

Supporting Information

Radiosynthesis and evaluation of an ^{18}F -labeled positron emission tomography (PET) radioligand for brain histamine subtype-3 receptors based on a non-imidazole 2-aminoethylbenzofuran chemotype

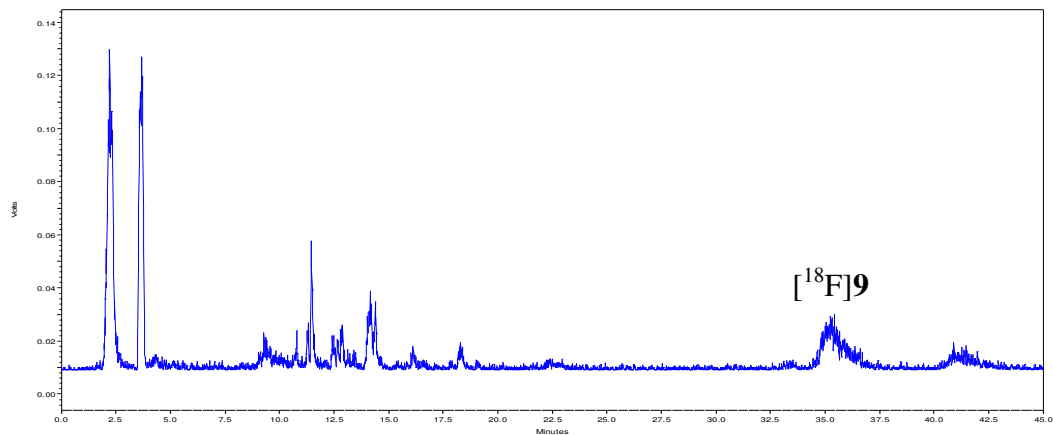
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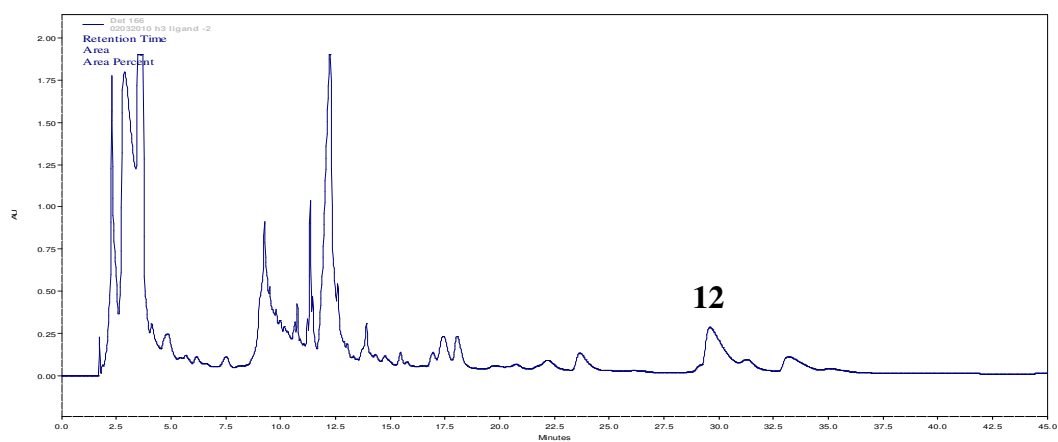
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An example of HPLC chromatograms from the separation of [^{18}F]9.

(a) Radioactivity detection



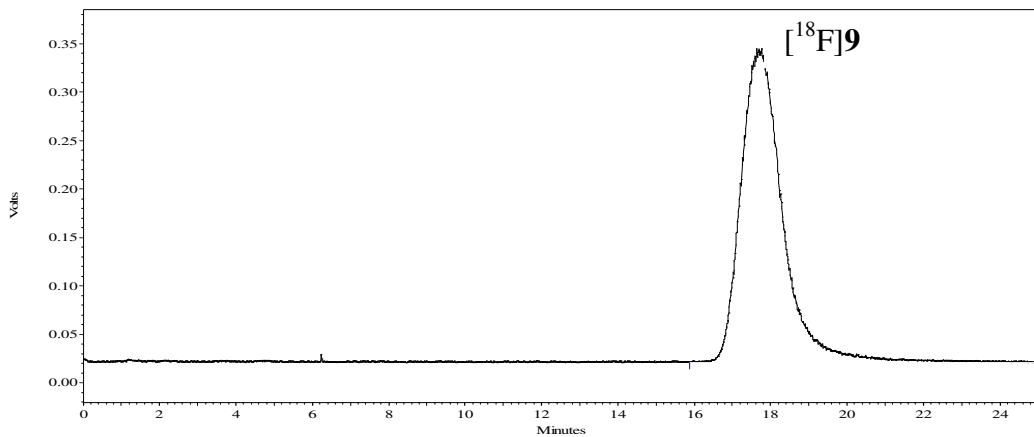
(b) Absorbance detection ($\lambda = 243 \text{ nm}$)



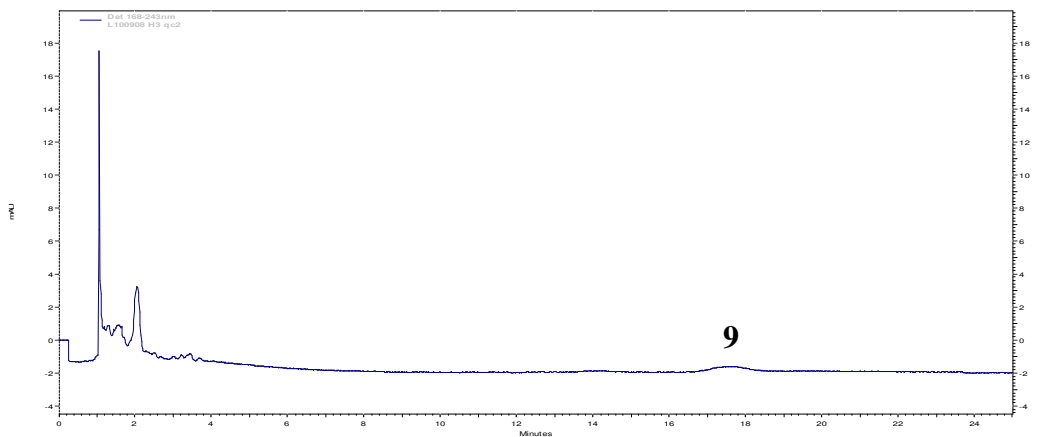
Separation was performed with HPLC on a Prodigy column (10 μm , 10 mm \times 250 mm; Phenomenex) eluted at 6 mL/min with a mixture of aq. NH_4OH (0.025%, pH 8.5) (A, 70%) and MeCN (B, 30%). B was kept at 30% for 5 min, linearly increased to 70% over 3 min, and then held at 70% for 45 min.

Example of chromatograms from the reverse phase HPLC analysis of [¹⁸F]9.

(a) Radioactivity detection



(b) Absorbance detection ($\lambda = 243$ nm)



Analysis was performed with HPLC on a Prodigy column (10 μ m, 4.6 mm \times 250 mm; Phenomenex) eluted with a mixture of aq. NH₄OH (0.025%, pH 8.5) and MeCN (20: 80 v/v) at 2 mL/min with eluate monitored for absorbance at 243 nm (Gold 166 detector, Beckman) and for radioactivity (PMT, HC-003; Bioscan Inc, Washington DC).