

CLAIMS:

1. A peptide comprising, or consisting of:
5 X-(Xaa₁)_a-(Xaa₂)_b-Y-(Xaa₃)_c-(Xaa₄)_d-Z,
in which each of X and Z is independently selected from Asn, Cys, Gln, Gly, Ser, Thr and Tyr;
10 in which one of Xaa₁ and Xaa₂ is His and the other of Xaa₁ and Xaa₂ is Arg;
in which one of Xaa₃ and Xaa₄ is His and the other of Xaa₃ and Xaa₄ is Arg;
in which the amino functional group of X is, optionally, acylated;
15 in which the carboxylate functional group of Z is, optionally, amidated;
in which Y is selected from Ala and Trp;
20 in which each of a and d is independently 2 to 4; and each of b and c is independently 2 to 4, or a salt or amide thereof.
2. The peptide according to Claim 1, in which Xaa₂ and Xaa₃ are each Arg.
- 25 3. The peptide according to Claim 1 or 2, in which Xaa₁ and Xaa₄ are each His.
4. The peptide according to any one of Claims 1 to 3, in which each of a and d is identical and is 2 to 4.
- 30 5. The peptide according to Claim 4, in which each of a and d is 3.
6. The peptide according to any one of Claims 1 to 5, in which each of b and c is identical and is 2 to 4.
- 35 7. The peptide according to Claim 6, each of b and c is 3.
8. The peptide according to any one of Claims 1 to 7, in which each of a, b, c and d is 3.
9. The peptide according to any one of Claims 1 to 8, in which each of X and Z is identical and
40 selected from Asn, Cys, Gln, Gly, Ser, Thr and Tyr.

10. The peptide according to any one of Claims 1 to 9, in which each of X and Z is Cys.
11. The peptide according to any one of Claims 1 to 10, in which Y is Trp.
- 5 12. The peptide according to any one of Claims 1 to 11, in which the sum of b plus c is at least six.
13. The peptide according to any one of Claims 1 to 12, in which the sum of a plus d is at least six.
- 10 14. The peptide according to any one of claims 1 to 13, where X and Z are Cys, Xaa₁ and Xaa₄ are His; a and d are each independently 2 to 4; Xaa₂ and Xaa₃ are Arg; b and c are each independently 2 to 4; and Y is Trp.
- 15 15. The peptide according to any one of Claims 1 to 14, in which the peptide comprises a net positive charge of 6 to 8.
16. The peptide according to Claim 15, in which the peptide comprises a net positive charge of 6.
- 20 17. The peptide according to any one of Claims 1 to 16, in which the peptide is Cys-(His)₃-(Arg)₃-Trp-(Arg)₃-(His)₃-Cys (CHHHRRRWRRRHHC).
18. The peptide according to any one of Claims 1 to 17, in which the peptide comprises 8 to 20 amino acids.
- 25 19. A peptide according to any one of Claims 1 to 18 for use as a cell delivery agent.
20. A peptide according to any one of Claims 1 to 18 for use in the delivery of an anionic cargo
- 30 to a cell or subject in need thereof.
21. An anionic cargo and a peptide according to any one of Claims 1 to 18 for delivery of the anionic cargo, for use in inducing an immune response in a subject in need thereof or a method for inducing an immune response in a subject wherein the anionic cargo and the peptide are to be
- 35 administered to a subject in need thereof.
22. An anionic cargo and a peptide according to any one of Claims 1 to 18 for delivery of the anionic cargo, for use in gene therapy in a subject in need thereof.
- 40 23. An anionic cargo and a peptide according to any one of Claims 1 to 18 for delivery of the anionic cargo, for use in the treatment and/or prophylaxis of an infection, cancer, wounds in a subject

in need thereof or a method for the treatment and/or prophylaxis of an infection, cancer, or wounds wherein the anionic cargo and the peptide are to be administered to a subject in need thereof.

24. The anionic cargo and peptide for use in the treatment and/or prophylaxis of cancer
5 according to claim 23, wherein the cancer is selected from breast cancer, prostate cancer, brain cancer, lung cancer, pancreatic cancer, ovarian cancer and skin cancer.

25. The anionic cargo and peptide for use in the treatment and/or prophylaxis of cancer
according to claim 24, wherein the cancer is breast cancer or prostate cancer.
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26. Use of an anionic cargo and a peptide according to any one of Claims 1 to 18 for delivery of the anionic cargo, in the manufacture of a medicament for the treatment and/or prophylaxis of an infection, cancer, or wounds in a subject in need thereof.

15 27. The use according to claim 26, wherein the cancer is selected from breast cancer, prostate cancer, brain cancer, lung cancer, pancreatic cancer, ovarian cancer and skin cancer.

28. The use according to claim 27, wherein the cancer is breast cancer or prostate cancer.

20 29. An anionic cargo and a peptide according to any one of Claims 1 to 18 for delivery of the anionic cargo, for use as a medicament.