

Supporting Information

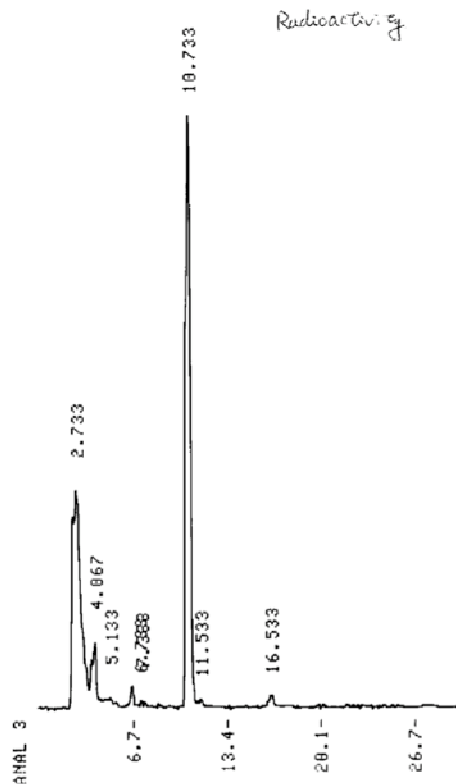
Fluoro-pegylated Chalcones as Positron Emission Tomography Probes for in Vivo Imaging of β -Amyloid Plaques in Alzheimer's Disease

Masahiro Ono,^{*,†,‡} Rumi Watanabe,[†] Hidekazu Kawashima,[§] Yan Cheng,[‡] Hiroyuki Kimura,[‡] Hiroyuki Watanabe,[†] Mamoru Haratake,[†] Hideo Saji,[‡] Morio Nakayama,^{*,†}

[†]Department of Hygienic Chemistry, Graduate School of Biomedical Sciences, Nagasaki University, 1-14 Bunkyo-machi, Nagasaki 852-8521, [‡]Department of Patho-Functional Bioanalysis, Graduate School of Pharmaceutical Sciences, Kyoto University, Yoshida Shimoadachi-cho, Sakyo-ku, Kyoto 606-8501, [§]Department of Nuclear Medicine and Diagnostic Imaging, Graduate School of Medicine, Kyoto University, Shogoin Kawahara-cho, Sakyo-ku, Kyoto 606-8507, Japan.

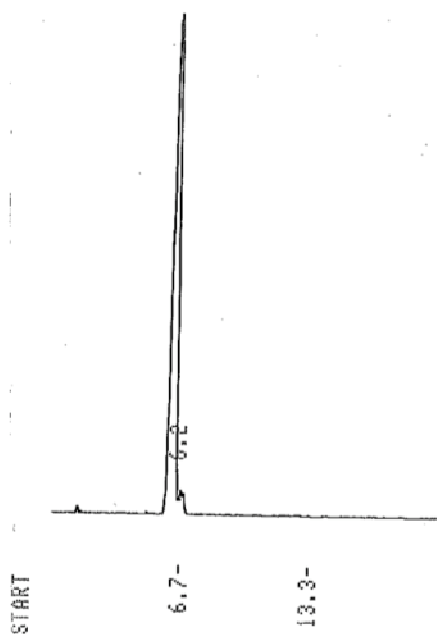
Representative HPLC chromatograms of [^{18}F]7c.

A



PKNO	TIME	AREA	MK	IDNO	CONC	NAME
1	2.733	57731			36.5725	
2	4.067	10353	V		6.5583	
3	5.133	2901	V		1.8377	
4	6.733	2857	V		1.81	
5	18.733	84612			53.8216	
TOTAL					157853	
					100	

B



CHROMATOGRAM 2 MEMORIZED

PKNO	TIME	AREA	MK	IDNO	CONC	NAME
1	6.2	56974			100	
TOTAL					56974	
					100	

A: The reaction mixture of [^{18}F]**7c** was purified by preparative HPLC [YMC-Pack Pro C18 column (20 × 150 mm I.D.), acetonitrile/water (75/25), flow rate 9.0 mL/min]. The retention time of the major byproduct of hydrolysis ($t_{\text{R}} = 2.7$ min) was well-resolved from [^{18}F]**7c** ($t_{\text{R}} = 10.7$ min).

B: After purification of [^{18}F]**7c** by preparative HPLC, the radiochemical yield, purity and specific activity of [^{18}F]**7c** were further confirmed by analytical reverse phase HPLC [YMC-Pack Pro C18 column (4.6 × 150 mm I.D.), acetonitrile/water (60/40), flow rate 1.0 mL/min]. [^{18}F]**7c** was eluted at a retention time of 6.2 min in a radiochemical purity of >99%.