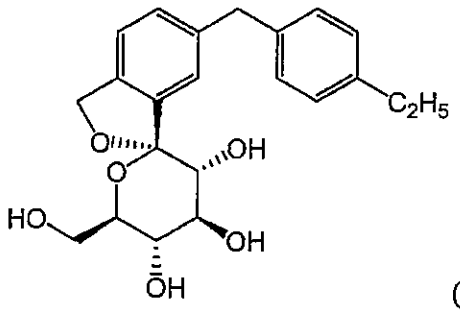
CLAIMS

1. A crystal of a compound represented by Formula (XI):



(XI)

2. The crystal of a compound represented by Formula (XI) according to claim 1, which is a monohydrate.

3. The crystal of a compound represented by Formula (XI) according to claim 1 or 2, which has peaks at diffraction angles (2θ) of about 3.5°, 6.9°, and 13.8° in X-ray powder diffraction pattern.

4. The crystal of a compound represented by Formula (XI) according to any one of claims 1 to 3, which has peaks at diffraction angles (2θ) of about 3.5°, 6.9°, 13.8°, 16.0°, 17.2°, and 18.4° in X-ray powder diffraction pattern.

5. The crystal of a compound represented by Formula (XI) according to any one of claims 1 to 4, which has peaks at diffraction angles (2θ) of about 3.5°, 6.9°, 10.4°, 13.8°, 16.0°, 17.2°, 18.4°, 20.8°, 21.4°, and 24.4° in X-ray powder diffraction pattern.

6. The crystal of a compound represented by Formula (XI) according to any one of claims 1 to 5, which is obtainable by crystallization from a mixture of acetone and water.

7. The crystal of a compound represented by Formula (XI) according to claim 6, wherein the ratio of acetone : water is 1:3.5 to 1:7 by volume.

8. The crystal of a compound represented by Formula (XI) according to claim 1, which is a co-crystal with sodium acetate.

9. The crystal of a compound represented by Formula (XI) according to claim 1 or

8, which has peaks at diffraction angles (2θ) of about 4.9°, 14.7°, 16.0°, 17.1°, and 19.6° in X-ray powder diffraction pattern.

10. The crystal of a compound represented by Formula (XI) according to any one of claims 1, 8 and 9, which has peaks at diffraction angles (2θ) of about 4.9°, 8.7°, 9.3°, 11.9°, 12.9°, 14.7°, 16.0°, 17.1°, 17.7°, 19.6°, 21.6° and 22.0° in X-ray powder diffraction pattern.

11. The crystal of a compound represented by Formula (XI) according to any one of claims 1, 8 to 10, which is obtainable by crystallization from a mixture of methanol and isopropanol.

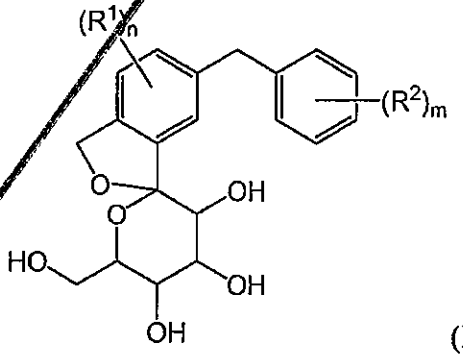
12. The crystal of a compound represented by Formula (XI) according to claim 1, which is a co-crystal with potassium acetate.

13. The crystal of a compound represented by Formula (XI) according to claim 1 or 12, which has peaks at diffraction angles (2θ) of about 5.0°, 15.1°, 19.0°, 20.1° and 25.2° in X-ray powder diffraction pattern.

14. The crystal of a compound represented by Formula (XI) according to any one of claims 1, 12 and 13, which has peaks at diffraction angles (2θ) of about 5.0°, 10.0°, 10.4°, 12.4°, 14.5°, 15.1°, 19.0°, 20.1°, 21.4°, and 25.2° in X-ray powder diffraction pattern.

15. The crystal of a compound represented by Formula (XI) according to any one of claims 1, 12 to 14, which is obtainable by crystallization from a mixture of methanol and isopropanol.

16. A process for preparing a high-purity compound represented by Formula (I):

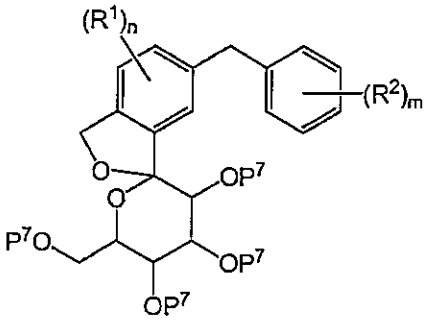


(I)

wherein n is 0, m is 1, and R^2 is C_{1-4}alkyl;

which comprises:

Step d): converting a compound of Formula (I) to a compound of Formula (Xa):



(Xa)

wherein R^2, m, and n are as defined hereinbefore, and P^7 is a protecting group of hydroxy;

Step e): crystallizing the compound of Formula (Xa) and purifying the compound by recrystallization;

Step f): removing a protecting group(s) from a compound of Formula (Xa) to give a high-purity compound of Formula (I).

17. The process according to claim 16, which further comprises a step for crystallizing the resulting compound represented by Formula (I) with a solvent selected from methanol, ethanol, propanol, isopropanol, butanol, ethylene glycol, 1-hexanol, tetrahydrofuran, t-butylmethyl ether, cyclopentylmethyl ether, 1,2-dimethoxyethane, diisopropyl ether, ethyl acetate, propyl acetate, hexyl acetate, N,N-dimethylformamide, N,N-dimethylacetamide, N-methylpyrrolidone, N,N-dibutylformamide, 1-chlorohexane, n-propylbenzene, hexylbenzene, heptane, toluene, acetone, 2-butanone, 2-heptanone, acetonitrile, dimethyl sulfoxide, and water, or a mixture of two or more solvents stated above.

18. The process according to claim 16 or 17, wherein 1-methylimidazole is used as a base for the conversion in Step d).

19. The process according to any one of claims 16 to 18, wherein P^7 is selected from C_{1-6}alkylcarbonyl, C_{1-6}alkoxycarbonyl, $-SiR^{23}R^{24}R^{25}$; and R^{23}, R^{24} and R^{25} are as

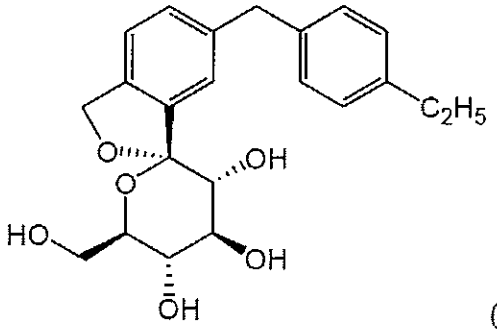
defined in claim 1.

20. The process according to any one of claims 16 to 19, wherein P^7 is selected from t-butylcarbonyl and methoxycarbonyl.

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Claims

1. A crystal of a monohydrate of a compound represented by Formula (XI):



(XI)

2. The crystal of a compound represented by Formula (XI) according to claim 1, which has peaks at diffraction angles (2θ) of about 3.5°, 6.9°, and 13.8° in X-ray powder diffraction pattern.

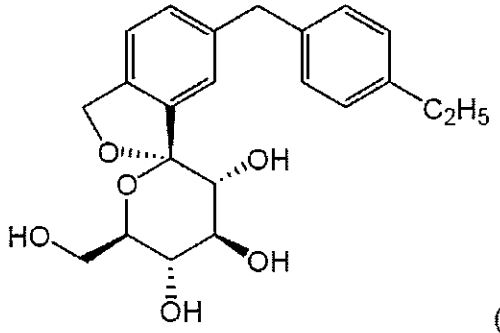
3. The crystal of a compound represented by Formula (XI) according to claim 1 or 2, which has peaks at diffraction angles (2θ) of about 3.5°, 6.9°, 13.8°, 16.0°, 17.2°, and 18.4° in X-ray powder diffraction pattern.

4. The crystal of a compound represented by Formula (XI) according to any one of claims 1 to 3, which has peaks at diffraction angles (2θ) of about 3.5°, 6.9°, 10.4°, 13.8°, 16.0°, 17.2°, 18.4°, 20.8°, 21.4°, and 24.4° in X-ray powder diffraction pattern.

5. The crystal of a compound represented by Formula (XI) according to any one of claims 1 to 4, which is obtainable by crystallization from a mixture of acetone and water.

6. The crystal of a compound represented by Formula (XI) according to claim 5, wherein the ratio of acetone : water is 1:3.5 to 1:7 by volume.

7. The crystal of a compound represented by Formula (XI):



(XI).

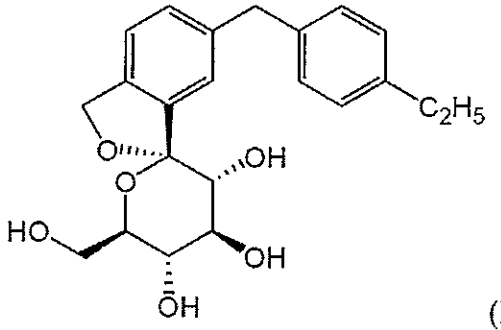
which is a co-crystal with sodium acetate.

8. The crystal of a compound represented by Formula (XI) according to claim 7, which has peaks at diffraction angles (2θ) of about 4.9°, 14.7°, 16.0°, 17.1°, and 19.6° in X-ray powder diffraction pattern.

9. The crystal of a compound represented by Formula (XI) according to any one of claims 1, 8 and 9, which has peaks at diffraction angles (2θ) of about 4.9°, 8.7°, 9.3°, 11.9°, 12.9°, 14.7°, 16.0°, 17.1°, 17.7°, 19.6°, 21.6° and 22.0° in X-ray powder diffraction pattern.

10. The crystal of a compound represented by Formula (XI) according to any one of claims 7 to 9, which is obtainable by crystallization from a mixture of methanol and isopropanol.

11. The crystal of a compound represented by Formula (XI)



(XI),

which is a co-crystal with potassium acetate.

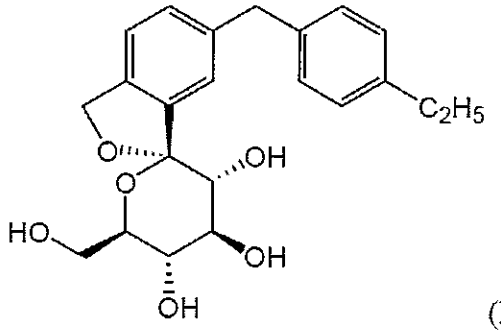
12. The crystal of a compound represented by Formula (XI) according to claim 11, which has peaks at diffraction angles (2θ) of about 5.0°, 15.1°, 19.0°, 20.1° and 25.2° in X-ray powder diffraction pattern.

13. The crystal of a compound represented by Formula (XI) according to claim 11 or 12, which has peaks at diffraction angles (2θ) of about 5.0°, 10.0°, 10.4°, 12.4°, 14.5°, 15.1°, 19.0°, 20.1°, 21.4°, and 25.2° in X-ray powder diffraction pattern.

14. The crystal of a compound represented by Formula (XI) according to any one of claims 1, and 11 to 13, which is obtainable by crystallization from a mixture of methanol and isopropanol.

15. A process for preparing the crystal as defined in any one of claims 1 to 14 of a

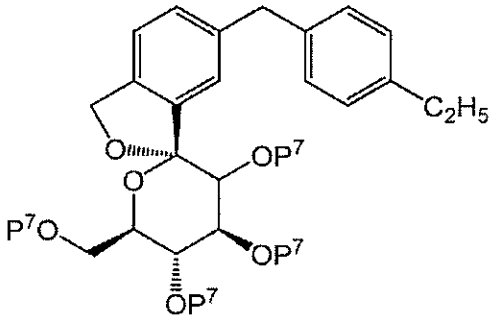
high-purity compound represented by Formula (XI):



(XI),

wherein the process comprises:

Step d): converting a compound of Formula (I) to a compound of Formula (Xc):



(Xc)

Step e): crystallizing the compound of Formula (Xc) and purifying the compound by recrystallization;

Step f): removing a protecting group(s) from a compound of Formula (Xc) to give a high-purity compound of Formula (XI).

16. The process according to claim 15, wherein P^7 is selected from t-butylcarbonyl and methoxycarbonyl.