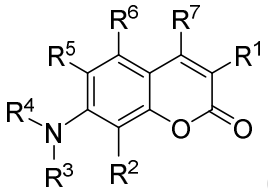
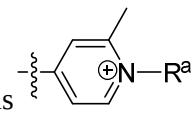
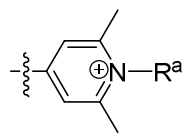
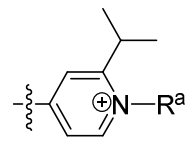
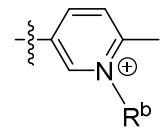
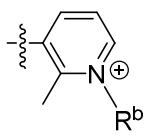
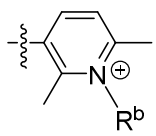
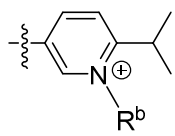
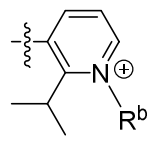
WHAT IS CLAIMED IS:

1. A compound of Formula (I), a salt, or a mesomeric form thereof:



(I)

wherein R^1 is  ,  ,  ,  ,  ,  ,  , or  , , and

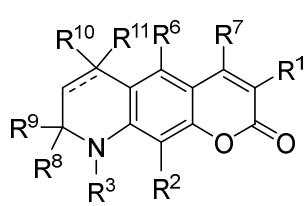
each of R^2, R^5, R^6 and R^7 is H;

each of R^3 and R^4 is independently H, C_1-C_6 alkyl, or substituted C_1-C_6 alkyl, the substituted C_1-C_6 alkyl is C_1-C_6 alkyl substituted with one or more substituents selected from the group consisting of carboxyl (–C(O)OH), carboxylate (–C(O)O$^-$), sulfo (–SO_3H) and sulfonate (–SO3$^-$);

or R^4 and R^5 together with the atoms to which they are attached form a ring or ring system selected from the group consisting of 6 membered heterocyclyl, wherein the 6 membered heterocyclyl is unsubstituted 6 membered heterocyclyl or C_1-C_6 alkyl substituted 6 membered heterocyclyl; and

each of R^a, R^b and R^c is independently C_1-C_6 alkyl or substituted C_1-C_6 alkyl, wherein each of R^a and R^b is independently C_1-C_6 alkyl or C_1-C_6 alkyl substituted with one or more substituents selected from the group consisting of carboxyl (–C(O)OH), carboxylate (–C(O)O$^-$), sulfo (–SO_3H) and sulfonate (–SO_3^-); wherein R^c is C_1-C_6 alkyl or C_1-C_6 alkyl substituted with one or more substituents selected from the group consisting of carboxyl (–C(O)OH), sulfo (–SO_3H) and sulfonate (–SO_3^-).

2. The compound of claim 1, wherein the compound of Formula (I) is also represented by Formula (Ia):



(Ia), a salt, or a mesomeric form thereof, wherein:

each R^8, R^9, R^{10} and R^{11} is independently H, C_1-C_6 alkyl; and

the bond represented by a solid and dashed line ------ is selected from the group consisting of a single bond and a double bond, provided that when ------ is a double bond, then R^{11} is absent.

3. The compound of claim 2, wherein R^{10} is H and R^{11} is C_1-C_6 alkyl.

4. The compound of claim 2, wherein each of R^{10} and R^{11} is H.

5. The compound of any one of claims 2 to 4, wherein each of R^8 and R^9 is H.

6. The compound of any one of claims 2 to 4, wherein at least one of R^8 and R^9 is C_1-C_6 alkyl.

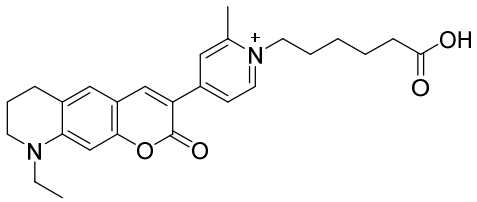
7. The compound of claim 6, wherein each of R^8 and R^9 is C_1-C_6 alkyl.

8. The compound of claim 7, wherein each of R^8 and R^9 is methyl.

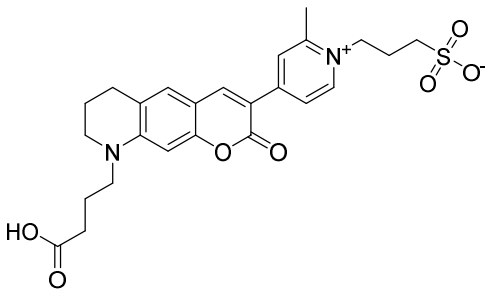
9. The compound of any one of claims 1 to 8, wherein R^3 is C_1-C_6 alkyl, or substituted C_1-C_6 alkyl is C_1-C_6 alkyl, wherein the substituted C_1-C_6 alkyl is C_1-C_6 alkyl is substituted with one or more substituents selected from the group consisting of carboxyl (–C(O)OH), carboxylate (–C(O)O$^-$), sulfo (–SO_3H), sulfonate (–SO_3^-).

10. The compound of claim 9, wherein R^3 is C_1-C_6 alkyl substituted with carboxyl.

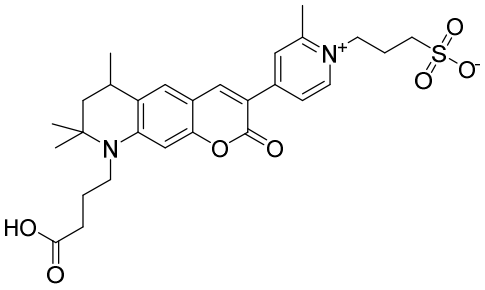
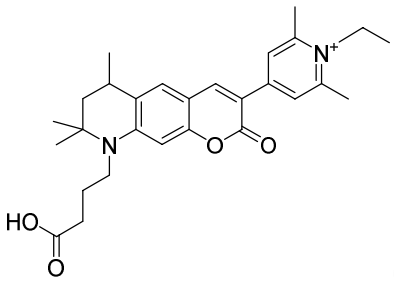
11. The compound of claim 1, selected from the group consisting of:

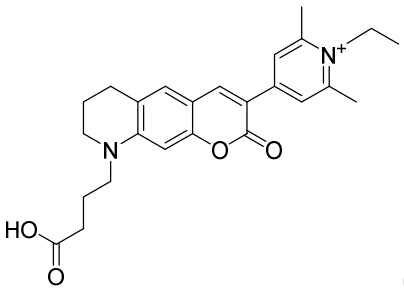
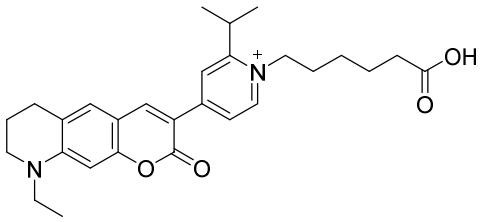


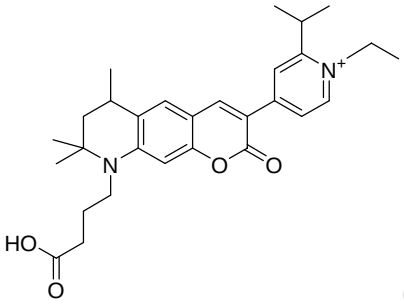
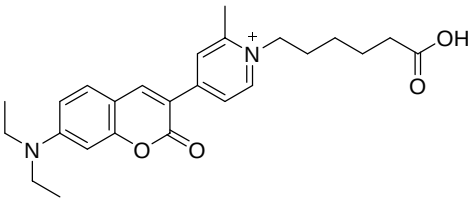
(I-1),



(I-

2),  (I-3),  (I-4),

 (I-5),  (I-6),

 (I-7) and  (I-8), and salts and mesomeric forms thereof.

12. A nucleotide or oligonucleotide labeled with a compound according to any one of claims 1 to 11.

13. The labeled nucleotide or oligonucleotide of claim 12, wherein the compound is attached the nucleotide or oligonucleotide via a carboxyl group of R^{8a}, R^{8b}, or R^{8c} of Formula (I).

14. The labeled nucleotide or oligonucleotide of claim 12, wherein the compound is attached the nucleotide or oligonucleotide via a carboxyl group of R^3 or R^4 of Formula (I).

15. The labeled nucleotide or oligonucleotide of any one of claims 12 to 14, wherein the compound is attached to the C5 position of a pyrimidine base or the C7 position of a 7-deaza purine base through a linker moiety.

16. The labeled nucleotide or oligonucleotide of any one of claims 12 to 15, further comprising a 3’ OH blocking group covalently attached to the ribose or deoxyribose sugar of the nucleotide.

17. The nucleotide or oligonucleotide of claim 12, wherein the nucleotide or oligonucleotide is an oligonucleotide hybridized to at least a portion of a target polynucleotide.

18. The oligonucleotide of claim 17, wherein the target polynucleotide is immobilized on a solid support.

19. The oligonucleotide according to claim 18, wherein the solid support comprises an array of a plurality of immobilized target polynucleotides.

20. A kit comprising a first nucleotide labeled with a first compound according to any one of claims 12 to 16.

21. The kit of claim 20, further comprising a second nucleotide labeled with a second compound, wherein the second compound is different from the first compound of the first labeled nucleotide.

22. The kit of claim 21, wherein the first labeled nucleotide and second labeled nucleotide are excitable using a first light source wavelength.

23. The kit of claim 21 or 22, further comprising a third nucleotide, wherein the third nucleotide is labeled with a third compound that is different from the first and the second compounds, and wherein the first and third labeled nucleotides are excitable using a second light source wavelength.

24. The kit of claim 23, further comprising a fourth nucleotide, and wherein the fourth nucleotide is unlabeled (dark).

25. The kit of any one of claims 20 to 24, wherein each of the first labeled nucleotide, the second labeled nucleotide and the third labeled nucleotide has an emission spectrum that is detectable in a single detection channel.

26. The kit of any one of claims 20 to 25, further comprising a DNA polymerase and one or more buffer compositions.

27. A method of determining the sequence of a target polynucleotide, comprising:

(a) contacting a primer polynucleotide/target polynucleotide complex with one or more labeled nucleotides, wherein at least one of said labeled nucleotide is a nucleotide of any one of claims 29 to 33, and wherein the primer polynucleotide is complementary to at least a portion of the target polynucleotide;

(b) incorporating a labeled nucleotide into the primer polynucleotide to produce an extended primer polynucleotide/target polynucleotide complex; and

(c) performing one or more fluorescent measurements of the extended primer polynucleotide/target polynucleotide complex to determine the identity of the incorporated nucleotide.

28. The method of claim 27, wherein the primer polynucleotide/target polynucleotide complex is formed by contacting the target polynucleotide with a primer polynucleotide complementary to at least a portion of the target polynucleotide.

29. The method of claim 27 or 28, further comprising (d) removing the label and the 3′ blocking group from the nucleotide incorporated into the primer polynucleotide.

30. The method of claim 28, further comprising (e) washing the removed label and the 3′ blocking group away from the extended primer polynucleotide.

31. The method of claim 30, further comprising repeating steps (a) to (e) until a sequence of at least a portion of the template polynucleotide strand is determined.

32. The method of claim 31, wherein the steps (a) to (e) is repeated at least 50 times.

33. The method of any one of claims 27 to 32, wherein the label and the 3′ blocking group from the nucleotide incorporated into the primer polynucleotide are removed in a single chemical reaction.

34. The method of any one of claims 27 to 33, wherein the method is performed on an automated sequencing instrument, and wherein the automated sequencing instrument comprises two light sources operating at different wavelengths.