9. The compound of claim 1, wherein R^a and R^b are independently hydrogen or methyl and q is an integer equal to 5.

10. A diagnostic composition for imaging amyloid deposits, comprising a radiolabeled compound of claim 1.

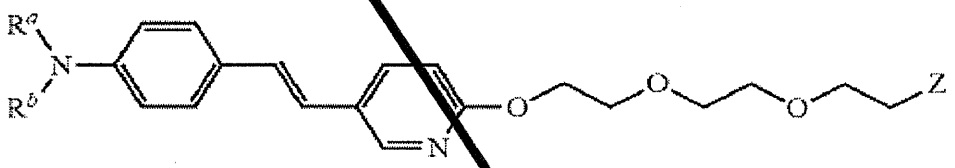
11. A method of imaging amyloid deposits in a mammal, comprising:

introducing into the mammal a detectable quantity of a diagnostic composition of claim 10;

allowing sufficient time for the labeled compound to be associated with amyloid deposits; and

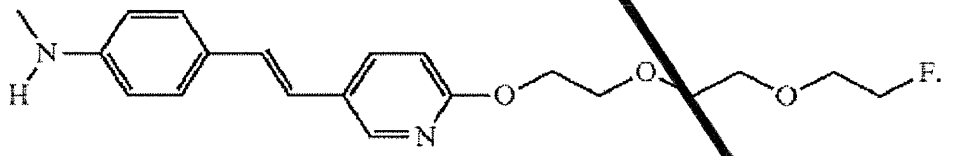
detecting the labeling compound associated with one or more amyloid deposits.

12. A compound of the formula:



wherein, R^a and R^b are independently hydrogen or methyl, and Z is —F or —^{18}F.

13. The compound of claim 12 of the formula:



14. A composition comprising a compound of claim 12 and a pharmaceutically acceptable carrier or diluent.

15. A composition comprising a compound of claim 13 and a pharmaceutically acceptable carrier or diluent.

16. A method of imaging amyloid deposits in a mammal, comprising:

introducing into the mammal a detectable quantity of a compound of claim 12;

9. The compound of claim 1, wherein R^a and R^b are independently hydrogen or methyl and q is an integer equal to 5.

10. A diagnostic composition for imaging amyloid deposits, comprising a radiolabeled compound of claim 1.

11. A method of imaging amyloid deposits in a mammal, comprising:

introducing into the mammal a detectable quantity of a diagnostic composition of claim 10;

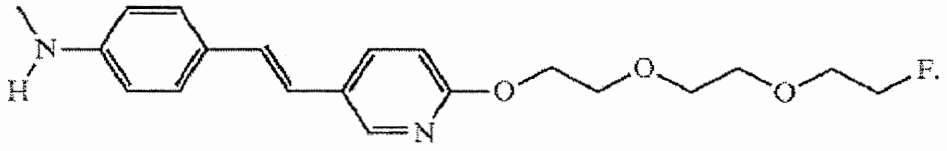
allowing sufficient time for the labeled compound to be associated with amyloid deposits; and

detecting the labeling compound associated with one or more amyloid deposits.

12. The compound of claim 4,

wherein R^a and R^b are independently hydrogen or methyl, and Z is –F or -^{18}F.

13. The compound of claim 12 of the formula:



14. A composition comprising a compound of claim 12 and a pharmaceutically acceptable carrier or diluent.

15. A composition comprising a compound of claim 13 and a pharmaceutically acceptable carrier or diluent.

16. A method of imaging amyloid deposits in a mammal, comprising:

introducing into the mammal a detectable quantity of a compound of claim 12;