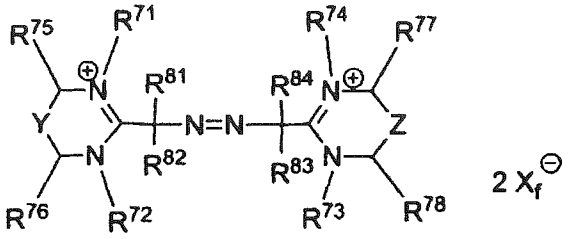
CLAIMS

1. A compound having a chemical structure represented by General formula (I):
[Chem. 1]



(I)

[wherein

Y represents a single bond or $CR^{85}$,

Z represents a single bond or $CR^{86}$,

$R^{72}$, $R^{73}$, $R^{75}$, $R^{76}$, $R^{77}$, $R^{78}$, $R^{85}$ and $R^{86}$ are each independently selected from the group consisting of hydrogen atom, $C_{1-6}$ alkyl group, $C_{1-6}$ alkoxy group, $C_{1-6}$ alkylcarbonyl group, phenyl group and hydroxyl group, wherein said $C_{1-6}$ alkyl group, $C_{1-6}$ alkoxy group, $C_{1-6}$ alkylcarbonyl group and phenyl group are optionally substituted with 1 or 2 substituents selected from the group consisting of $C_{1-6}$ alkyl group, $C_{1-6}$ alkoxy group, $C_{1-6}$ alkylcarbonyl group, phenyl group and hydroxyl group,

$R^{72}$ and $R^{73}$ optionally each independently represent adamanthyl group or $C_{1-6}$ alkyl group substituted with $Si(OCH_3)_2(CH_3)$, or

$R^{75}$ and $R^{76}$ or $R^{77}$ and $R^{78}$ together optionally form $-(CH_2)_{3-5}-$,

$R^{81}$, $R^{82}$, $R^{83}$ and $R^{84}$ are a substituent selected from the group consisting of $C_{1-4}$ alkyl group, $C_{1-4}$ alkylcarbonyl group and $C_{1-3}$ alkoxy group, wherein the $C_{1-4}$ alkyl is optionally substituted with one $C_{1-3}$ alkoxy group; and

$R^{71}$ and $R^{74}$ each independently are $C_{1-3}$ alkyl group, and

$X_f^-$ is counter anion.]

2. The compound according to claim 1, wherein said Y and Z represent single bond.

3. The compound according to claim 1 or 2, wherein said $R^{81}$, $R^{82}$, $R^{83}$, and $R^{84}$ are each independently selected from the group consisting of methyl group, ethyl group, methylcarbonyl group, isobutyl group, and 2-methyl-2-methoxypropyl group.

4. The compound according to any one of claims 1 to 3, wherein said $R^{71}$ and $R^{74}$ are a methyl group.

5. The compound according to any one of claims 1 to 4, wherein said $R^{72}$ and $R^{73}$, said $R^{75}$ and $R^{77}$, said $R^{76}$ and $R^{78}$, said $R^{81}$ and $R^{84}$, said $R^{82}$ and $R^{83}$, and said $R^{71}$ and $R^{74}$, each represent an identical substituent, and said Y and Z represent an identical substituent or a single bond.

6. The compound according to claim 1, wherein said $R^{71}$, $R^{72}$, $R^{73}$, $R^{74}$, $R^{81}$, $R^{82}$, $R^{83}$, and $R^{84}$ are a methyl group, and said $R^{75}$, $R^{76}$, $R^{77}$ and $R^{78}$ are a hydrogen atom, and said Y and Z are a single bond.

7. A cationic polymerization initiator, comprising the compound according to any one of claims 1 to 6.

8. A method for producing an intracellular delivery vehicle, comprising performing radical polymerization reaction involving the cationic radical initiator according to claim 7, a monomer comprising carbon-carbon double bonds, and a crosslinker.