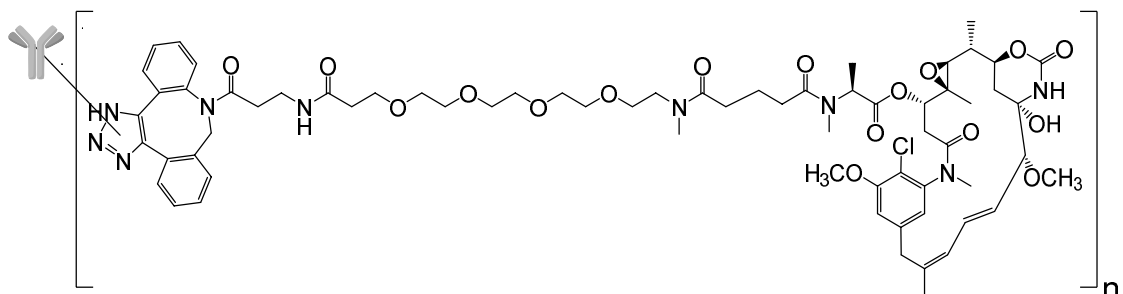


WHAT IS CLAIMED IS:

1. An antibody conjugate according to the formula:



wherein n is from 1 to 4;

the antibody comprises a V_H region of SEQ ID NO: 13, and a V_L region of SEQ ID NO: 14;

the antibody further comprises a residue of p-azidomethyl-phenylalanine substituting at each of sites HC-F404 and HC-Y180 according to the EU numbering scheme; and

each structure within the brackets of the formula is bonded to the antibody at one of the p-azidomethyl-phenylalanine residues.

2. The antibody conjugate of claim 1 wherein n is 1.
3. The antibody conjugate of claim 1 wherein n is 2.
4. The antibody conjugate of claim 1 wherein n is 3.
5. The antibody conjugate of claim 1 wherein n is 4.
6. The antibody conjugate of any one of the previous claims, further comprising at least one constant region domain.
7. The antibody conjugate of claim 6, wherein the constant region comprises SEQ ID NO: 19, SEQ ID NO: 20, or both.
8. The antibody conjugate of any one of the preceding claims, wherein the antibody is a monoclonal antibody.

9. The antibody conjugate of any one of the preceding claims, wherein the antibody is an IgA, an IgD, an IgE, an IgG, or an IgM.
10. The antibody conjugate of any one of the preceding claims, wherein the antibody is humanized or human.
11. The antibody conjugate of any one of the preceding claims, wherein the antibody is aglycosylated.
12. The antibody conjugate of any one of the preceding claims, wherein the antibody is an antibody fragment.
13. The antibody conjugate of claim 12, wherein the antibody fragment is selected from an Fv fragment, a Fab fragment, a F(ab')₂ fragment, a Fab' fragment, an scFv (sFv) fragment, and an scFv-Fc fragment.
14. The antibody conjugate of claim 13, wherein the antibody is an scFv fragment.
15. The antibody conjugate of claim 13, wherein the antibody is an scFv-Fc fragment.
16. The antibody conjugate of any one of the preceding claims, wherein the antibody specifically binds cynomolgus BCMA.
17. The antibody conjugate of any one of the preceding claims, wherein the antibody specifically binds mouse BCMA.
18. A kit comprising an antibody conjugate of any one of the preceding claims, and instructions for use of the antibody conjugate.
19. The kit of claim 18, wherein the antibody conjugate is lyophilized.
20. The kit of claim 19, further comprising a fluid for reconstitution of the lyophilized antibody.

21. A pharmaceutical composition comprising the antibody conjugate of any one of claims 1 to 17 and a pharmaceutically acceptable carrier.

22. Use of the antibody conjugate of any one of claims 1 to 17, or the pharmaceutical composition of claim 21, in the manufacture of a medicament for the treatment of cancer.

23. Use of the antibody conjugate of any one of claims 1 to 17, or the pharmaceutical composition of claim 21, in the manufacture of a medicament for diagnosing cancer.

24. The use of claim 22 or 23, wherein the disease or condition is leukemia.

25. The use of claim 22 or 23, wherein the disease or condition is lymphoma.

26. The use of claims 22 or 23, wherein the disease or condition is multiple myeloma.

27. The use of claim 26, wherein said multiple myeloma is Stage I according to the International Staging System or the Revised International Staging System.

28. The use of claim 26, wherein said multiple myeloma is Stage II according to the International Staging System or the Revised International Staging System.

29. The use of claim 26, wherein said multiple myeloma is Stage III according to the International Staging System or the Revised International Staging System.

30. The use of claim 26, wherein said multiple myeloma is newly-diagnosed multiple myeloma.

31. The use of claim 26, wherein said multiple myeloma is relapsed or refractory multiple myeloma.

32. The antibody conjugate of any one of claims 1 to 17, or the pharmaceutical composition of claim 21, for use in treating cancer.

33. The antibody conjugate of any one of claims 1 to 17, or the pharmaceutical composition of claim 21, for use in diagnosing cancer.
34. The use of claim 32 or 33, wherein the disease or condition is leukemia.
35. The use of claim 32 or 33, wherein the disease or condition is lymphoma.
36. The use of claim 32 or 33, wherein the disease or condition is multiple myeloma.
37. The use of claim 36, wherein said multiple myeloma is Stage I according to the International Staging System or the Revised International Staging System.
38. The use of claim 36, wherein said multiple myeloma is Stage II according to the International Staging System or the Revised International Staging System.
39. The use of claim 36, wherein said multiple myeloma is Stage III according to the International Staging System or the Revised International Staging System.
40. The use of claim 36, wherein said multiple myeloma is newly-diagnosed multiple myeloma.
41. The use of claim 36, wherein said multiple myeloma is relapsed or refractory multiple myeloma.
42. The antibody conjugate of any one of claims 1 to 17, or the pharmaceutical composition of claim 21, for use in therapy.