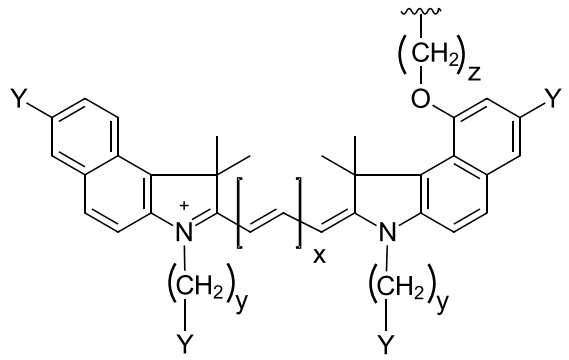
Claims

1. A fluorescent conjugate comprising a fluorochrome moiety F coupled to a targeting moiety T, wherein moiety F has the formula (I):



wherein

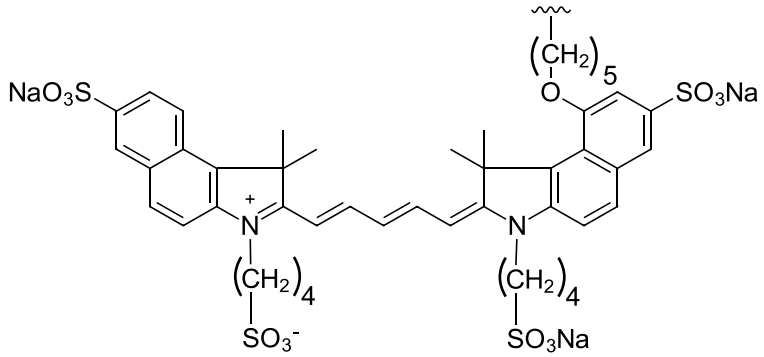
Y is independently for each occurrence selected from SO_3H, SO_3-, and SO_3M, wherein M is a monovalent cation;

x, z and y are independently selected from an integer of 1 to 8;

and wherein moiety T has affinity to a tumour marker.

2. The conjugate of claim 1, wherein Y is selected from SO_3- and SO_3Na.

3. The conjugate of claim 1 or 2, wherein moiety F has the formula (II):



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4. The conjugate of any one of claims 1 to 3, wherein the tumour marker is a tumour antigen.

5. The conjugate of claim 4, wherein the tumour antigen is carcinoembryonic antigen (CEA).

6. The conjugate of any preceding claim, wherein moiety T is selected from an antibody, an antibody fragment, and a fusion protein comprising at least one variable region of an antibody; and wherein the antibody is optionally a chimeric monoclonal antibody (mAb).

7. The conjugate of any preceding claim, wherein the moiety T is a chimeric monoclonal antibody that binds to one or more epitopes of the CEA antigen.

8. The conjugate of claim 7, wherein moiety F has the formula (II), and wherein the chimeric monoclonal antibody is directed against the GOLD-2 epitope of CEA, comprises heavy chains of the G1m3 allotype and light chains of the km3 allotype, each heavy chain and each light chain comprising at least one mouse IgG1 variable domain and at least one human constant domain.

9. The conjugate of claim 8, wherein the chimeric monoclonal antibody comprises a variable light chain region of SEQ ID NO: 4 and a variable heavy chain of SEQ ID NO: 3.

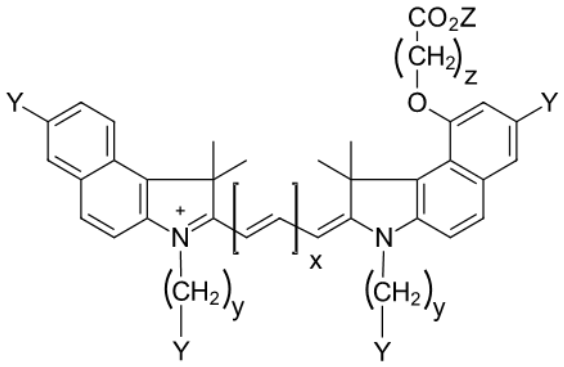
10. The conjugate of any one of claims 1 to 5, wherein the moiety T is a non-peptidic ligand.

11. The conjugate of any preceding claim, wherein n moieties F are coupled to one moiety T, and wherein n is an integer selected from 1 to 4.

12. A composition comprising the conjugate of any preceding claim, wherein the composition optionally
(a) is sterile and comprises an aqueous buffer and L-arginine, and/or
(b) comprises a compound comprising moiety T which is not coupled to moiety F.

13. The composition of claim 12, wherein the average degree of conjugation of the conjugate in the composition is about 0.5 to 3.

14. A method for the preparation of a fluorescent conjugate, comprising the steps of
(a) providing a fluorochrome having the formula (III):



wherein Y is independently for each occurrence selected from SO_3H, SO_3^- and SO_3M, wherein M is a monovalent cation;

x, z and y are independently selected from an integer of 1 to 8, and

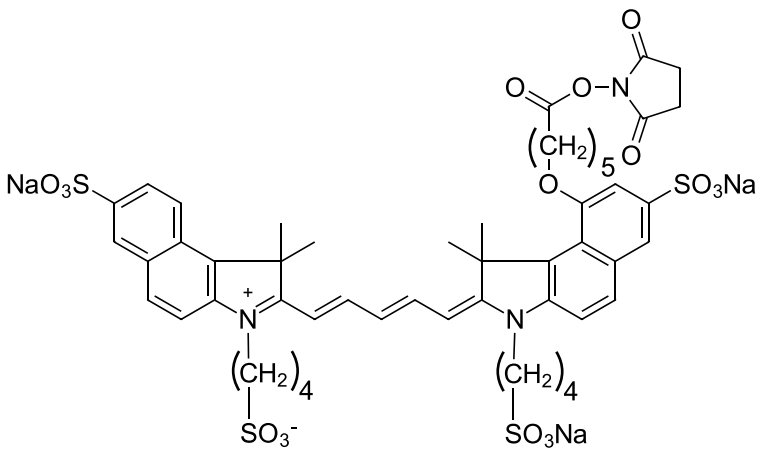
Z is selected from a counterion, hydrogen, succinimidyl, sulfosuccinimidyl, and nitrophenyl,

(b) providing a targeting agent having affinity to a tumour marker; and

(c) coupling the fluorochrome with the targeting agent.

15. A method of claim 14, wherein Y is selected from SO_3^- and SO_3Na.

16. The method of claim 14 or 15, wherein the targeting agent is a chimeric monoclonal antibody having affinity to CEA, and/or wherein the fluorochrome is a compound of formula (IV):



17. The *in-vitro* use of the conjugate of claims 1 to 11 or the composition of claims 12 to 13 for the detection of a tumour cell in a sample, or for diagnosing and/or monitoring a tumour.

18. Use of the conjugate of claims 1 to 11 or the composition of claims 12 to 13 as a diagnostic agent.

19. Use of the conjugate of claims 1 to 11 or the composition of claims 12 to 13 as a diagnostic agent in

(a) detecting foci of a tumour that expresses the tumour marker or for determining the location of a tumour that expresses the tumour marker in a patient, and/or
(b) detecting tumour cells or tumour tissue at a resection margin in a patient undergoing, or having undergone, resection surgery of a tumour that expresses the tumour marker.

20. The use of claims 18 or 19, wherein the use comprises illuminating a tissue at a resection site of a patient suffering from a tumour and undergoing a resection surgery with light having a wavelength of about 660 to 700 nm,
wherein the resection surgery is performed within a period of not more than about 96 hours after the patient has been administered with the conjugate of claims 1 to 11 or the composition of claims 12 to 13.

21. The use of any one of claims 18 to 20, wherein the tumour is a colorectal, gastric, biliary, pancreatic, oesophageal, ovarian, breast, prostate, liver or lung cancer, or wherein the tumour is a peritoneal carcinomatosis.

22. The use of claim 21, wherein the tumour is a malignant gastrointestinal tumour, and wherein the conjugate is the conjugate of claims 8 or 9.

23. The use of any one of claims 18 to 22, wherein the conjugate or composition is to be administered topically, by inhalation, or by intravenous, intraperitoneal, subcutaneous, or intramuscular injection or perfusion.

24. The use of any one of claims 18 to 23, wherein the conjugate is to be administered by injection and in a dose in the range from about 5 to 15 mg.