CLAIMS

1. A compound of formula:

CCLLCCLLC	(I)	(SEQ ID No. 1) or
CLLCCLLCC	(III)	(SEQ ID No. 3);

wherein C represents a cationic amino acid and L represents an amino acid with a lipophilic R group and in which one of the amino acids having a lipophilic R group is a non-genetically coded amino acid, said compound optionally in the form of a salt, ester or amide.

2. A compound as claimed in claim 1 wherein each lipophilic R group has at least 9 non-hydrogen atoms.

3. A compound as claimed in claim 1 or claim 2 wherein each lipophilic R group has at least one cyclic group.

4. A compound as claimed in any preceding claim in which 1 to 3 of the amino acids with lipophilic R groups are tryptophan.

5. A compound as claimed in any preceding claim which incorporates a non-genetically coded amino acid selected from the group consisting of: 2-amino-3-(biphenyl-4-yl)propanoic acid (biphenylalanine), 2-amino-3,3-diphenylpropanoic acid (diphenylalanine), 2-amino-3-(anthracen-9-yl)propanoic acid, 2-amino-3-(naphthalen-2-yl)propanoic acid, 2-amino-3-(naphthalen-1-yl)propanoic acid, 2-amino-3-[1,1':4',1"-terphenyl-4-yl]-propionic acid, 2-amino-3-(2,5,7-tri-*tert*-butyl-1H-indol-3-yl)propanoic acid, 2-amino-3-[1,1':3',1"-terphenyl-4-yl]-propionic acid, 2-amino-3-[1,1':2',1"-terphenyl-4-yl]-propionic acid, 2-amino-3-(4-naphthalen-2-yl-phenyl)-propionic acid, 2-amino-3-(4'-butylbiphenyl-4-yl)propanoic acid, 2-amino-3-[1,1':3',1"-terphenyl-5'-yl]-propionic acid and 2-amino-3-(4-(2,2-diphenylethyl)phenyl)propanoic acid.

6. A compound as claimed in any preceding claim having the formula of SEQ ID NO: 23 (LTX-315), or a salt, ester or amide thereof.

7. A composition comprising a compound as claimed in any preceding claim, in combination with a pharmaceutically acceptable carrier, diluent or excipient.

8. A composition comprising a compound as claimed in any one of claims 1 to 6 in combination with at least one other therapeutic ingredient.

9. Use of a compound as claimed in any one of claims 1 to 6 as medicament.

10. Use of a compound as claimed in any one of claims 1 to 6 in the manufacture of a medicament in combination with a vaccine, as a vaccine adjuvant.

11. A formulation comprising a compound as claimed in any one of claims 1 to 6 and at least one vaccine.

12. A pharmaceutical pack comprising:
    (i) at least one vaccine; and
    (ii) a compound as claimed in any one of claims 1 to 6.

13. Use of a compound as claimed in any one of claims 1 to 6 in the manufacture of a medicament for the treatment of a tumour, wherein the use comprises the step of administration of a pharmaceutically effective amount of said compound to a patient in need of same.

14. The formulation as claimed in claim 11, the pharmaceutical pack as claimed in claim 12, or the use as claimed in claim 10, wherein said vaccine is either a tumour lysate or an anti-cancer vaccine containing at least one protein and/or peptide with amino acid sequences corresponding to immunogenic sequence(s) from tumour associated antigen(s).

15. The formulation as claimed in claim 11, the pharmaceutical pack as claimed in claim 12 or the use as claimed in claim 10, wherein said vaccine is an anti-virus vaccine containing at least one protein and/or peptide with amino acid sequence(s) corresponding to immunogenic sequences from viral protein(s).

CLAIMS

1. A compound of formula:

CCLLCCLLC	(I)	(SEQ ID No. 1) or
CLLCCLLCC	(III)	(SEQ ID No. 3);

wherein C represents a cationic amino acid and L represents an amino acid with a lipophilic R group and in which one of the amino acids having a lipophilic R group is a non-genetically coded amino acid, said compound optionally in the form of a salt, ester or amide.

2. A compound as claimed in claim 1 wherein each lipophilic R group has at least 9 non-hydrogen atoms.

3. A compound as claimed in claim 1 or claim 2 wherein each lipophilic R group has at least one cyclic group.

4. A compound as claimed in any preceding claim in which 1 to 3 of the amino acids with lipophilic R groups are tryptophan.

5. A compound as claimed in any preceding claim which incorporates a non-genetically coded amino acid selected from the group consisting of:

2-amino-3-(biphenyl-4-yl)propanoic acid (biphenylalanine), 2-amino-3,3-diphenylpropanoic acid (diphenylalanine), 2-amino-3-(anthracen-9-yl)propanoic acid, 2-amino-3-(naphthalen-2-yl)propanoic acid, 2-amino-3-(naphthalen-1-yl)propanoic acid, 2-amino-3-[1,1':4',1"-terphenyl-4-yl]-propionic acid, 2-amino-3-(2,5,7-tri-*tert*-butyl-1H-indol-3-yl)propanoic acid, 2-amino-3-[1,1':3',1"-terphenyl-4-yl]-propionic acid, 2-amino-3-[1,1':2',1"-terphenyl-4-yl]-propionic acid, 2-amino-3-(4-naphthalen-2-yl-phenyl)-propionic acid, 2-amino-3-(4'-butylbiphenyl-4-yl)propanoic acid, 2-amino-3-[1,1':3',1"-terphenyl-5'-yl]-propionic acid and 2-amino-3-(4-(2,2-diphenylethyl)phenyl)propanoic acid.

6. A compound as claimed in any preceding claim having the formula of SEQ ID NO: 23 (LTX-315), or a salt, ester or amide thereof.

7. A composition comprising a compound as claimed in any preceding claim, in combination with a pharmaceutically acceptable carrier, diluent or excipient.

8. A composition comprising a compound as claimed in any one of claims 1 to 6 in combination with at least one other therapeutic ingredient.

9. Use of a compound as claimed in any one of claims 1 to 6 as medicament.

10. A vaccine adjuvant comprising a compound having the following characteristics:

a) consisting of 9 amino acids in a linear arrangement;

b) of those 9 amino acids, 5 are cationic and 4 have a lipophilic R group;

c) at least one of the amino acids having a lipophilic R group is a non-genetically coded amino acid; and

d) the lipophilic and cationic residues are arranged such that there are no more than two of either type of residue adjacent to one another;

optionally in the form of a salt, ester or amide.

11. A vaccine adjuvant comprising a compound as defined in claim 10 in combination with at least one vaccine.

12. A pharmaceutical pack comprising:
(i) at least one vaccine; and
(ii) a compound as defined in claim 10.

13. Use of a compound as claimed in any one of claims 1 to 6 in the manufacture of a medicament for the treatment of a tumour, wherein the use comprises the step of administration of a pharmaceutically effective amount of said compound to a patient in need of same.

14. Use of a vaccine adjuvant as defined in claim 10 in the manufacture of a medicament for vaccination, wherein the use comprises the step of administration of a pharmaceutically effective amount of said compound and a vaccine to a patient.

15. The vaccine adjuvant as claimed in claim 11, the pharmaceutical pack as claimed in claim 12, or the use as claimed in claim 14, wherein said vaccine is either a tumour lysate or an anti-cancer vaccine containing at least one protein and/or peptide with amino acid sequences corresponding to immunogenic sequence(s) from tumour associated antigen(s).

16. The vaccine adjuvant as claimed in claim 11, the pharmaceutical pack as claimed in claim 12 or the use as claimed in claim 14, wherein said vaccine is an anti-virus vaccine containing at least one protein and/or peptide with amino acid sequence(s) corresponding to immunogenic sequences from viral protein(s).