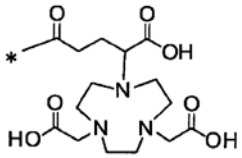
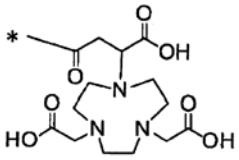
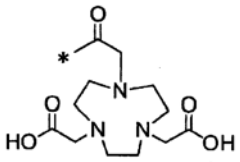
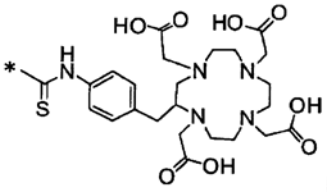
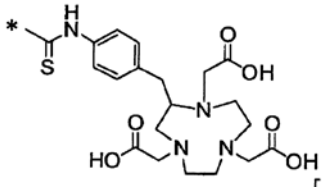

[12]


[13]


[14]


[15]


[16]

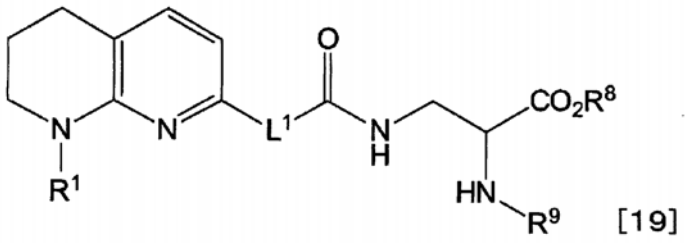

[17]

(in the formulae, ∗ represents a binding position); and L^1, L^2, L^3, and m have the same definition as L^1, L^2, L^3, and m described above).

[0006b] In another aspect of the present disclosure, there is provided a method for manufacturing a metal complex, comprising:

a step of reacting the compound represented by Formula [11] or a salt thereof obtained by the manufacturing method as described herein with a metal ion.

[0006c] In yet another aspect of the present disclosure, there is provided a compound represented by Formula [19] or a salt thereof

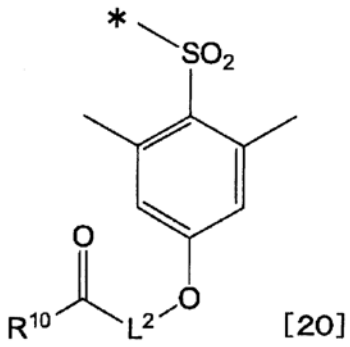

[19]

(in the formula, R^1 represents a hydrogen atom or an amino-protecting group; R^8 represents a $C_{2\text{-}6}$ alkyl group which may be substituted or a benzyl group which may be substituted;

R^9 represents:

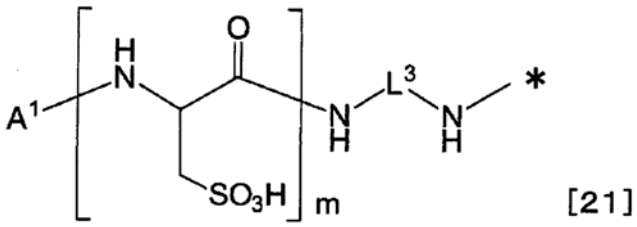
- a hydrogen atom,

- an amino-protecting group selected from the group consisting of aryl C_{1-6} alkyl group, a C_{1-6} alkoxy C_{1-6} alkyl group, an acyl group, a C_{1-6} alkoxycarbonyl group, an aryl C_{1-6} alkoxycarbonyl group, an aryloxycarbonyl group, a C_{1-6} alkylsulfonyl group, a heterocyclic sulfonyl group, or a silyl group, and these groups may be substituted with one or more substituents selected from Substituent Group A, wherein Substituent Group A is selected from the group consisting of a halogen atom, a nitro group, a cyano group, an amino group which may be protected, a hydroxyl group which may be protected, a C_{1-6} alkyl group, a C_{3-8} cycloalkyl group, an aryl group, a C_{1-6} alkoxy group, a C_{1-6} alkylamino group, a di(C_{1-6} alkyl)amino group, a heterocyclic group, and an oxy group, or
- a group represented by Formula [20]



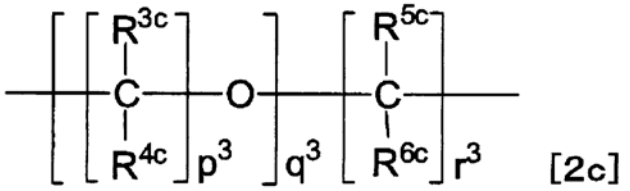
[20]

(in the formula, ∗ represents a binding position; R^{10} represents a hydroxyl group or a group represented by Formula [21]



[21]

(in the formula, ∗ represents a binding position, L^3 represents a group represented by Formula [2c]



[2c]

(in the formula, R^{3c}, R^{4c}, R^{5c}, and R^{6c} are the same as or different from each other and represent a hydrogen atom or a C_{1-6} alkyl group; p^3 represents an integer of 1 to 3; q^3 represents an integer of 0 to 3; and r^3 represents an integer of 1 to 6); A^1 represents any one of the groups represented by Formulae [4] to [9]

[0006i] In another aspect of the present disclosure, there is provided the complex as described herein, for use in the treatment of a disease involving an integrin.

[0006j] In yet another aspect of the present disclosure, there is provided the complex as described herein, for use in the diagnosis of a disease involving an integrin.

[0006k] In a further aspect of the present disclosure, there is provided a use of the complex as described herein in the manufacture of a medicament for the treatment of a disease involving an integrin, wherein the disease involving an integrin is tumor.

[0006l] In another aspect of the present disclosure, there is provided a use of the complex as described herein in the manufacture of a medicament for the diagnosis of a disease involving an integrin, wherein the disease involving an integrin is tumor.

[0007] According to the knowledge of the inventors of the present disclosure, a nitrogen-containing compound represented by the following Formula [11] is an excellent integrin-binding compound which exhibits high integrating properties and persistency with

which may be substituted.

7. The manufacturing method according to any one of claims 1 to 6,

wherein R^7 is a C_{1-6} alkyl group which may be substituted or a benzyl group which may be substituted.

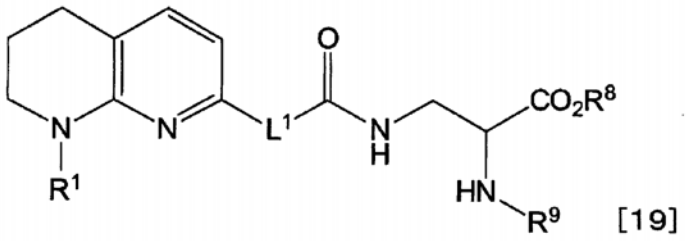
8. The manufacturing method according to any one of claims 1 to 7,

wherein the step of deprotecting is a step of deprotecting by using an acid.

9. A method for manufacturing a metal complex, comprising:

a step of reacting the compound represented by Formula [11] or a salt thereof obtained by the manufacturing method according to any one of claims 1 to 7 with a metal ion.

10. A compound represented by Formula [19] or a salt thereof



[19]

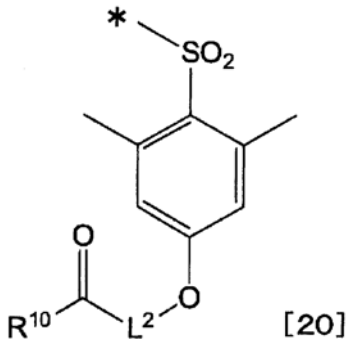
(in the formula, R^1 represents a hydrogen atom or an amino-protecting group; R^8 represents a C_{2-6} alkyl group which may be substituted or a benzyl group which may be substituted;

R^9 represents:

- a hydrogen atom,
- an amino-protecting group selected from the group consisting of aryl C_{1-6} alkyl group, a C_{1-6} alkoxy C_{1-6} alkyl group, an acyl group, a C_{1-6} alkoxycarbonyl group, an aryl C_{1-6} alkoxycarbonyl group, an aryloxycarbonyl group, a C_{1-6} alkylsulfonyl group, a heterocyclic sulfonyl group, or a silyl group, and these groups may be substituted with one or more substituents selected from Substituent Group A, wherein Substituent Group A

is selected from the group consisting of a halogen atom, a nitro group, a cyano group, an amino group which may be protected, a hydroxyl group which may be protected, a C_{1-6} alkyl group, a C_{3-8} cycloalkyl group, an aryl group, a C_{1-6} alkoxy group, a C_{1-6} alkylamino group, a di(C_{1-6} alkyl)amino group, a heterocyclic group, and an oxy group, or

- a group represented by Formula [20]



[20]

(in the formula, * represents a binding position; R^{10} represents a hydroxyl group or a

27. The complex according to claim 25 or 26, for use in the treatment of a disease involving an integrin.

28. The complex according to claim 25, wherein the metal is a noncytotoxic radioactive metal.

29. The complex according to claim 28, for use in the diagnosis of a disease involving an integrin.

30. The complex for use according to claim 27 or 29, wherein the disease involving an integrin is tumor.

31. Use of the complex according to claim 25 or 26 in the manufacture of a medicament for the treatment of a disease involving an integrin, wherein the disease involving an integrin is tumor.

32. Use of the complex according to claim 28 in the manufacture of a medicament for the diagnosis of a disease involving an integrin, wherein the disease involving an integrin is tumor.