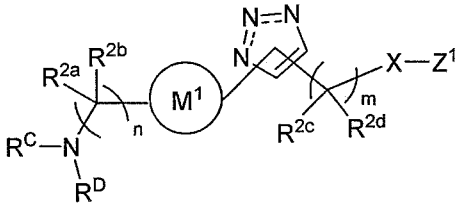
[0018] In some embodiments, Z is alkyl, heterocyclyl, or aryl, each of which is optionally substituted by one or more R^5. In some embodiments, Z is heterocyclyl (e.g., 6-membered heterocyclyl). In some embodiments, Z is a nitrogen-containing heterocyclyl, an oxygen-containing heterocyclyl, or a sulfur-containing heterocyclyl (e.g., tetrahydropyranyl or thiomorpholinyl-1,1-dioxide). In some embodiments, Z is oxetanyl, tetrahydrofuranyl, tetrahydropyranyl, thiomorpholinyl-1,1-dioxide, piperidinyl, piperazinyl, or pyrrolidinyl.

[0019] In some embodiments, Z is aryl (e.g., phenyl). In some embodiments, Z is monosubstituted phenyl (e.g., with 1 R^5). In some embodiments, Z is monosubstituted phenyl, wherein the 1 R^5 an amine-containing group (e.g., NH_2). In some embodiments, Z is monosubstituted phenyl, wherein the 1 R^5 is an oxygen-containing group (e.g., OCH_3). In some embodiments, the 1 R^5 is in the ortho position or the para position.

[0020] In some embodiments, Z is alkyl (e.g., C_1-C_{12} alkyl). In some embodiments, Z is C_1-C_8 alkyl substituted with 1 R^5, wherein R^5 is alkyl, heteroalkyl, halogen, oxo, $-OR^{A1}$, $-C(O)OR^{A1}$, $-C(O)R^{B1}$,$-OC(O)R^{B1}$, or $-N(R^{C1})(R^{D1})$. In some embodiments, Z is C_1-C_8 alkyl substituted with 1 R^5, wherein R^5 is –OH or –C(O)OH.

[0021] In some embodiments, Z is heteroalkyl (e.g., C_1-C_{12} heteroalkyl). In some embodiments, Z is an oxygen-containing heteroalkyl or a nitrogen-containing heteroalkyl. In some embodiments, Z is (–OCH2CH2–)zOCH3, wherein z is an integer selected from 1 to 10 (e.g., z is 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10).

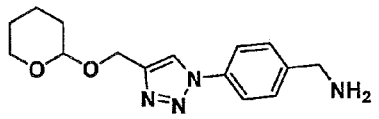
[0022] In one aspect, the compound of Formula (II) is a compound of Formula (II-c):



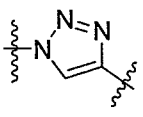
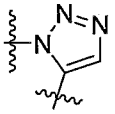
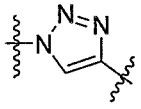
Formula (II-c), or a salt thereof, wherein Ring M^1 is cycloalkyl, heterocyclyl, aryl, or heteroaryl, each of which is optionally substituted with 1-5 R^3; Z^1 is alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl, each of which is optionally substituted by one or more R^5; each of R^{2a}, R^{2b}, R^{2c}, and R^{2d} is independently hydrogen, alkyl, alkenyl, alkynyl, heteroalkyl, halo, cyano, nitro, amino, cycloalkyl, heterocyclyl, aryl, or heteroaryl; or R^{2a} and R^{2b} or R^{2c} and R^{2d} are taken together to form an oxo group; R^C and R^D are independently hydrogen, alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl, wherein each of alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl,

heterocyclyl, aryl, or heteroaryl is optionally substituted with 1-6 R^6; or R^C and R^D, taken together with the nitrogen atom to which they are attached, form a ring (e.g., a 5-7 membered ring), optionally substituted with 1-6 R^6; each of R^3, R^5, and R^6 is independently alkyl, alkenyl, alkynyl, heteroalkyl, halogen, cyano, azido, oxo, $-OR^{A1}$, $-C(O)OR^{A1}$, $-C(O)R^{B1}$,$-OC(O)R^{B1}$, $-N(R^{C1})(R^{D1})$, $-N(R^{C1})C(O)R^{B1}$, $-C(O)N(R^{C1})$, SR^{E1}, cycloalkyl, heterocyclyl, aryl, heteroaryl; each of R^{10} and R^{11} is independently hydrogen, alkyl, alkenyl, alkynyl, heteroalkyl, halogen, $-C(O)R^{B1}$, $-N(R^{C1})C(O)R^{B1}$, $-C(O)N(R^{C1})$, SR^{E1}, $S(O)_x$, cycloalkyl, or heterocyclyl; each R^{A1}, R^{B1}, R^{C1}, R^{D1}, and R^{E1} is independently hydrogen, alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, wherein each of alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, heteroaryl is optionally substituted with 1-6 R^7; each R^7 is independently alkyl, alkenyl, alkynyl, heteroalkyl, halogen, cyano, oxo, hydroxyl, cycloalkyl, or heterocyclyl; each m and n is independently 0, 1, 2, 3, 4, 5, or 6; and x is 1 or 2.

[0022a] In another aspect, there is provided a compound of Formula (II-c) or a salt thereof as described herein, wherein Ring M^1 is cycloalkyl, heterocyclyl, aryl, or heteroaryl, each of which is optionally substituted with 1-5 R^3; Z^1 is alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl, each of which is optionally substituted by one or more R^5; X is absent, $N(R^{10})(R^{11})$, O, or S; each of R^{2a}, R^{2b}, R^{2c}, and R^{2d} is independently hydrogen, alkyl, alkenyl, alkynyl, heteroalkyl, halo, cyano, nitro, amino, cycloalkyl, heterocyclyl, aryl, or heteroaryl; or R^{2a} and R^{2b} or R^{2c} and R^{2d} are taken together to form an oxo group; R^C and R^D are independently hydrogen, alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl, wherein each of alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl is optionally substituted with 1-6 R^6; each of R^3, R^5, and R^6 is independently alkyl, alkenyl, alkynyl, heteroalkyl, halogen, cyano, azido, oxo, $-OR^{A1}$, $-C(O)OR^{A1}$, $-C(O)R^{B1}$,$-OC(O)R^{B1}$, $-N(R^{C1})(R^{D1})$, $-N(R^{C1})C(O)R^{B1}$, $-C(O)N(R^{C1})$, SR^{E1}, cycloalkyl, heterocyclyl, aryl, heteroaryl; each of R^{10} and R^{11} is independently hydrogen, alkyl, alkenyl, alkynyl, heteroalkyl, halogen, $-C(O)R^{B1}$, $-N(R^{C1})C(O)R^{B1}$, $-C(O)N(R^{C1})$, SR^{E1}, $S(O)_x$, cycloalkyl, or heterocyclyl; each R^{A1}, R^{B1}, R^{C1}, R^{D1}, and R^{E1} is independently hydrogen, alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, wherein each of alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, heteroaryl is optionally substituted with 1-6 R^7; each R^7 is independently alkyl, alkenyl, alkynyl, heteroalkyl, halogen, cyano, oxo, hydroxyl, cycloalkyl, or

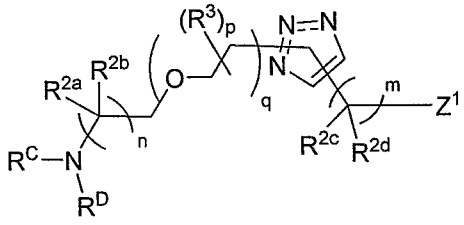
heterocyclyl; n is 1, 2, 3, 4, 5 or 6; m is 0, 1, 2, 3, 4, 5 or 6 and x is 1 or 2; provided that the compound is not .

[0023] In some embodiments, Ring M^1 is aryl, or heteroaryl. In some embodiments, M is aryl (e.g., phenyl).

[0024] In some embodiments, P is selected from  and . In some embodiments, P is .

[0025] In some embodiments, Ring Z^1 is heterocyclyl (e.g., 6-membered heterocyclyl). In some embodiments, Ring Z^1 is a nitrogen-containing heterocyclyl, an oxygen-containing heterocyclyl, or a sulfur-containing heterocyclyl (e.g., tetrahydropyranyl or phthalic anhydridyl). In some embodiments, Z is oxetanyl, tetrahydrofuranyl, tetrahydropyranyl, thiomorpholinyl-1,1-dioxide, piperidinyl, piperazinyl, or pyrrolidinyl.

[0026] In yet another aspect, the compound of Formula (II) is a compound of Formula (II-k):

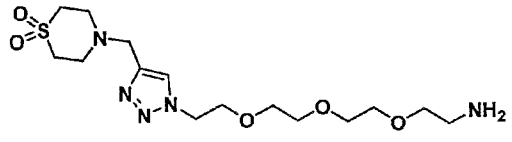
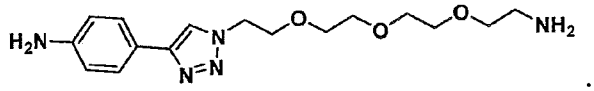


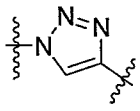
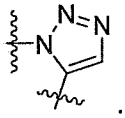
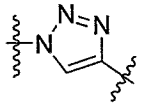
, Formula (II-k), or a salt thereof, wherein Z^1 is alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl, optionally substituted

with 1-5 R^5; each of R^{2a}, R^{2b}, R^{2c}, and R^{2d} is independently hydrogen, alkyl, alkenyl, alkynyl, heteroalkyl, halo, cyano, nitro, amino, cycloalkyl, heterocyclyl, aryl, or heteroaryl; or R^{2a} and R^{2b} or R^{2c} and R^{2d} are taken together to form an oxo group; R^C and R^D are independently hydrogen, alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl, wherein each of alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl is optionally substituted with 1-6 R^6; or R^C and R^D, taken together with the nitrogen atom to which they are attached, form a ring (e.g., a 5-7 membered ring), optionally substituted with 1-6 R^6; each of R^3, R^5, and R^6 is independently alkyl, alkenyl, alkynyl, heteroalkyl, halogen, cyano, azido, oxo, $-OR^{A1}$, $-C(O)OR^{A1}$, $-C(O)R^{B1}$, $-OC(O)R^{B1}$, $-N(R^{C1})(R^{D1})$, $-N(R^{C1})C(O)R^{B1}$, $-C(O)N(R^{C1})$, SR^{E1}, cycloalkyl, heterocyclyl, aryl, heteroaryl; each R^{A1}, R^{B1}, R^{C1}, R^{D1}, and R^{E1} is independently hydrogen, alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, wherein each of alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, heteroaryl is optionally substituted with 1-6 R^7; each R^7 is independently alkyl, alkenyl, alkynyl, heteroalkyl, halogen, cyano, oxo, hydroxyl, cycloalkyl, or heterocyclyl; m and n are each independently 0, 1, 2, 3, 4, 5, or 6; p is 0, 1, 2, 3, or 4; and q is an integer from 0 to 25.

[0026a] In a further aspect, there is provided a compound of Formula (II-k) or a salt thereof, wherein Z^1 is alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl, optionally substituted with 1-5 R^5; each of R^{2a}, R^{2b}, R^{2c}, and R^{2d} is independently hydrogen, alkyl, alkenyl, alkynyl, heteroalkyl, halo, cyano, nitro, amino, cycloalkyl, heterocyclyl, aryl, or heteroaryl; or R^{2a} and R^{2b} or R^{2c} and R^{2d} are taken together to form an oxo group; R^C and R^D are independently hydrogen, alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl, wherein each of alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl is optionally substituted with 1-6 R^6; or R^C and R^D, taken together with the nitrogen atom to which they are attached, form a ring (e.g., a 5-7 membered ring), optionally substituted with 1-6 R^6; each of R^3, R^5, and R^6 is independently alkyl, alkenyl, alkynyl, heteroalkyl, halogen, cyano, azido, oxo, $-OR^{A1}$, $-C(O)OR^{A1}$, $-C(O)R^{B1}$, $-OC(O)R^{B1}$, $-N(R^{C1})(R^{D1})$, $-N(R^{C1})C(O)R^{B1}$, $-C(O)N(R^{C1})$, SR^{E1}, cycloalkyl, heterocyclyl, aryl, heteroaryl; each R^{A1}, R^{B1}, R^{C1}, R^{D1}, and R^{E1} is independently hydrogen, alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, wherein each of alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, heteroaryl is optionally substituted with 1-6 R^7; each R^7 is independently alkyl, alkenyl, alkynyl, heteroalkyl, halogen, cyano, oxo, hydroxyl, cycloalkyl, or heterocyclyl; m and n are each

independently 0, 1, 2, 3, 4, 5, or 6; p is 0, 1, 2, 3, or 4; and q is an integer from 1 to 25, provided that: (i) when Z^1 is aryl, R^5 is not bicyclic heteroaryl; and (ii) the compound is not


or

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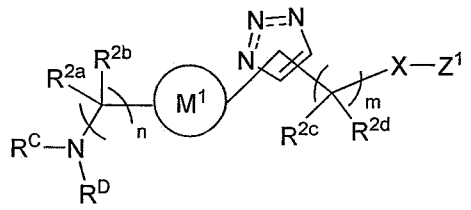
[0027] In some embodiments, the triazolyl is selected from  and . In some embodiments, the triazolyl is .

[0028] In some embodiments, Z^1 is alkyl, heterocyclyl, or aryl, each of which is optionally substituted by one or more R^5. In some embodiments, Z^1 is heterocyclyl (e.g., 6-membered heterocyclyl). In some embodiments, Z^1 is a nitrogen-containing heterocyclyl or a sulfur-containing heterocyclyl (e.g., thiomorpholinyl-1,1-dioxide). In some embodiments, Z^1 is oxetanyl, tetrahydrofuranyl, tetrahydropyranyl, thiomorpholinyl-1,1-dioxide, piperidinyl, piperazinyl, or pyrrolidinyl.

[0029] In some embodiments, Z^1 is aryl (e.g., phenyl). In some embodiments, Z is monosubstituted phenyl (e.g., with 1 R^5). In some embodiments, Z^1 is monosubstituted phenyl, wherein the 1 R^5 an amine-containing group (e.g., NH_2). In some embodiments, Z is monosubstituted phenyl, wherein the 1 R^5 is an oxygen-containing group (e.g., OCH_3). In some embodiments, the 1 R^5 is in the ortho position or the para position.

CLAIMS

1. A compound of Formula (II-c):



Formula (II-c), or a salt thereof, wherein:

Ring M^1 is cycloalkyl, heterocyclyl, aryl, or heteroaryl, each of which is optionally substituted with 1-5 R^3;

Z^1 is alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl, each of which is optionally substituted by one or more R^5;

X is absent, $N(R^{10})(R^{11})$, O, or S;

each of R^{2a}, R^{2b}, R^{2c}, and R^{2d} is independently hydrogen, alkyl, alkenyl, alkynyl, heteroalkyl, halo, cyano, nitro, amino, cycloalkyl, heterocyclyl, aryl, or heteroaryl;

or R^{2a} and R^{2b} or R^{2c} and R^{2d} are taken together to form an oxo group; R^C and R^D are independently hydrogen, alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl, wherein each of alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl is optionally substituted with 1-6 R^6;

each of R^3, R^5, and R^6 is independently alkyl, alkenyl, alkynyl, heteroalkyl, halogen, cyano, azido, oxo, $-OR^{A1}$, $-C(O)OR^{A1}$, $-C(O)R^{B1}$,$-OC(O)R^{B1}$, $-N(R^{C1})(R^{D1})$, $-N(R^{C1})C(O)R^{B1}$, $-C(O)N(R^{C1})$, SR^{E1}, cycloalkyl, heterocyclyl, aryl, heteroaryl;

each of R^{10} and R^{11} is independently hydrogen, alkyl, alkenyl, alkynyl, heteroalkyl, halogen, $-C(O)R^{B1}$, $-N(R^{C1})C(O)R^{B1}$, $-C(O)N(R^{C1})$, SR^{E1}, $S(O)_x$, cycloalkyl, or heterocyclyl;

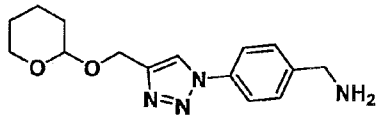
each R^{A1}, R^{B1}, R^{C1}, R^{D1}, and R^{E1} is independently hydrogen, alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, wherein each of alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, heteroaryl is optionally substituted with 1-6 R^7;

each R^7 is independently alkyl, alkenyl, alkynyl, heteroalkyl, halogen, cyano, oxo, hydroxyl, cycloalkyl, or heterocyclyl;

n is 1, 2, 3, 4, 5, or 6;

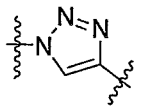
m is 0, 1, 2, 3, 4, 5, or 6;

and x is 1 or 2;

provided that the compound is not 

.

2. The compound of claim 1, wherein M^2 is aryl (e.g., phenyl).

3. The compound of any one of the preceding claims, wherein the triazolyl ring is .

4. The compound of any one of the preceding claims, wherein each of R^{2a}, R^{2b}, R^{2c}, and R^{2d} is independently hydrogen or alkyl or one of R^{2a} and R^{2b} or R^{2c} and R^{2d} are taken together to form an oxo group.

5. The compound of claim 4, wherein each of R^{2a}, R^{2b}, R^{2c}, and R^{2d} is independently hydrogen.

6. The compound of any one of the preceding claims, wherein m is 1.

7. The compound of any one of the preceding claims, wherein X is absent or O.

8. The compound of any one of the preceding claims, wherein Z is heterocyclyl (e.g., 6-membered heterocyclyl).

9. The compound of claim 8, wherein Z is a nitrogen-containing heterocyclyl, an oxygen-containing heterocyclyl, or a sulfur-containing heterocyclyl (e.g., oxetanyl, tetrahydrofuranyl, tetrahydropyranyl, thiomorpholinyl-1,1-dioxide, piperidinyl, piperazinyl, or pyrrolidinyl).

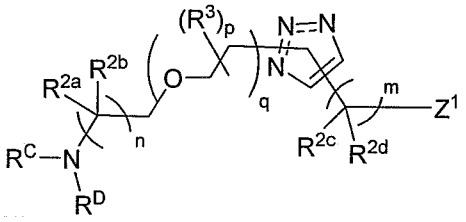
10. The compound of any one of claims 1-7, wherein Z is aryl (e.g., phenyl).

11. The compound of claim 10, wherein Z is monosubstituted phenyl (e.g., with 1 R^5).

12. The compound of claim 10, wherein Z is monosubstituted phenyl, wherein the 1 R^5 an amine-containing group (e.g., NH_2) or an oxygen-containing group (e.g., OCH_3).

13. The compound of any one of claims 11-12, wherein the 1 R^5 is in the ortho position or the para position.

14. A compound of Formula (II-k):



, Formula (II-k), or a salt thereof, wherein:

Z^1 is alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl, optionally substituted with 1-5 R^5;

each of R^{2a}, R^{2b}, R^{2c}, and R^{2d} is independently hydrogen, alkyl, alkenyl, alkynyl, heteroalkyl, halo, cyano, nitro, amino, cycloalkyl, heterocyclyl, aryl, or heteroaryl;

or R^{2a} and R^{2b} or R^{2c} and R^{2d} are taken together to form an oxo group;

R^C and R^D are independently hydrogen, alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl, wherein each of alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl is optionally substituted with 1-6 R^6;

or R^C and R^D, taken together with the nitrogen atom to which they are attached, form a ring (e.g., a 5-7 membered ring), optionally substituted with 1-6 R^6;

each of R^3, R^5, and R^6 is independently alkyl, alkenyl, alkynyl, heteroalkyl, halogen, cyano, azido, oxo, $-OR^{A1}$, $-C(O)OR^{A1}$, $-C(O)R^{B1}$, $-OC(O)R^{B1}$, $-N(R^{C1})(R^{D1})$, $-N(R^{C1})C(O)R^{B1}$, $-C(O)N(R^{C1})$, SR^{E1}, cycloalkyl, heterocyclyl, aryl, heteroaryl;

each R^{A1}, R^{B1}, R^{C1}, R^{D1}, and R^{E1} is independently hydrogen, alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, wherein each of alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, heteroaryl is optionally substituted with 1-6 R^7;

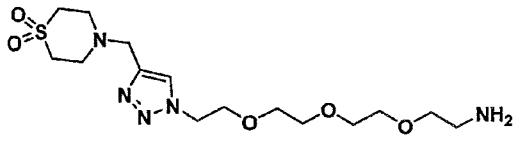
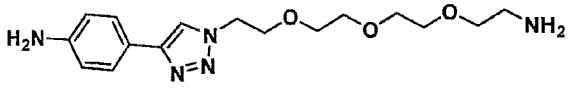
each R^7 is independently alkyl, alkenyl, alkynyl, heteroalkyl, halogen, cyano, oxo, hydroxyl, cycloalkyl, or heterocyclyl;

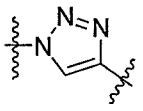
m and n are each independently 0, 1, 2, 3, 4, 5, or 6;

p is 0, 1, 2, 3, or 4; and

q is an integer from 1 to 25, provided that:

(i) when Z^1 is aryl, R^5 is not bicyclic heteroaryl; and

(ii) the compound is not  or .

15. The compound of claim 14, wherein the triazolyl ring is selected from .

16. The compound of any one of claims 14-15, wherein each of R^{2a}, R^{2b}, R^{2c}, and R^{2d} is independently hydrogen or alkyl or one of R^{2a} and R^{2b} or R^{2c} and R^{2d} are taken together to form an oxo group.

17. The compound of claim 16, wherein each of R^{2a}, R^{2b}, R^{2c}, and R^{2d} is independently hydrogen.

18. The compound of any one of claims 14-17, wherein each of m and n is 1.

19. The compound of any one of claims 14-18, wherein q is an integer between 1 and 5 (e.g., 3).

20. The compound of any one of claims 14-19, wherein Z^1 is heterocyclyl (e.g., 6-membered heterocyclyl).

21. The compound of claim 20, wherein Z^1 is a nitrogen-containing heterocyclyl, an oxygen-containing heterocyclyl, or a sulfur-containing heterocyclyl (e.g., (e.g., oxetanyl, tetrahydrofuranyl, tetrahydropyranyl, thiomorpholinyl-1,1-dioxide, piperidinyl, piperazinyl, or pyrrolidinyl).

22. The compound of any one of claims 14-19, wherein Z^1 is aryl (e.g., phenyl).

23. The compound of claim 22, wherein Z^1 is monosubstituted phenyl (e.g., with 1 R^5).

24. The compound of claim 22, wherein Z^1 is monosubstituted phenyl, wherein the 1 R^5 an amine-containing group (e.g., NH_2) or an oxygen-containing group (e.g., OCH_3).

25. The compound of claim 24, wherein the 1 R^5 is in the ortho position or the para position.

26. The compound of any one of the preceding claims, wherein the compound of Formula (II-c) or Formula (II-k) is disposed on a surface, e.g., an inner or outer surface, of a device.

27. The compound of any one of the preceding claims, wherein the compound is selected from a compound depicted in any one of Figures 1-6, or a pharmaceutically acceptable salt thereof.

28. A pharmaceutical composition comprising a compound of any one of the preceding claims and a pharmaceutically acceptable excipient.

29. A composition for use in treating a disease, disorder, or condition, or modulating an immune response in a subject, e.g., at a site in the subject, e.g., the site of an implantable element (e.g., a device or material), comprising a compound of any one of claims 1-27 or a composition of claim 28.

30. The composition of claim 29, wherein the composition comprises an implantable element (e.g., a device or material, e.g., described herein).

31. The composition of any one of claims 29-30, wherein the composition is to be provided systemically or locally.

32. The composition of any one of claims 29-31, wherein the disorder or condition is, e.g., a condition characterized by unwanted immune response.

33. The composition of any one of claims 29-32, wherein the disorder or condition is, e.g., a condition characterized by an inadequate immune response.

34. The composition of any one of claims 29-33, wherein the composition is to be provided to downregulate an immune response.

35. The composition of any one of claims 29-33, wherein the composition is to be provided to upregulate an immune response.

36. The composition of any one of claim 29-35, wherein the composition reduces or is capable of reducing an unwanted reaction to the implantable element, e.g., reducing fibrosis or, inflammation at, or inactivation of, the implanted device or cell.

37. The composition of claim 30, wherein the implantable element (e.g., device or material) comprises a cell, e.g., a recombinant cell, which provides a substance, e.g., a therapeutic agent.

38. The composition of claim 37, wherein the cell is a retinal epithelial cell (e.g., a human RPE cell) or an RPE-like cell.

39. The composition of claims 36-38, wherein the cell comprises an exogenous nucleic acid (e.g., RNA (e.g., an mRNA) or DNA).

40. The composition of claim 39, wherein the exogenous nucleic acid encodes a polypeptide.

41. The composition of claim 40, wherein the polypeptide comprises an antibody (e.g., anti-nerve growth factor antibody).

42. The composition of claim 40, wherein the polypeptide is an enzyme (e.g., alpha-galactosidase).

43. The composition of claim 40, wherein the polypeptide comprises a clotting factor (e.g., a blood clotting factor, e.g., an activated blood clotting factor).

44. The composition of claim 40, wherein the polypeptide comprises Factor I, Factor II, Factor V, Factor VII, Factor VIII, Factor IX, Factor X, Factor XI, or Factor XIII.

45. The composition of claim 40, wherein the sequence of the polypeptide comprises at least one amino acid deletion, addition, or substitution relative to the sequence (e.g., naturally occurring human sequence) of Factor I, Factor II, Factor V, Factor VII, Factor VIII, Factor IX, Factor X, Factor XI, or Factor XIII.

46. The composition of claim 40, wherein the polypeptide is a replacement therapy or a replacement protein (e.g., a clotting factor, an enzyme, or an antibody).

47. The composition of any one of claims 40-46, wherein the disease is a blood clotting disease or a lysosomal storage disease (e.g., a hemophilia (e.g., Hemophilia A or Hemophilia B), Fabry Disease, Gaucher Disease, Pompe Disease, or MPS I).

48. The composition of claims 30-47, wherein the implantable element is to be provided as a prophylactic treatment.

49. The composition of claims 30-48, wherein the implantable element is formulated for injection into a subject (e.g., intraperitoneal, intramuscular, or subcutaneous injection).

50. The composition of claims 30-48, wherein the implantable element is formulated for implantation into a subject (e.g., into the peritoneal cavity, e.g., the lesser sac).

51. The composition of claims 30-50, wherein the implantable element is to be implanted or to be injected into the lesser sac, into the omentum, or into the subcutaneous fat of a subject.

52. The composition of claims 30-51, wherein the implantable element is to be administered to a first subject having less than about 50%, 40%, 30%, 25%, 20%, 15%, 10%, 5%, 2%, or 1% of the polypeptide (e.g., a blood clotting factor, e.g., Factor I, Factor II, Factor V, Factor VII, Factor VIII, Factor IX, Factor X, Factor XI, or Factor XIII) relative to a second subject (e.g., a healthy subject), e.g., as determined by a blood test.

53. The composition of claims 30-52, wherein the level of a biomarker (e.g., a serum biomarker) in a subject is monitored, e.g., in order to determine the level of efficacy of treatment.

54. An implantable element (e.g., a device or a material) comprising a compound of any one of claims 1-27 or a composition of claim 28.

55. A device comprising a compound of any one of claims 1-27 or a composition of claim 28.

56. The device of claim 55, wherein the compound is disposed on a surface, e.g., an inner or outer surface, of the device.

57 The device of any one of claims 55-56, wherein the compound is distributed evenly across the surface.

58. The device of any one of claims 55-56, wherein the compound is distributed unevenly across the surface.

59. The device of any one of claims 55-58, wherein the device is to be administered or to be provided to a subject for the treatment of a disease, disorder, or condition.

60. The device of any one of claims 55-59, wherein a first portion of the surface of the device comprises a compound of Formula (I) that modulates, e.g., down regulates or upregulates, an immune response and a second portion of the device lacks the compound, or has substantially lower density of the compound.

61. The device of any one of claims 55-59, wherein a first portion of the surface of the device comprises a compound of Formula I that modulates, e.g., down regulates, an immune response and a second portion of the surface comprises a second compound of Formula I, e.g., that upregulates the immune response, second portion of the device lacks the compound, or has substantially lower density of the compound.

72. The device of any one of claims 59-71, wherein the disease is a blood clotting disease or a lysosomal storage disease (e.g., a hemophilia (e.g., Hemophilia A or Hemophilia B), Fabry Disease, Gaucher Disease, Pompe Disease, or MPS I).

73. The device of claims 55-72, wherein the device is to be provided as a prophylactic treatment.

74. The device of claims 55-73, wherein the device is formulated for injection into a subject (e.g., intraperitoneal, intramuscular, or subcutaneous injection).

75. The device of claims 55-73 wherein the device is formulated for implantation into a subject (e.g., into the peritoneal cavity, e.g., the lesser sac).

76. The device of claims 55-75, wherein the device is to be implanted or to be injected into the lesser sac, into the omentum, or into the subcutaneous fat of a subject.

77. A compound of Formula (I):

$$A—L^1—M—L^2—P—L^3—Z$$

(I)

or a salt, solvate, hydrate, tautomer, stereoisomer, or isotopically labeled derivative thereof, wherein:

A is selected from A1 or A2, wherein:

A1 is hydrogen, alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, $-OR^A$, $-C(O)OR^A$, $-C(O)R^B$, $-OC(O)R^B$, $-N(R^C)(R^D)$, $-N(R^C)C(O)R^B$, $-C(O)N(R^C)(R^D)$, $-N_3$, $-NC$, $-CN$, $-NCO$, $-NCS$, $-N(R^C)N(R^D)_2$, $-NCN(R^C)$, $-C(=N(R^C)(R^D))OR^A$, $-SR^E$, $-S(O)_xR^E$, $-OS(O)_xR^E$, $-N(R^C)S(O)_xR^E$, $-S(O)_xN(R^C)(R^D)$, $-P(R^F)_y$, $-Si(OR^A)_3$, $-Si(R^G)(OR^A)_2$, $-B(OR^A)_2$, or a metal, wherein each alkyl, alkenyl, alkynyl,

heteroalkyl, cycloalkyl, heterocyclyl, aryl, and heteroaryl is optionally substituted by one or more R^1;

A2 is alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, –O–, –C(O)O–, –C(O)–, –OC(O)–, $–N(R^C)–$, $–N(R^C)C(O)–$, $–C(O)N(R^C)–$, $–N(R^C)N(R^D)–$, –NCN–, $–C(=N(R^C)(R^D))O–$, –S–, $–S(O)_x–$, $–OS(O)_x–$, $–N(R^C)S(O)_x–$, $–S(O)_xN(R^C)–$, $–P(R^F)_y–$, $–Si(OR^A)_2–$, $–Si(R^G)(OR^A)–$, $–B(OR^A)–$, or a metal, wherein each alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, and heteroaryl is linked to an attachment group (e.g., an attachment group defined herein) and is optionally substituted by one or more R^1;

each L^1, L^2, and L^3 is independently a bond, alkyl, alkenyl, alkynyl, or heteroalkyl, wherein each alkyl, alkenyl, alkynyl, and heteroalkyl is optionally substituted by one or more R^2;

M is alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl, each of which is optionally substituted by one or more R^3;

P is cycloalkyl, heterocyclyl, aryl, or heteroaryl, each of which is optionally substituted by one or more R^4;

Z is alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl, each of which is optionally substituted by one or more R^5;

each R^A, R^B, R^C, R^D, R^E, R^F, and R^G is independently hydrogen, alkyl, alkenyl, alkynyl, heteroalkyl, halogen, azido, cycloalkyl, heterocyclyl, aryl, or heteroaryl, wherein each alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, and heteroaryl is optionally substituted with one or more R^6,

or R^C and R^D, taken together with the nitrogen atom to which they are attached, form a ring (e.g., a 5-7 membered ring), optionally substituted with one or more R^6,

or one or both of R^C and R^D is bound to an atom within L or M or one of the substituents of L or M to form a ring optionally substituted with one or more R^6;

each R^1, R^2, R^3, R^4, R^5, and R^6 is independently alkyl, alkenyl, alkynyl, heteroalkyl, halogen, cyano, azido, oxo, $–OR^{A1}$, $–C(O)OR^{A1}$, $–C(O)R^{B1}$, $–OC(O)R^{B1}$, $–N(R^{C1})(R^{D1})$, $–N(R^{C1})C(O)R^{B1}$, $–C(O)N(R^{C1})$, SR^{E1}, $S(O)_xR^{E1}$, $–OS(O)_xR^{E1}$, $–N(R^{C1})S(O)_xR^{E1}$, –

$S(O)_xN(R^{C1})(R^{D1})$, $-P(R^{F1})_y$, cycloalkyl, heterocyclyl, aryl, heteroaryl, wherein each alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, and heteroaryl is optionally substituted by one or more R^7;

each R^{A1}, R^{B1}, R^{C1}, R^{D1}, R^{E1}, and R^{F1} is independently hydrogen, alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl, wherein each alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocyclyl, aryl, heteroaryl is optionally substituted by one or more R^7;

each R^7 is independently alkyl, alkenyl, alkynyl, heteroalkyl, halogen, cyano, oxo, hydroxyl, cycloalkyl, or heterocyclyl;

x is 1 or 2; and

y is 2, 3, or 4.

78. A compound listed in any one of Figures 1-6, or a pharmaceutically acceptable salt thereof.