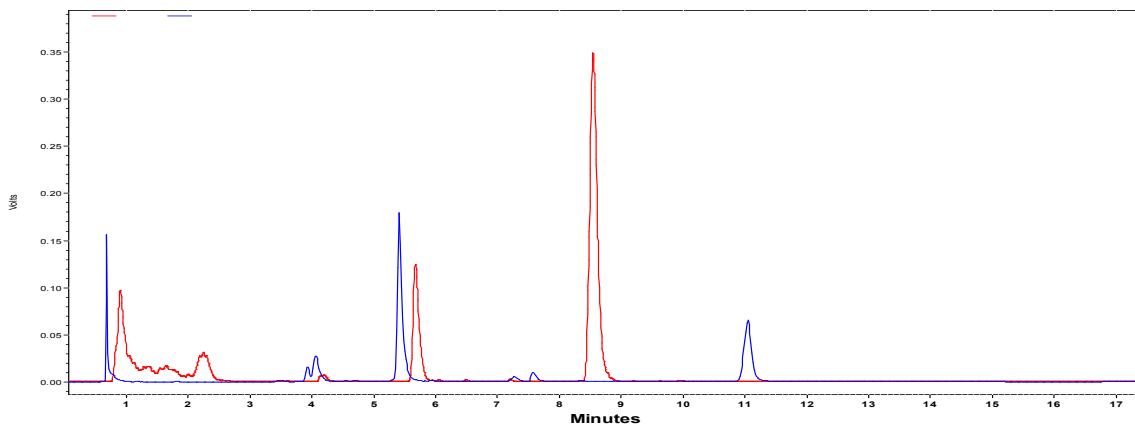


Figure 3: RadioHPLC chromatogram of crude radiolabeled peptide with cold standard co-injection. Red trace is radioactive trace, and blue is UV at 254 nm. C18 column with 9-81% acetonitrile in 0.05% TFA/water over 18 min gradient was used. Initial peak at solvent front corresponds to hydrolyzed $[^{18}\text{F}]$ F-Py-TFP ($[^{18}\text{F}]$ fluoronicotinic acid), peak at 2 min corresponds to unreacted ^{18}F -fluoride, peak at 5.5 min corresponds to $[^{18}\text{F}]$ F-Py-TFP-YGGFL, and 8.5 min peak corresponds to unreacted $[^{18}\text{F}]$ F-Py-TFP.

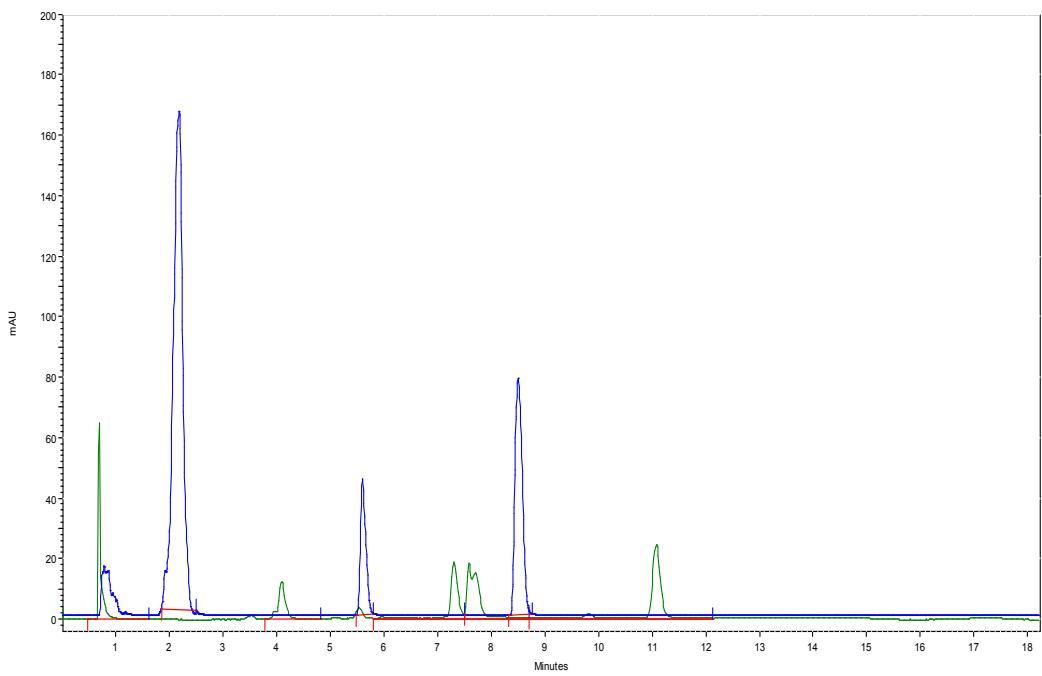


Figure 4: RadioHPLC chromatogram of crude radiolabeled peptide reaction without cold co-injection