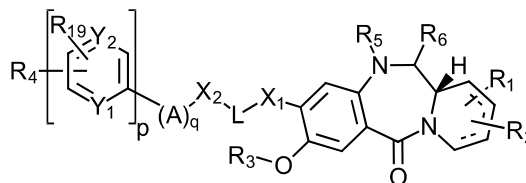


CLAIMS

1. A compound of formula (I):



(I)

5 and salts and solvates thereof,

in which;

the dotted lines indicates the optional presence of a double bond between one or more of C1 and C2, C2 and C3, and C3 and C4;

10 R₁ is selected from R₇, =CH₂, =CH-(CH₂)_m-CH₃, =O, (CH₂)_m-OR₇, (CH₂)_m-CO₂R₇, (CH₂)_m-NR₇R₈, O-(CH₂)_n-NR₇R₈, NH-C(O)-R₇, O-(CH₂)_n-NH-C(O)-R₇, O-(CH₂)_n-C(O)-NH-R₇, (CH₂)_m-SO₂R₇, O-SO₂R₇, (CH₂)_m-C(O)R₇ and (CH₂)_m-C(O)NR₇R₈;

R₂ is selected from R₉, CH₂, =CH-(CH₂)_m-CH₃, =O, (CH₂)_r-OR₉, (CH₂)_r-CO₂R₉, (CH₂)_r-NR₉R₁₀, O-(CH₂)_s-NR₉R₁₀, NH-C(O)-R₉, O-(CH₂)_s-NH-C(O)-R₉, O-(CH₂)_s-C(O)-NH-R₉, (CH₂)_r-SO₂R₉, O-SO₂R₉, (CH₂)_r-COR₉ and (CH₂)_r-C(O)NR₉R₁₀;

15 R₃ is selected from H, C₁₋₁₂ alkyl and CH₂Ph;

R₄ is selected from phenyl, pyrrolyl, N-methylpyrrolyl, furanyl, thiophenyl, imidazolyl, N-methylimidazolyl, oxazolyl, thiazolyl, pyridyl, benzofuranyl, benzothiophenyl, benzimidazolyl, N-methylbenzoimidazolyl, benzooxazolyl and benzothiazolyl, optionally substituted with up to three optional substituent groups selected from OH, C₁₋₆ alkyl, OC₁₋₆ alkyl, (CH₂)_j-CO₂R₁₁, O-(CH₂)_k-NR₁₁R₁₂, (CH₂)_j-NR₁₁R₁₂, C(=O)-NH-(CH₂)_k-NR₁₁R₁₂; C(=O)-NH-R₂₄ C(=O)-NH-(CH₂)_k-C(=NH)NR₁₁R₁₂, and in which R₄ comprises a C(=O)-NH-R₂₄ substituent group;

R₁₉ is selected from H and (CH₂)_t-NR₂₀R₂₁;

Y₁ is N or CH;

25 Y₂ is N or CH; and in which at least one of Y₁ and Y₂ is CH;

p is 0 or 1;

j, m, r and t are independently selected from an integer from 0 to 6;

k, n and s are independently selected from an integer from 1 to 6;

X_1 is selected from O, C(=O), C(=O)NR₁₃, NR₁₃C(=O);

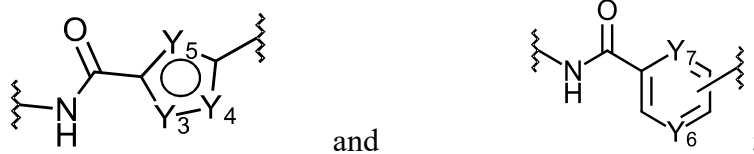
L is selected from an amino acid, a peptide chain having from 2 to 6 amino acids, an

5 alkylene chain containing from 1 to 12 carbon atoms which may contain one or more carbon-carbon double or triple bonds, a paraformaldehyde chain $-(OCH_2)_{1-12}-$, a polyethylene glycol chain $-(OCH_2CH_2)_{1-6}-$, which chains may be interrupted by one or more of O, S and/or NH groups and/or C_{5-9} heteroarylene and/or phenylene;

X₂ is selected from O, C(=O), C(=O)NR₁₅, NR₁₅C(=O) or is absent;

10 q is 1;

A is:



A1

A2

15 O; and the other of Y₃ and Y₄ is CH; and Y₅ is independently selected from CH,
N, S and COH;

for each A2 group one of Y_6 and Y_7 is independently selected from N and CH; and the other of Y_6 and Y_7 is CH;

R₇ and R₉ are independently selected from H, C₁₋₁₂ alkyl, C₅₋₉ heteroaryl, C₆₋₁₅

heteroarylalkyl, phenyl and C₇₋₁₂ aralkyl groups; wherein the heteroaryl, heteroarylalkyl, phenyl and aralkyl groups are optionally substituted with up to three optional substituent groups selected from C₁₋₆ alkyl, OH, OC₁₋₆ alkyl;

R₂₄ is a phenyl optionally substituted with up to three optional substituent groups

25 NR₁₁R₁₂, C(=O)-NH-(CH₂)_k-NR₁₁R₁₂ and C(=O)-NH-(CH₂)_k-C(=NH)NR₁₁R₁₂;

R₈, R₁₀, R₁₁, R₁₂, R₁₃, R₁₅, R₁₇, R₂₀ and R₂₁ are independently selected from H and C₁₋₆ alkyl;

and either:

- (i) R_5 and R_6 together form a double bond;
- (ii) R_5 is H and R_6 is OH; or
- (iii) R_5 is H and R_6 is OC_{1-6} alkyl;

5 with the proviso that when p is 0 and A is A1, then:

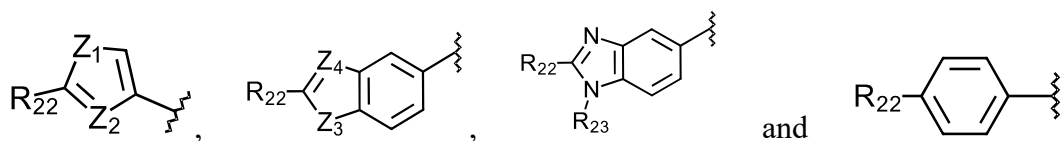
- (a) for at least one A1 group one of Y_3 and Y_4 is selected from S and O; or
- (b) for at least one A1 group Y_5 is S; or
- (c) R_4 is not pyrrolyl, imidazolyl, optionally substituted pyrrolyl or optionally substituted imidazolyl.

10 2. A compound of formula (I) and salts and solvates thereof according to Claim 1, in which R_{24} is $-C_6H_4-(CH_2)_j-R_{18}$, in which R_{18} is selected from CO_2H , CO_2CH_3 , $CO_2CH_2CH_3$, $NH(CH_3)$ and NH_2 .

3. A compound of formula (I) and salts and solvates thereof according to Claim 1 or 2, in which R_1 is selected from R_7 , $O-(CH_2)_n-NH-C(O)-R_7$ and $O-(CH_2)_n-C(O)-NH-R_7$.

15 4. A compound of formula (I) and salts and solvates thereof according to Claim 1, 2 or 3, in which R_3 is selected from methyl and ethyl.

5. A compound of formula (I) and salts and solvates thereof according to any preceding claim, in which R_4 is selected from:



20 in which Z_1 is selected from NH, N- CH_3 , S and O;

Z_2 is selected from CH and N;

Z_3 is selected from S and O;

Z_4 is selected from CH and N;

R_{22} is selected from $(CH_2)_jCO_2R_{11}$, $(CH_2)_jNR_{11}R_{12}$ and $C(=O)-NH-C_6H_4-(CH_2)_j-R_{18}$;

25 R_{18} is selected from CO_2H , CO_2CH_3 , $CO_2CH_2CH_3$, $NH(CH_3)$ and NH_2 ;

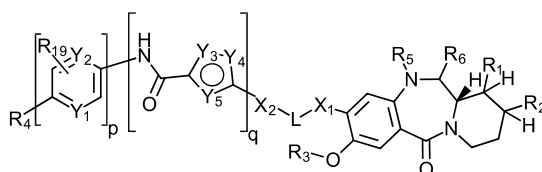
j is selected from an integer from 0 to 6; and

R₁₁ and R₁₂ are independently selected from H and C₁₋₆ alkyl; and

R₂₃ is selected from H and C₁₋₆ alkyl.

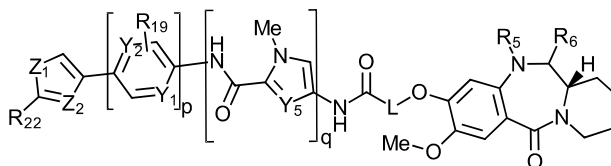
6. A compound of formula (I) and salts and solvates thereof according to any preceding
5 claim, in which R₅ and R₆ together form a double bond.

7. A compound of formula (I) and salts and solvates thereof according to any preceding
claim, in which compound has the following structure:

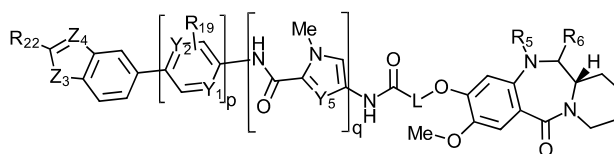


(XV).

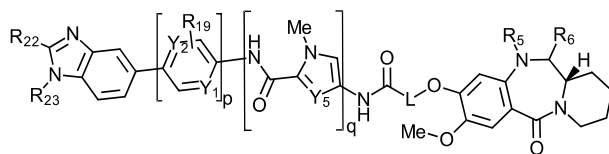
10 8. A compound of formula (I) and salts and solvates thereof according to any preceding
claim, in which the compound has the following structure:



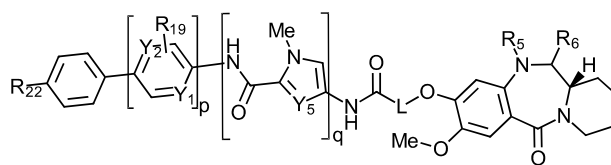
(XVI);



(XVII);



(XVIII); and



(XIX)

in which q is 1;

p is 0 or 1;

5 L is an alkylene chain containing from 1 to 12 carbon atoms;

Y₁ is N or CH;

Y₂ is N or CH; and in which at least one of Y₁ and Y₂ is CH;

Y₅ is selected from CH and N;

Z₁ is selected from O, S, NH and N-CH₃;

10 Z₂ is selected from CH and N; and

Z₃ is selected from S and O;

Z₄ is selected from CH and N;

R₂₂ is selected from (CH₂)_jCO₂H, (CH₂)_jCO₂C₁₋₆ alkyl, (CH₂)_jNR₁₁R₁₂ and C(=O)-NH-C₆H₄-(CH₂)_j-R₁₈;

15 R₁₈ is selected from CO₂H, CO₂CH₃, CO₂CH₂CH₃, NH(CH₃) and NH₂;

R₁₉ is selected from H and (CH₂)_t-NR₂₀R₂₁;

j and t are independently selected from an integer from 0 to 6; and

R₁₁, R₁₂ and R₂₃ are independently selected from H and C₁₋₆ alkyl.

and either:

20 (i) R₅ and R₆ together form a double bond;

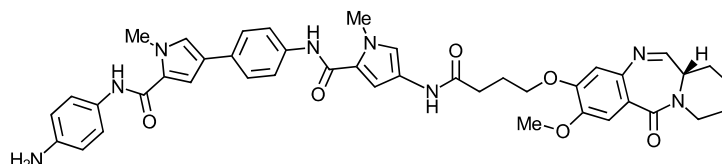
(ii) R₅ is H and R₆ is OH; or

(iii) R₅ is H and R₆ is OC₁₋₆ alkyl;

with the proviso that when the compound is (XVI) and p is 0, that Z₁ is selected from O and S.

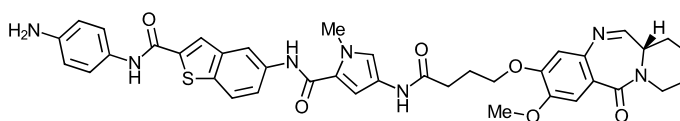
9. A compound of formula (I) and salts and solvates thereof according to any preceding claim, in which the compound is selected from:

(a) (*S*)-*N*-(4-aminophenyl)-4-(4-(4-(4-((2-methoxy-12-oxo-6a,7,8,9,10,12-hexahydrobenzo[*e*]pyrido[1,2-*a*][1,4]diazepin-3-yl)oxy)butan-amido)-1-methyl-1*H*-pyrrole-2-carboxamido)phenyl)-1-methyl-1*H*-pyrrole-2-carboxamide (41)



(41);

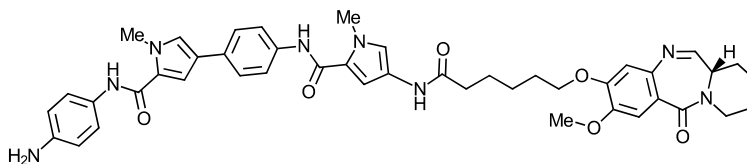
(b) (*S*)-*N*-(2-((4-Aminophenyl)carbonyl)benzo[*b*]thiophen-5-yl)-4-(4-((2-methoxy-12-oxo-6a,7,8,9,10,12-hexahydrobenzo[*e*]pyrido[1,2-*a*][1,4]diazepin-3-yl)oxy)-butanamido)-1-methyl-1*H*-pyrrole-2-carboxamide (47)



(47);

and

(c) (*S*)-*N*-(4-aminophenyl)-4-(4-(4-(4-((2-methoxy-12-oxo-6a,7,8,9,10,12-hexahydrobenzo[*e*]pyrido[1,2-*a*][1,4]diazepin-3-yl)oxy)hexan-amido)-1-methyl-1*H*-pyrrole-2-carboxamido)phenyl)-1-methyl-1*H*-pyrrole-2-carboxamide (62)



(62).

10. A compound of formula (I) and salts and solvates thereof according to any preceding claim for use as a medicament.

11. A compound of formula (I) and salts and solvates thereof according to any of Claims 1 to 9 for use in the treatment of a proliferative disease.

12. A compound for use of formula (I) and salts and solvates thereof according to Claim 11 for use in the treatment of a proliferative disease, in which the proliferative disease is selected from bladder cancer, bone cancer, bowel cancer, brain cancer, breast cancer, cervical cancer, colon cancer, head and neck cancer, leukemia, liver cancer, lung cancer, lymphoma, melanoma, oesophageal cancer, oral cancer, ovarian cancer, pancreatic cancer, prostate cancer, rectal cancer, renal cancer, retinoblastoma, sarcoma, skin cancer, stomach cancer, testicular cancer, thyroid cancer and uterine cancer.
13. A pharmaceutical composition comprising a compound of formula (I) and salts and solvates thereof according to any of Claims 1 to 9 and a pharmaceutically acceptable excipient, carrier or diluent.
14. Use of a compound of formula (I) and salts and solvates thereof according to any of Claims 1 to 9, or of a pharmaceutical composition of Claim 13, in the manufacture of a medicament for treating a proliferative disease.
15. A compound of formula (I) and salts and solvates thereof according to any of Claims 1 to 9, linked, either directly or indirectly, to a targeting agent to provide a targeted conjugate.