

## Supporting Information

### **Synthesis and Biological Evaluation of $^{123}\text{I}$ -Labeled Pyridyl Benzoxazole Derivatives: Novel $\beta$ -Amyloid Imaging Probes for Single-Photon Emission Computed Tomography**

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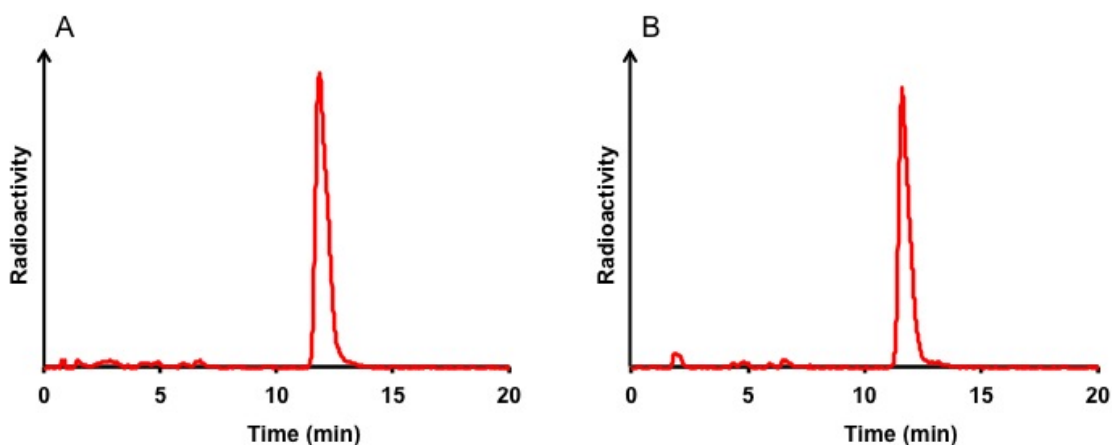
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## Method

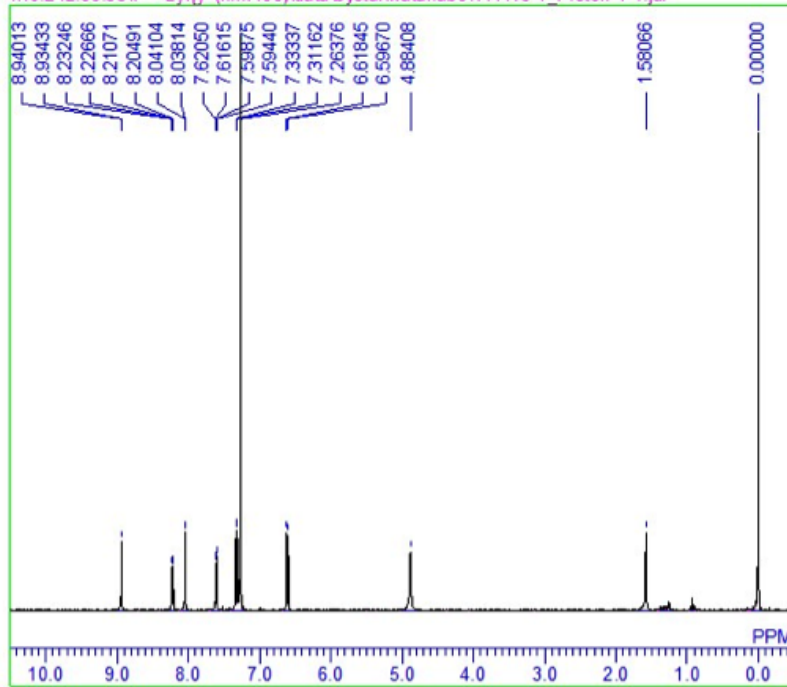
### In vitro stability in mouse plasma

[<sup>125</sup>I]9 (11 kBq, 10 μL) was added to the mouse plasma (200 μL), and the plasma samples (n = 3) were incubated at 37°C for 1 h. After incubation, plasma samples were mixed with equal volumes of acetonitrile followed by centrifugation at 4,500 rpm for 10 min to remove the denatured proteins. The supernatant was filtrated using 0.45 μm filter (Millipore; Billerica, MA, USA). Then, the filtrate was analyzed by HPLC on a Cosmosil C18 column (Nacalai Tesque, Kyoto, Japan, 5C<sub>18</sub>-AR-II, 4.6 mm × 150 mm), eluting with an isocratic solvent of H<sub>2</sub>O:acetonitrile (3:7) at flow rate of 1.0 ml/min.

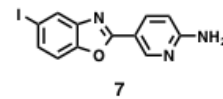


**Figure S1.** Representative HPLC profiles of [<sup>125</sup>I]9 in mouse plasma before (A) and after incubation for 1 h (B) at 37°C.

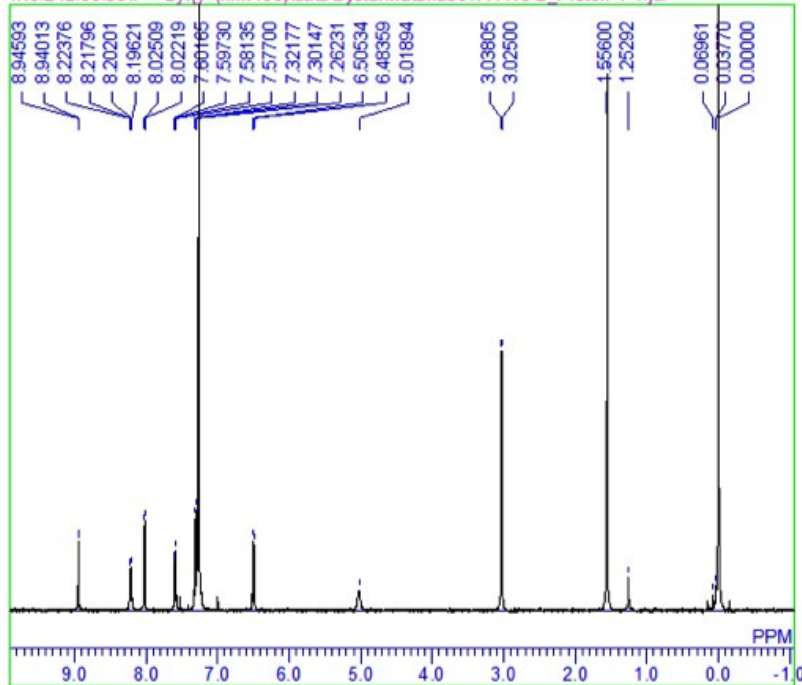
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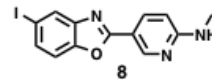
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 OBFIN 7.29 Hz  
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 SCANS 8  
 ACQTM 1.7249 sec  
 PD 5.0000 sec  
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 CTEMP 19.1 c  
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 RGAIN 54

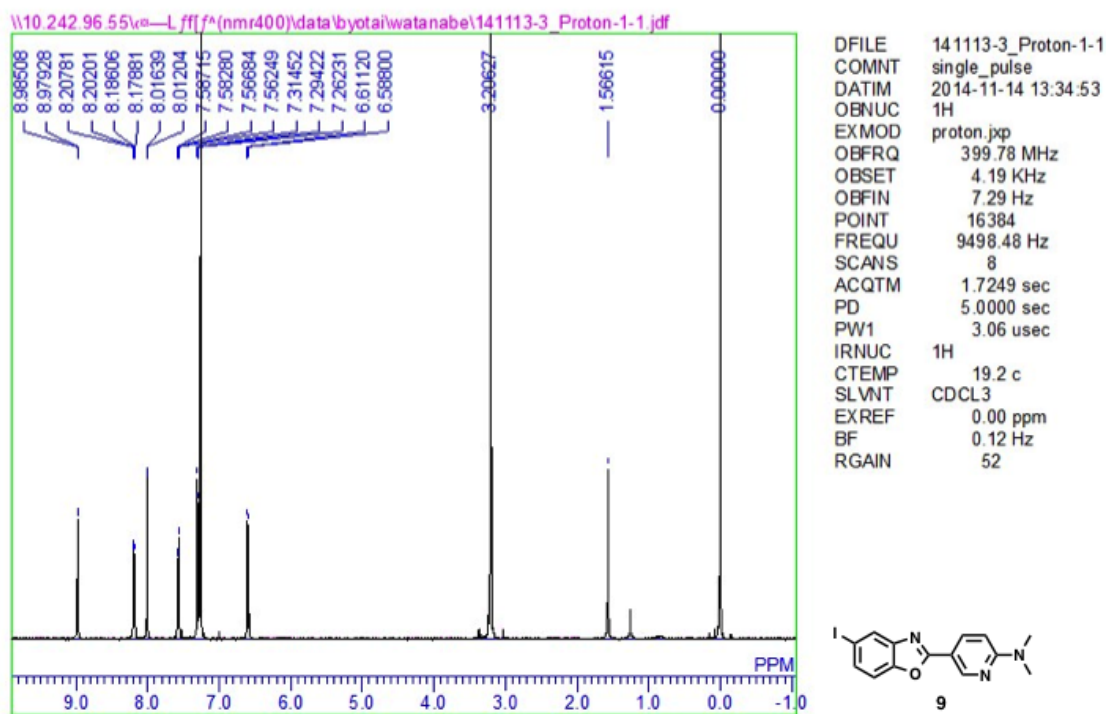


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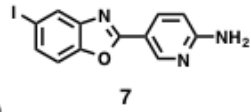
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 FREQU 9498.48 Hz  
 SCANS 8  
 ACQTM 1.7249 sec  
 PD 5.0000 sec  
 PW1 3.06 usec  
 IRNUC 1H  
 CTEMP 19.2 c  
 SLVNT CDCL3  
 EXREF 0.00 ppm  
 BF 0.12 Hz  
 RGAIN 50





**Figure S2.**  $^1\text{H}$ -NMR spectrum of compounds **7**, **8**, and **9**.

GCmateII  
2014/03/20



Page 1

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Inlet: Direct Probe

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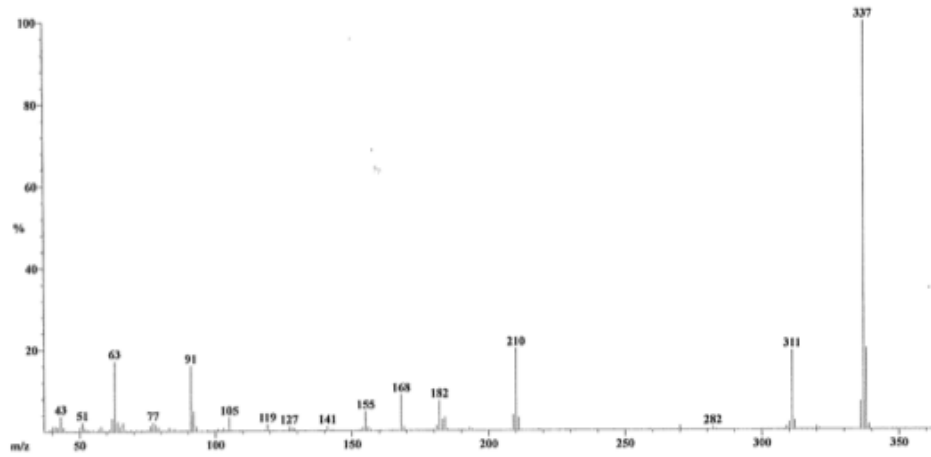
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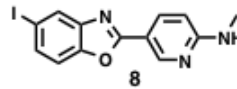
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R.T.: 1.17

#Ions: 179



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2014/03/20



Page 1

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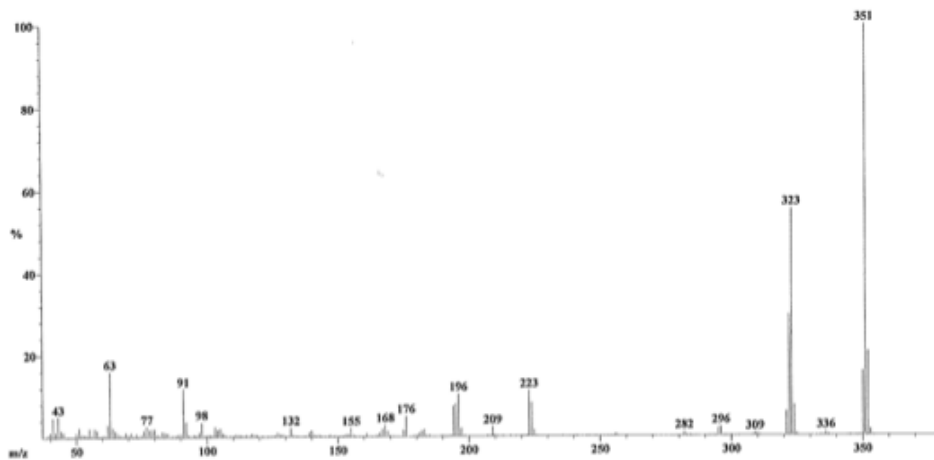
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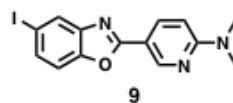
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GCmateII  
2014/03/20



Page 1

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Ionization mode: EI+

Printed by: kyoto-pharmaceutical Univ.

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R.T.: 1.33

#Ions: 197

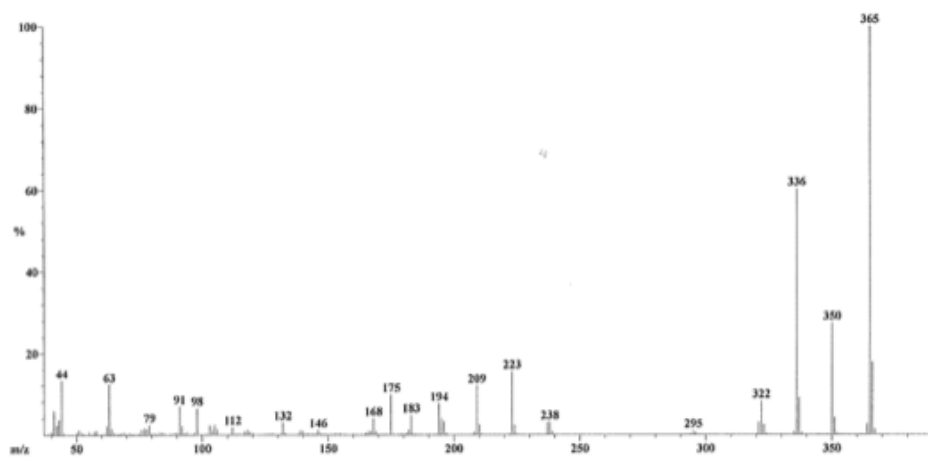


Figure S3. MS data of compounds 7, 8, and 9.