

Supporting Information

Novel ^{18}F -labeled benzofuran derivatives with improved properties for PET imaging of β -amyloid plaques in Alzheimer's brains

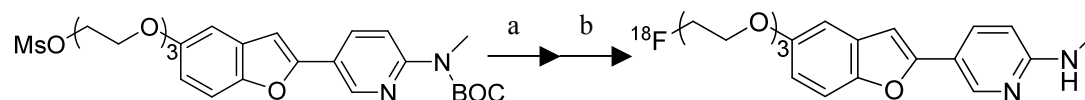
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(1) Preparation of [^{18}F]**10** ([^{18}F]FPYBF-2)

^{18}F -labeling reaction



a, Kryptofix222/ K_2CO_3 , ^{18}F , MeCN, 120°C , 5 min.

b, 10% HCl (aq), 120°C , 5 min.

HPLC condition

Column: $5\text{C}_{18}\text{-AR-II}$ (4.6×150 mm)

Mobile phase: MeCN : H_2O = 50 : 50

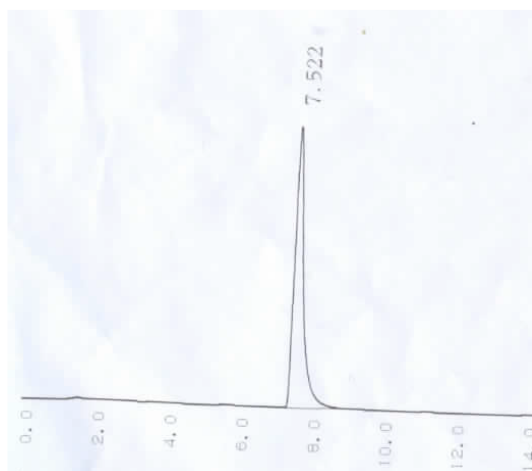
Flow rate: 1.0 mL/min

Detection: 254 nm (UV)

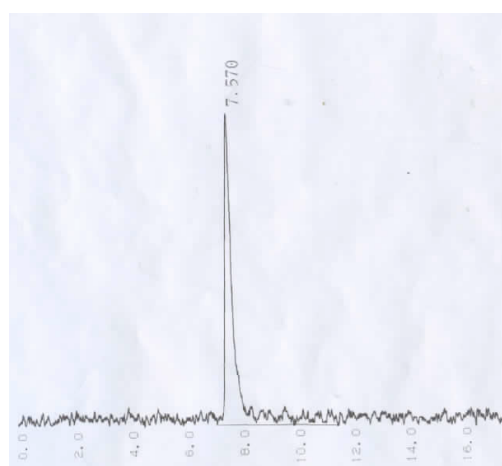
Retention time

Cold: 7.522 min, Hot: 7.570 min

UV

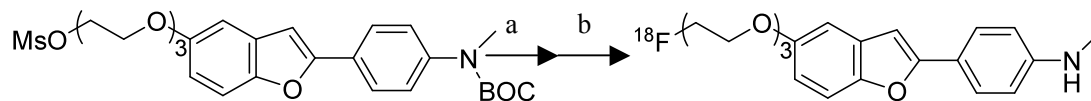


Radioactivity



(2) Preparation of [^{18}F]**21** ([^{18}F]FPHBF-2)

^{18}F -labeling reaction



a, Kryptofix222/ K_2CO_3 , ^{18}F , MeCN, 120°C , 5 min.

b, 10% HCl (aq), 120°C , 5 min.

HPLC condition

Column: $5\text{C}_{18}\text{-AR-II}$ (4.6×150 mm)

Mobile phase: MeCN : H_2O = 50 : 50

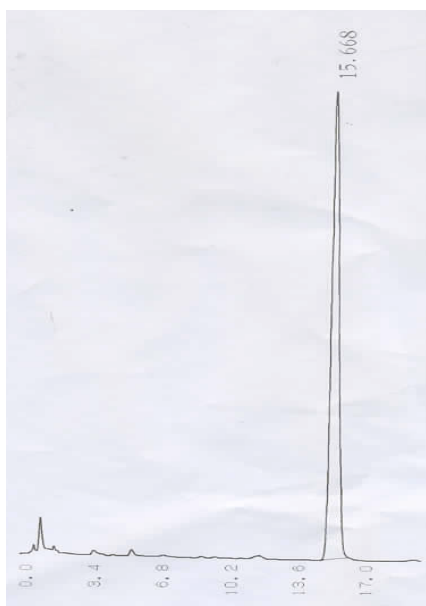
Flow rate: 1.0 mL/min

Detection: 254 nm (UV)

Retention time

Cold: 15.668 min, Hot: 15.733min

UV



Radioactivity

