CLAIMS

1. A peptide for promoting regeneration of dentin or dental pulp tissues and treating dentin hypersensitivity, the peptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 1-86 and 88-95, wherein the peptide is from 10 to 34 amino acids in length.

2. The peptide of claim 1, wherein the peptide has a modification selected from the group consisting of an N- or C-terminal acetylation, amidation, or methylation; a D-amino acid introduction; a peptide bond modification selected from the group consisting of CH_2-NH, CH_2-S, CH_2-S=O, and CH_2-CH_2; a backbone modification; and a side-chain modification.

3. A polynucleotide encoding the peptide of claim 1.

4. An expression vector comprising the polynucleotide of claim 3.

5. A composition comprising the peptide of claim 1.

6. The composition of claim 5, comprising a polypeptide prepared by linking repeats of the peptide.

7. The composition of claim 5, which is a pharmaceutical composition and further comprises a pharmaceutically acceptable carrier, excipient, or diluent.

8. A composition comprising a complex of a peptide for promoting regeneration of dentin or dental pulp tissues and treating dentin hypersensitivity, linked to a drug having a therapeutic effect on dentin or dental pulp diseases, wherein the peptide comprises any one amino acid sequence of SEQ ID NOS: 1 to 96 , and wherein the peptide is from 10 to 34 amino acids in length.

9. The composition of claim 8, wherein the drug has a therapeutic effect on dentin hypersensitivity, pulp hyperemia, pulpitis, pulp degeneration or pulp necrosis, or gangrenous pulp.

10. The composition of claim 8, wherein the composition is an oral antiseptic mouthwash, oral hygiene product, toothpaste, dental floss, or oral ointment.

11. A food product comprising the composition of claim 5.

12. The food product of claim 11, wherein the food is a beverage, tea, spice, gum or confectionery.

13. A peptide compound comprising repeats of a unit peptide for promoting regeneration of dentin or dental pulp tissues and treating dentin hypersensitivity, wherein said unit peptide comprising any one amino acid sequence of SEQ ID NOS: 1 to 96, and wherein the unit peptide is from 10 to 34 amino acids in length.

14. The peptide compound of claim 13, wherein the peptide compound has a modification selected from the group consisting of an N- or C-terminal acetylation, amidation, or methylation; a D-amino acid introduction; a peptide bond modification selected from the group consisting of CH_2-NH, CH_2-S, CH_2-S=O, and CH_2-CH_2; a backbone modification; and a side-chain modification.

15. A composition comprising the peptide compound of claim 13.

16. A composition comprising a complex of a peptide compound of claim 13 linked to a drug having a therapeutic effect on dentin or dental pulp diseases.

17. The composition of claim 16, wherein the drug has a therapeutic effect on dentin hypersensitivity, pulp hyperemia, pulpitis, pulp degeneration or pulp necrosis, or gangrenous pulp.

18. The composition of claim 16, wherein the composition is an oral antiseptic mouthwash, oral hygiene product, toothpaste, dental floss, or oral ointment.

19. A food product comprising the composition of claim 15.

20. The food product of claim 19, wherein the food is a beverage, tea, spice, gum or confectionery.

21. Use of the peptide of claim 1 or 2, the composition of any one of claims 5 to 7, the composition of any one of claims 8 to 10, the peptide compound of claim 13 or 14, the composition of claim 15, the composition of any one of claims 16 to 18 or the food product of claim 19 or 20 in the

manufacture of a medicament for the prevention or treatment of a dentin or dental pulp disease.