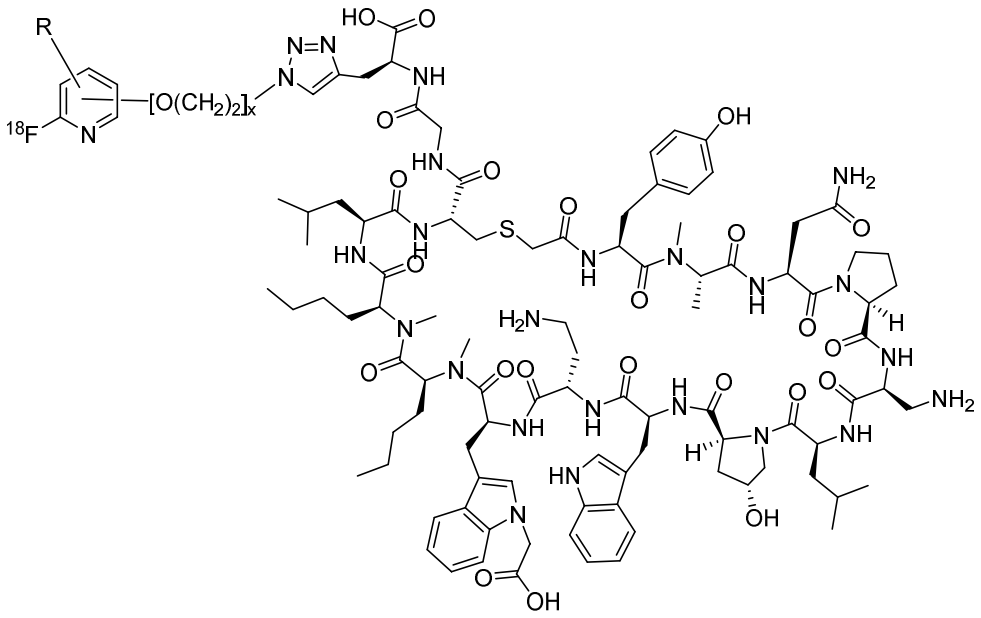
CLAIMS

WHAT IS CLAIMED IS:

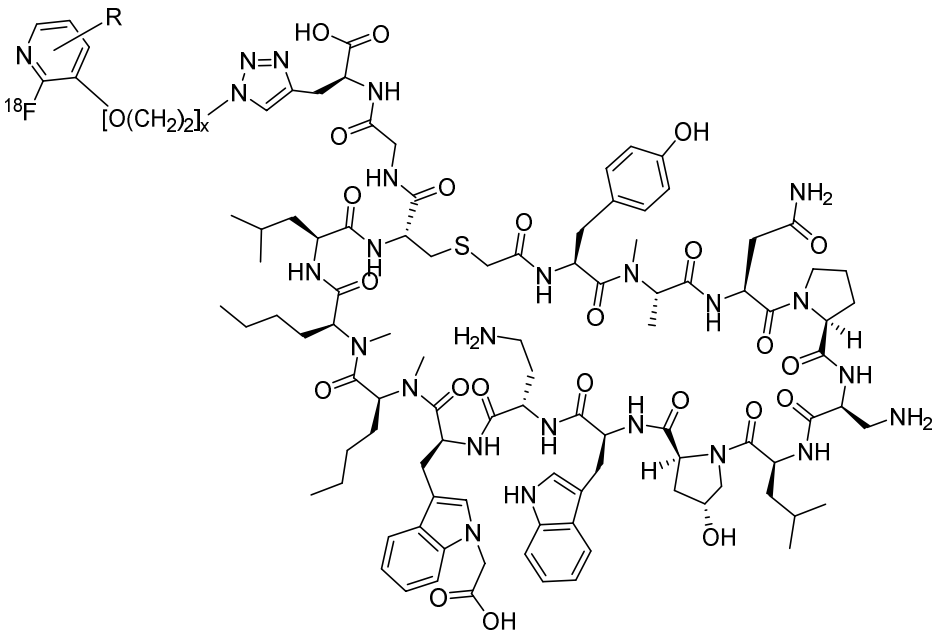
1. A compound of formula (I):



(I),

or a pharmaceutically acceptable salt thereof, wherein x is an integer from 1 to 8 and R is a C_1-C_6alkyl group.

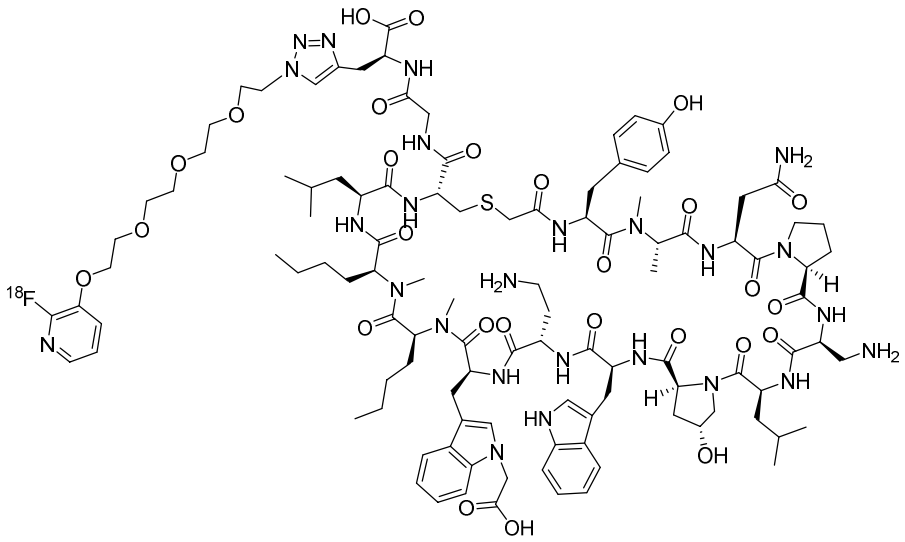
2. A compound of claim 1 of formula (II):



(II),

or a pharmaceutically acceptable salt thereof, wherein x is an integer from 1 to 8 and R is C_1-C_6alkyl group.

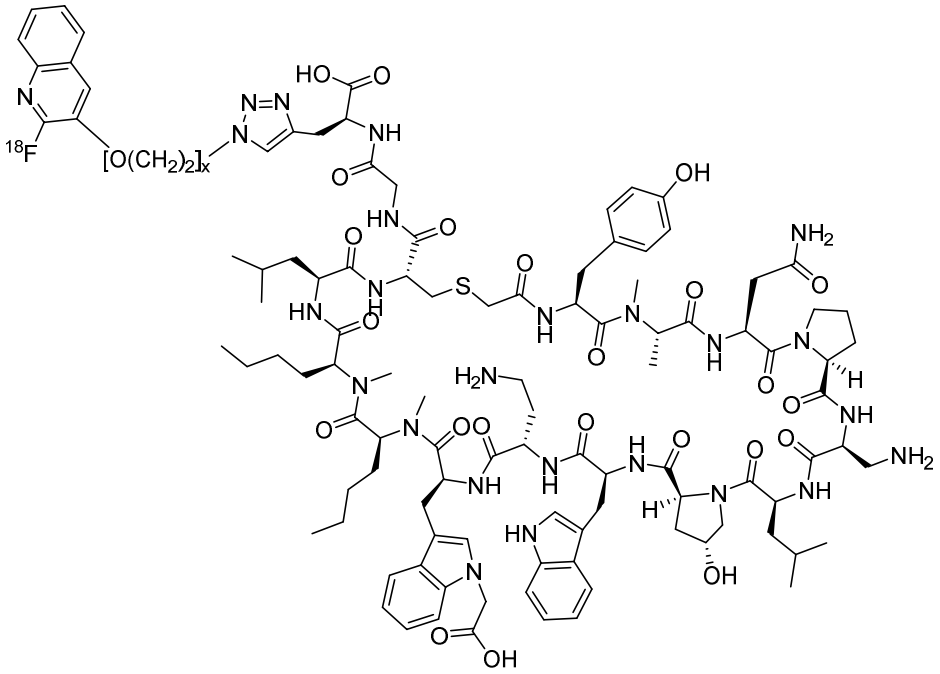
3. A compound of formula (III):



(III),

or a pharmaceutically acceptable salt thereof.

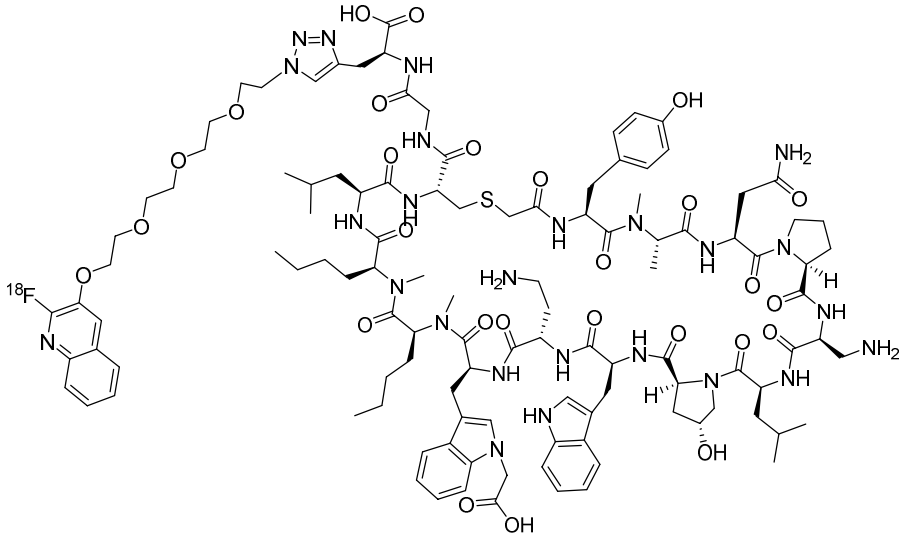
4. A compound of formula (IV):



(IV),

or a pharmaceutically acceptable salt thereof, wherein x is an integer from 1 to 8.

5. A compound of claim 4 of formula (V):



(V),

or a pharmaceutically acceptable salt thereof.

6. A compound according to any one of claims 1 to 5 or a pharmaceutically acceptable salt thereof for use in diagnosing a disease.

7. The compound or a pharmaceutically acceptable salt thereof for use according to claim 6, wherein the disease is selected from the group consisting of solid cancers, hematopoietic cancers, hematological cancers, autoimmune disease, neurodegenerative disease cardiovascular disease, and pathogenic infection.

8. A method of obtaining an image of a compound according to any one of claims 1 to 5, the method comprising:

a) administering the compound to a subject; and

b) imaging *in vivo* the distribution of the compound by positron emission tomography (PET) scanning.

9. A compound according to any one of claims 1 to 5 for use in obtaining an image, said use comprising:

a) administering the compound to a subject; and

b) imaging *in vivo* the distribution of the compound by positron emission tomography (PET) scanning, wherein the imaged distribution of the compound is indicative of the presence or absence of a disease.

10. A compound according to any one of claims 1 to 5 for use in monitoring the progress of a disease in a subject, said use comprising:

(a) administering to a subject in need thereof the compound which binds to a target molecule associated with the presence of the disease at a first time point and obtaining an image of at least a portion of the subject to determine the amount of the diseased cells or tissue; and

(b) administering to the subject the compound at one or more subsequent time points and obtaining an image of at least a portion of the subject at each time point; wherein the dimension and location of the diseased cells or tissue at each time point is indicative of the progress of the disease.

11. A compound according to any one of claims 1 to 5 for use in quantifying diseased cells or tissues in a subject, said use comprising:

(a) administering to a subject having diseased cells or tissues the compound which binds to a target molecule located with the diseased cells or tissues; and

(b) detecting radioactive emissions of the ^{18}F in the diseased cells or tissue, wherein the level and distribution of the radioactive emissions in the diseased cells or tissues is a quantitative measure of the diseased cells or tissues.

12. A method of obtaining a quantitative image of tissues or cells expressing PD-L1, the method comprising contacting the cells or tissue with a compound of claim 1 which

binds to PD-L1, and detecting or quantifying the tissue expressing PD-L1 using positron emission tomography (PET).

13. A pharmaceutical composition comprising a compound of any one of claims 1 to 5.