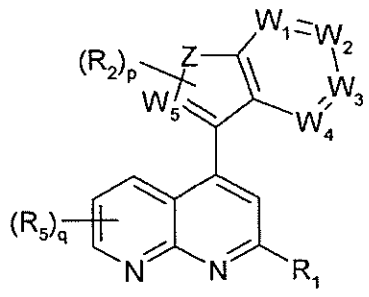
Claims

1. Compounds of formula (I)



(I)

wherein:

W_1, W_2, W_3, W_4 denotes independently from each other N or CR^3,

W_5 denotes N or C, preferably denotes N or CR^3, more preferably denotes N,

Z denotes C=C, NR^4, C=N, O, S, CH, N=N or N=C, preferably denotes C=C, $N(R^4)CO$, NR^4, C=N, O, $CON(R^4)$, S, CH, N=N or N=C, more preferably denotes C=C, $N(R^4)CO$, NR^4, C=N, O, $CON(R^4)$, S, CH or N=N,

R^1 denotes a monocyclic aryl having 5, 6, 7, 8, 9 or 10 C atoms or a monocyclic heteroaryl having 5, 6, 7, 8, 9, 10, 11, 12, 13 or 14 C atoms and 1, 2, 3, 4 or 5 N, O and/or S atoms, each of which can be independently substituted by at least one substituent selected from the group consisting of Y, Hal, CN, CF_3 or OY,

R^2 denotes H, Hal, A, $-(CYY)_n-OY$, $-(CYY)_n-NYY$, $-(CYY)_n-Het$, SY, NO_2, CN, COOY, -CO-NYY, -NY-COA, $-NY-SO_2A$, $-SO_2-NYY$, $S(O)_mA$, -CO-Het, $-O(CYY)_n-OY$, $-O(CYY)_n-NYY$, $-O(CYY)_n-Het$, -NH-COOA, -NH-CO-NYY, -NH-COO-$(CYY)_n-NYY$, $-NH-COO-(CYY)_n-Het$, $-NH-CO-NH-(CYY)_n-NYY$, $-NH-CO-NH(CYY)_n-Het$, $-OCO-NH-(CYY)_n-NYY$, -

		OCO-NH-$(CYY)_n$-Het, CHO, COA, =S, =NY, =O or a monocyclic aryl having 5, 6, 7, 8, 9 or 10 C atoms or a monocyclic heteroaryl having 5, 6, 7, 8, 9, 10, 11, 12, 13 or 14 C atoms and 1, 2, 3, 4 or 5 N, O and/or S atoms, each of monocyclic aryl and monocyclic heteroaryl can be independently substituted by at least one substituent selected from the group consisting of Y, Hal, CN, CF_3 or OY,
	R^3	denotes H, OY, NYY, NY-COY, NY-CO-$(CYY)_n$-OY, NY-COY-NYY, NY-$(CYY)_n$-NYY, O-$(CYY)_n$-NYY or O-$(CYY)_n$-Het,
	R^4	denotes H, A, -$(CYY)_o$-Het, -$(CYY)_o$-NYY or -$(CYY)_o$-OY,
	R^5	denotes H, A, OY, NYY or Het,
	Y	denotes H or A, preferably in case of -$(CYY)_{n/o}$-Y additionally denotes H, A or OH,
	A	denotes unbranched or branched alkyl having 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 C atoms, in which 1, 2, 3, 4, 5, 6 or 7 H atoms can be replaced independently from one another by Hal and/or in which one or two CH_2 groups can be replaced independently of one another by a O, S, SO, SO_2, a -CY=CY- group and/or a -C≡C- group; alternatively, A denotes cycloalkyl with 3, 4, 5, 6, 7 or 8 C-atoms,
	Het	denotes a saturated or unsaturated, mono, bi- or tricyclic heterocycle having 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 or 20 C atoms and 1, 2, 3, 4 or 5 N, O and/or S atoms, which can be substituted by at least one substituent selected from the group consisting of Y, Hal, CN, CF_3, OY,
	Hal	denotes F, Cl, Br or I,

m denotes 0, 1 or 2,

n denotes 0, 1, 2, 3 or 4,

o denotes 0, 1, 2, 3 or 4, preferably if Z is NR^4, o additionally denotes 2, 3 or 4,

p denotes 0, 1, 2 or 3,

q denotes 0, 1, 2 or 3,

with the proviso that the following compounds are excluded:

(a) 2-(5-chloro-2-fluoro-phenyl)-4-isoquinolin-4-yl-[1,8]naphthyridine,
(b) 4-isoquinolin-4-yl-2-(6-methyl-pyridin-2-yl)-[1,8]naphthyridine,
(c) 4-[2-(2-fluoro-phenyl)-[1,8]naphthyridin-4-yl]-[2,7]naphthyridin-1-ylamine,
(d) 4-[2-(2,5-difluoro-phenyl)-[1,8]naphthyridin-4-yl]-[2,7]naphthyridin-1-ylamine,
(e) N-{4-[2-(2-fluoro-phenyl)-[1,8]naphthyridin-4-yl]-[2,7]naphthyridin-1-yl}-acetamide,
(f) 2-(2-fluoro-phenyl)-4-[2,7]naphthyridin-4-yl-[1,8]naphthyridine,
(g) 5-[2-(2-fluoro-phenyl)-[1,8]naphthyridin-4-yl]-[2,7]naphthyridin-1-ylamine,
(h) 5-[2-(5-chloro-2-fluoro-phenyl)-[1,8]naphthyridin-4-yl]-[1,7]naphthyridine,
(i) 4-[2-(5-chloro-2-fluoro-phenyl)-[1,8]naphthyridin-4-yl]-[2,7]naphthyridin-1-ylamine,

and the physiologically acceptable salts, solvates, stereoisomers and tautomers thereof, including mixtures thereof in all ratios.

2. Compound according to claim 1, with the further proviso that W_5 denotes N and/or Z excludes N=C, i.e. Z denotes C=C, $N(R^4)CO$, NR^4, C=N, O, $CON(R^4)$, S, CH or N=N,
and the physiologically acceptable salts, solvates, stereoisomers and tautomers thereof, including mixtures thereof in all ratios.

3. Compound according to claim 1 or 2, wherein Z is selected from the group consisting of:

(a) C=C, or

(b) $N(R^4)CO$, or

(c) NR^4, or

(d) C=N, or

(e) O, or

(f) $CON(R^4)$,

and preferably is C=C,

and the physiologically acceptable salts, solvates, stereoisomers and tautomers thereof, including mixtures thereof in all ratios.

4. Compound according to any of claims 1 to 3, wherein

(a) W_1, W_3, W_4 denote independently from each other CR^3, and
W_2 denotes N, or

(b) W_2, W_3, W_4 denote independently from each other CR^3, and
W_1 denotes N, or

(c) W_1, W_2, W_4 denote independently from each other CR^3, and
W_3 denotes N, or

(d) W_1, W_2, W_3, W_4 denote independently from each other CR^3, or

(e) W_1, W_3 denote independently from each other CR^3, and
W_2, W_4 denotes N,

and the physiologically acceptable salts, solvates, stereoisomers and tautomers thereof, including mixtures thereof in all ratios.

5. Compound according to any of claims 1 to 4, wherein

R^1 denotes phenyl, which can be substituted by at least one substituent selected from the group consisting of Y, Hal, CN, CF_3 or OY,

and the physiologically acceptable salts, solvates, stereoisomers and tautomers thereof, including mixtures thereof in all ratios.

6. Compound according to any of claims 1 to 5, wherein

R^2 is absent or denotes H, A, Hal, $-(CYY)_n-OY$, NO_2, $-(CYY)_n-NYY$, $-(CYY)_n-Het$, $-O-(CYY)_n-Het$, $-O-(CYY)_n-OY$, $-O-(CYY)_n-NYY$,

NY-(CYY)$_n$-NYY, NY-COY or a monocyclic heteroaryl having 5, 6, 7, 8, 9, 10, 11, 12, 13 or 14 C atoms and 1, 2, 3, 4 or 5 N, O and/or S atoms, where the monocyclic heteroaryl can be independently substituted by at least one substituent selected from the group consisting of Y, Hal, CN, CF_3 or OY,

and the physiologically acceptable salts, solvates, stereoisomers and tautomers thereof, including mixtures thereof in all ratios.

7. Compound according to any of claims 1 to 6, wherein

W_1, W_3, W_4 denote independently from each other CR^3, and

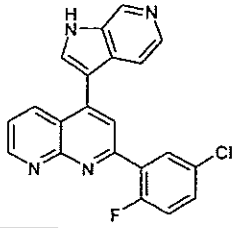
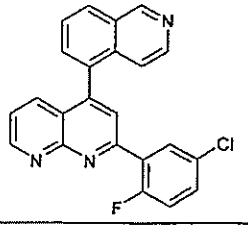
W_2, W_5 denote N, and

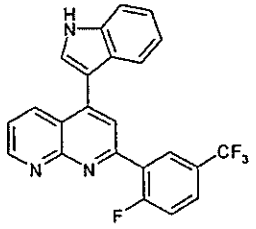
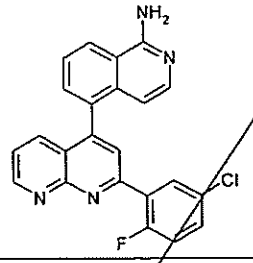
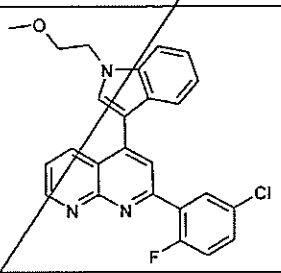
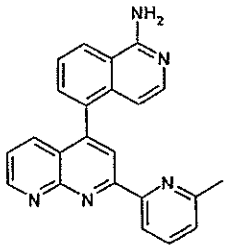
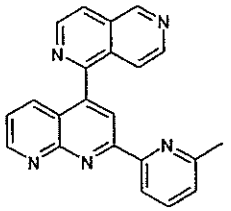
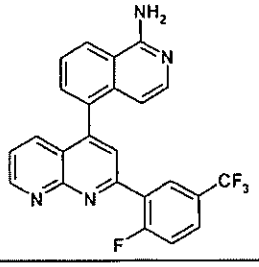
Z denotes C=C, and

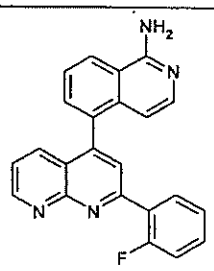
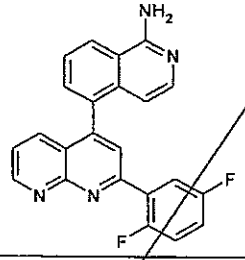
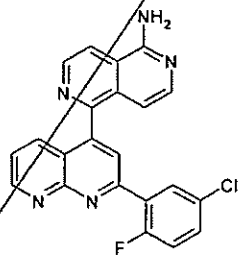
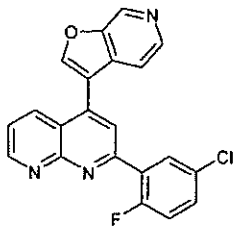
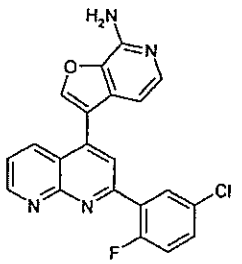
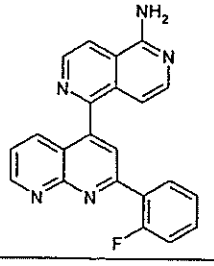
R^1 denotes phenyl, which can be substituted by at least one substituent selected from the group consisting of Y, Hal, CN, CF_3 or OY,

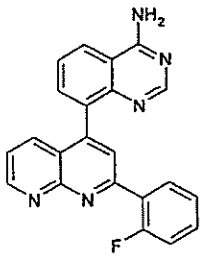
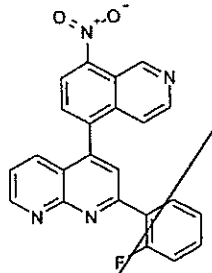
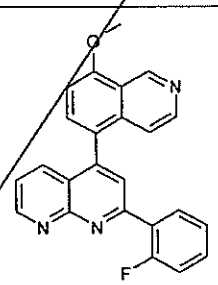
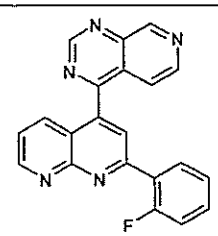
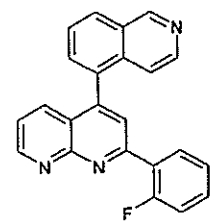
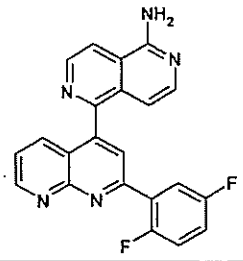
and the physiologically acceptable salts, solvates, stereoisomers and tautomers thereof, including mixtures thereof in all ratios.

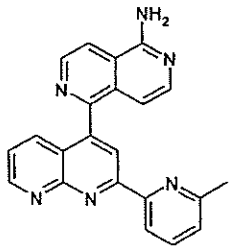
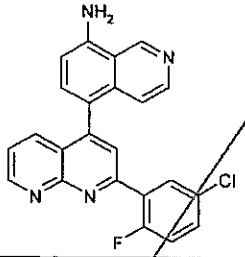
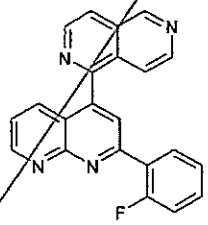
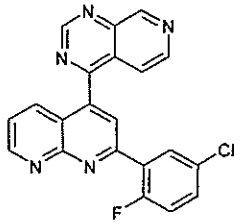
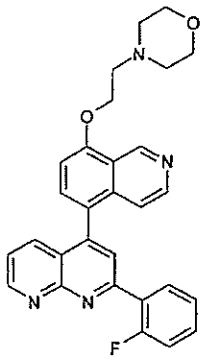
8. Compounds according to any of claims 1 to 7, which are selected from the group consisting of:

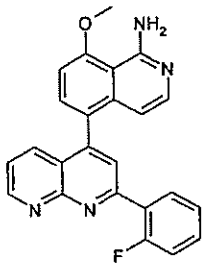
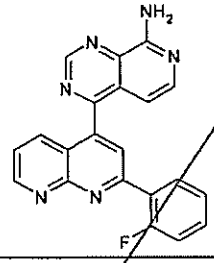
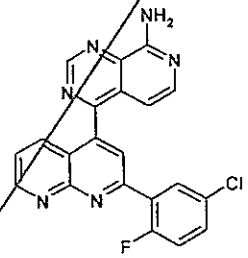
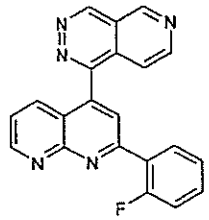
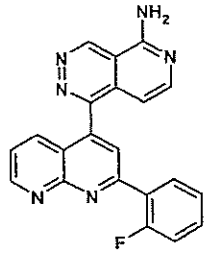
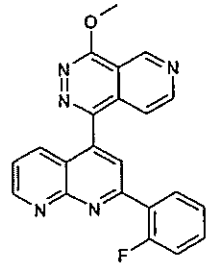
Compound 1	
Compound 2	

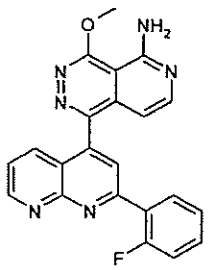
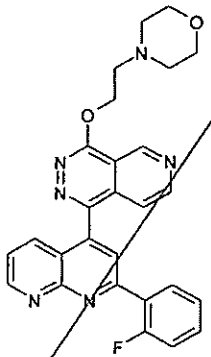
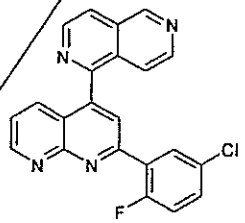
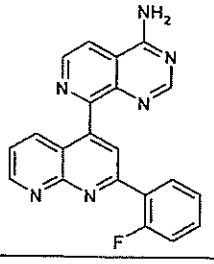
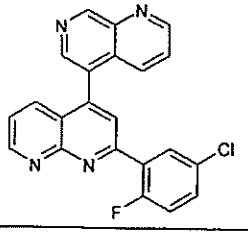
Compound 3	
Compound 4	
Compound 5	
Compound 6	
Compound 7	
Compound 8	

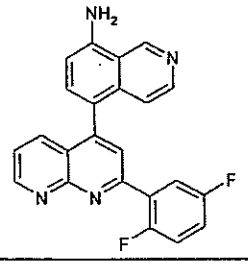
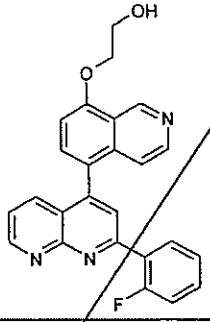
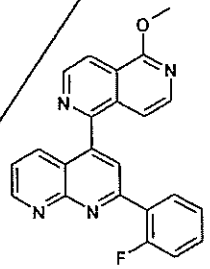
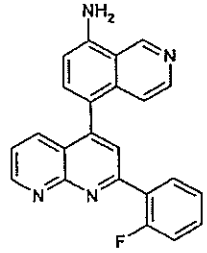
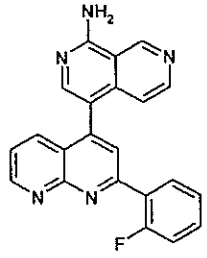
Compound 9	
Compound 10	
Compound 11	
Compound 12	
Compound 13	
Compound 14	

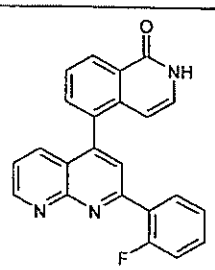
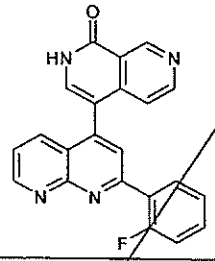
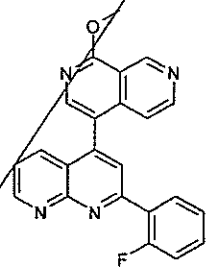
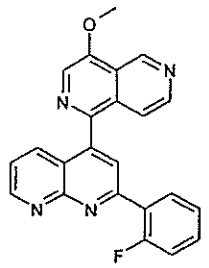
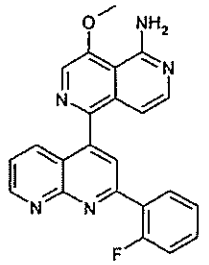
Compound 15	
Compound 16	
Compound 17	
Compound 18	
Compound 19	
Compound 20	

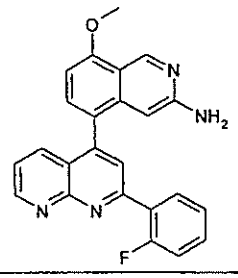
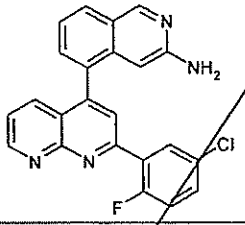
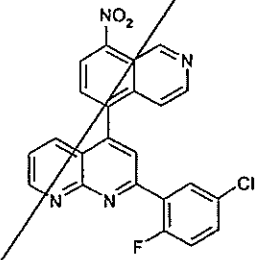
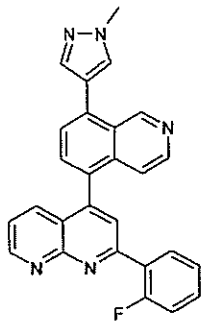
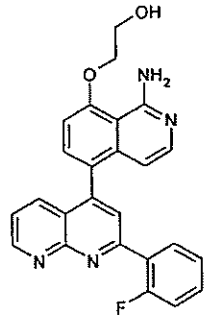
Compound 21	
Compound 22	
Compound 23	
Compound 24	
Compound 25	

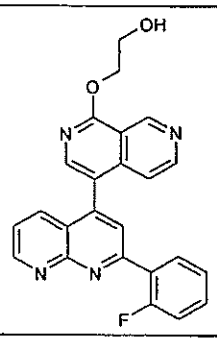
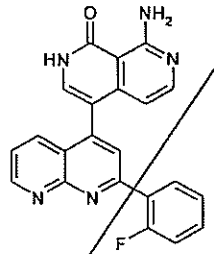
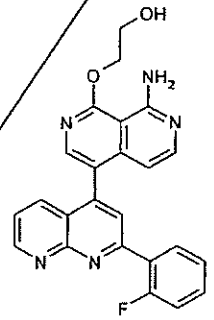
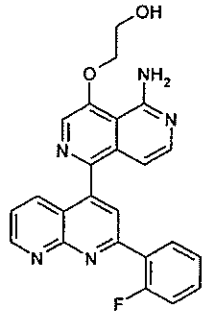
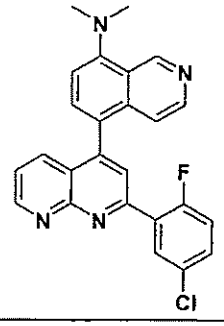
Compound 26	
Compound 28	
Compound 29	
Compound 30	
Compound 31	
Compound 32	

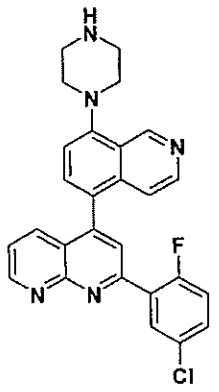
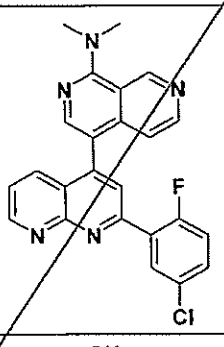
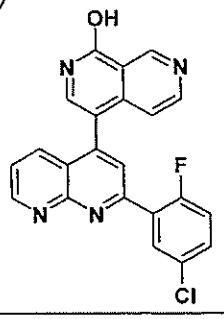
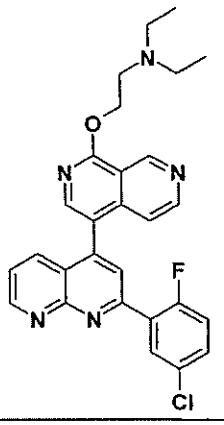
Compound 33	
Compound 34	
Compound 35	
Compound 36	
Compound 37	

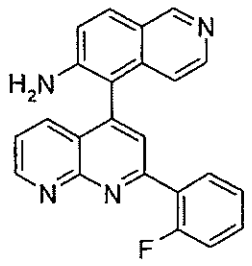
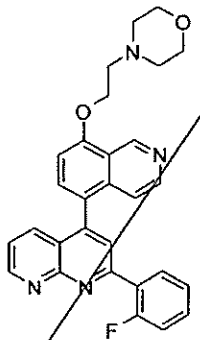
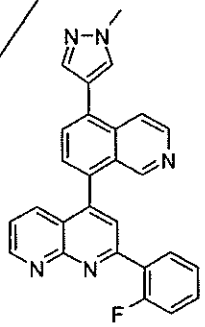
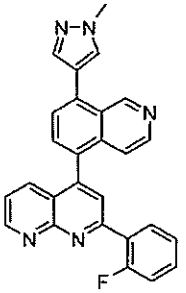
Compound 38	
Compound 39	
Compound 40	
Compound 41	
Compound 42	

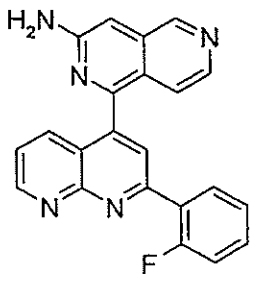
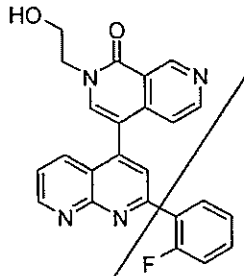
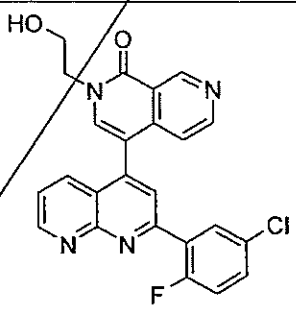
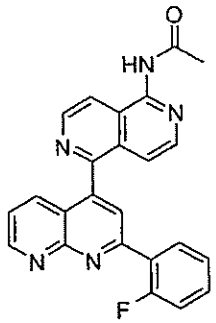
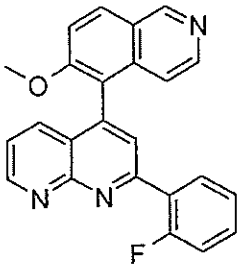
Compound 43	
Compound 44	
Compound 45	
Compound 46	
Compound 47	

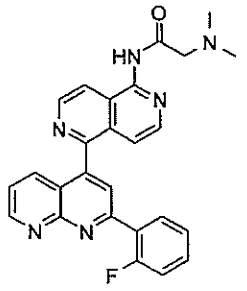
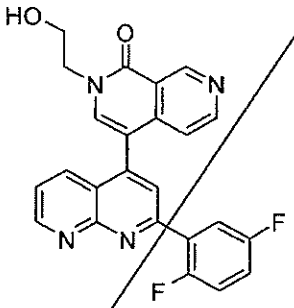
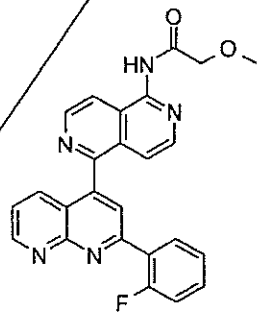
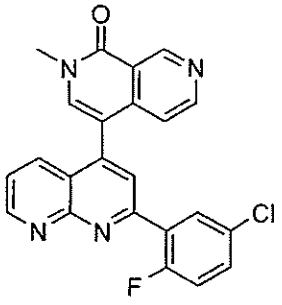
Compound 48	
Compound 49	
Compound 50	
Compound 51	
Compound 52	

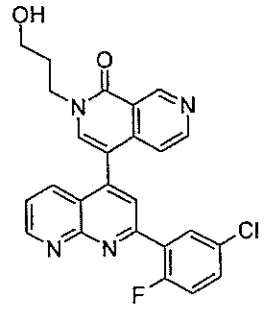
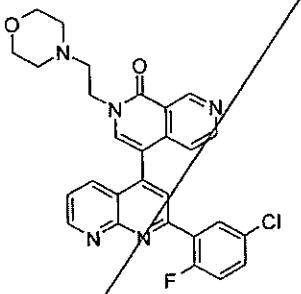
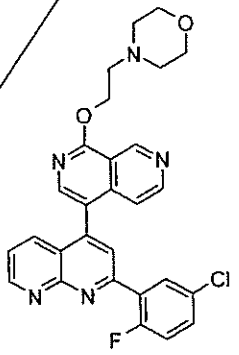
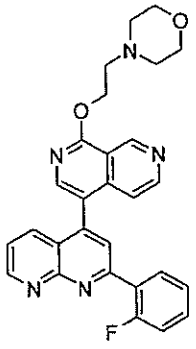
Compound 53	
Compound 54	
Compound 55	
Compound 56	
Compound 57	

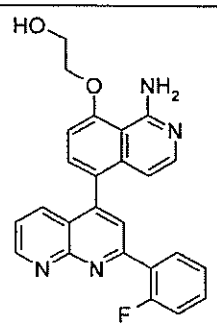
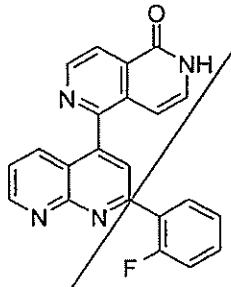
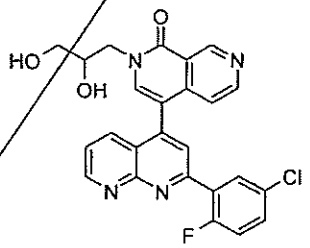
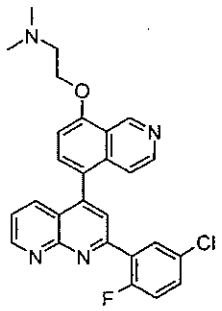
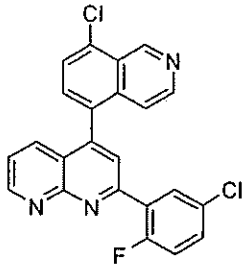
Compound 58	
Compound 59	
Compound 60	
Compound 61	

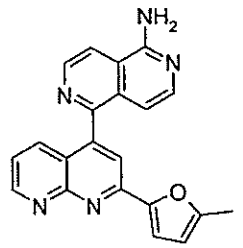
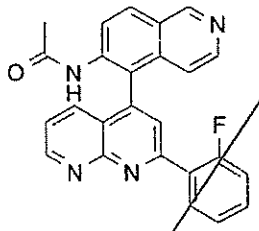
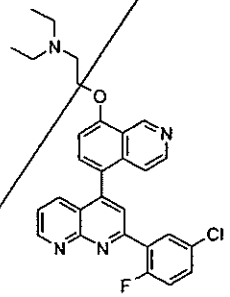
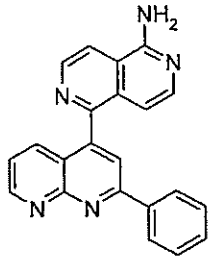
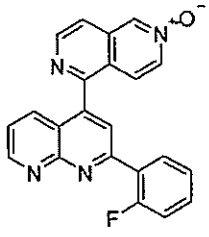
Compound 62	
Compound 63	
Compound 64	
Compound 65	

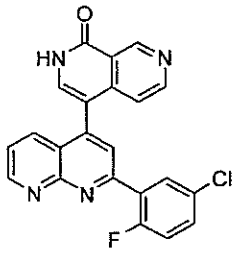
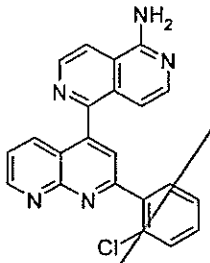
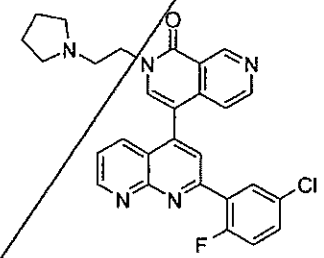
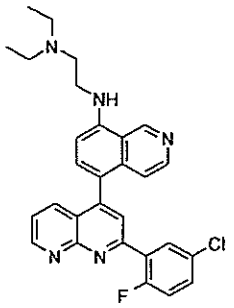
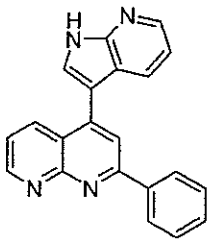
Compound 66	
Compound 67	
Compound 68	
Compound 69	
Compound 70	

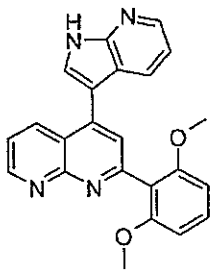
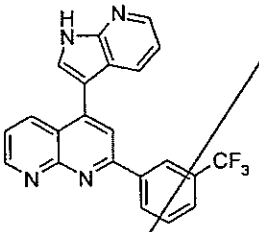
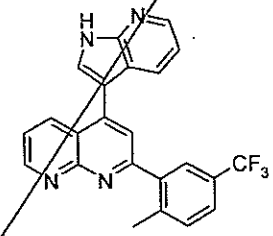
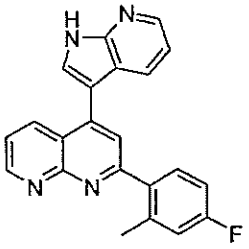
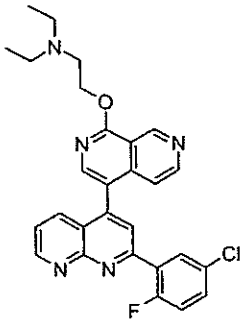
Compound 71	
Compound 72	
Compound 73	
Compound 74	

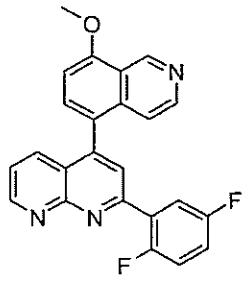
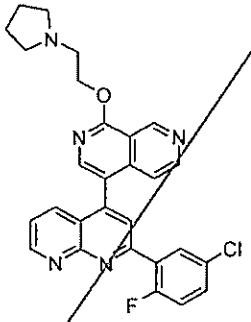
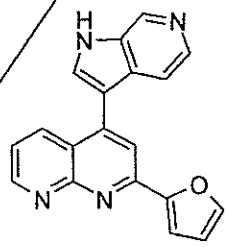
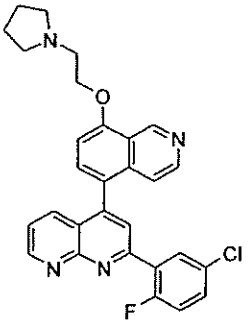
Compound 75	
Compound 76	
Compound 77	
Compound 78	

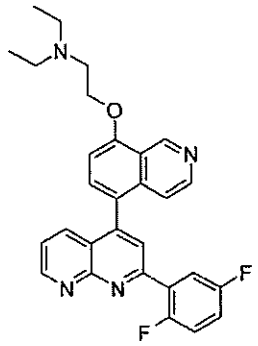
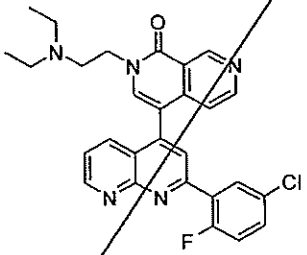
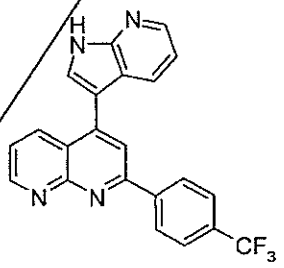
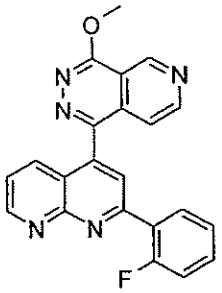
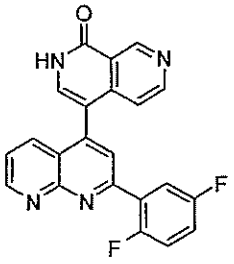
Compound 79	
Compound 80	
Compound 81	
Compound 82	
Compound 83	

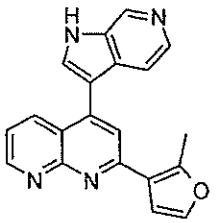
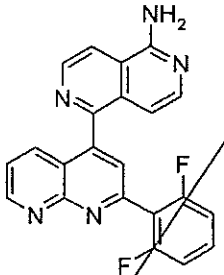
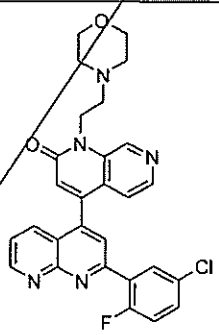
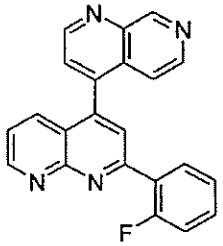
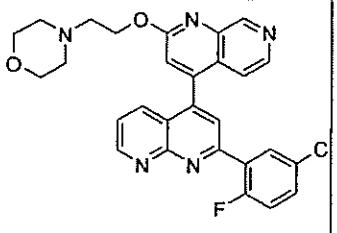
Compound 84	
Compound 85	
Compound 86	
Compound 87	
Compound 88	

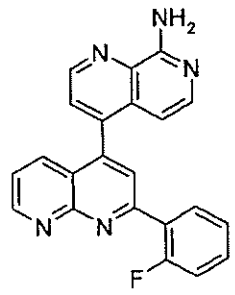
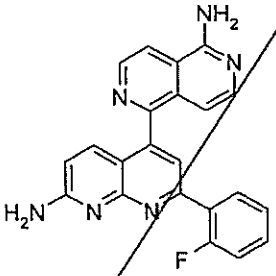
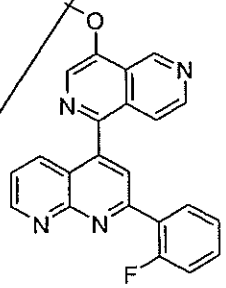
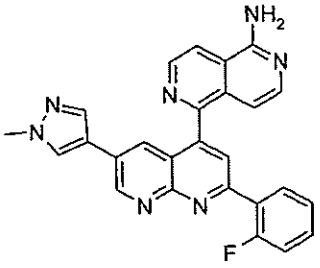
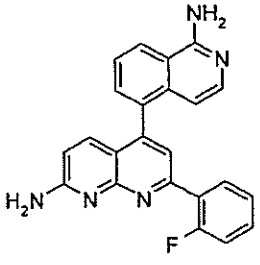
Compound 89	
Compound 90	
Compound 91	
Compound 92	
Compound 93	

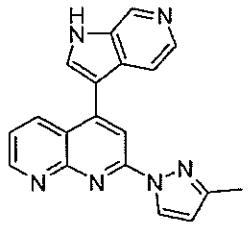
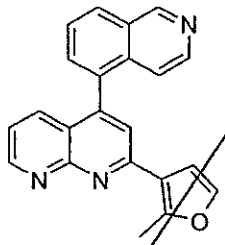
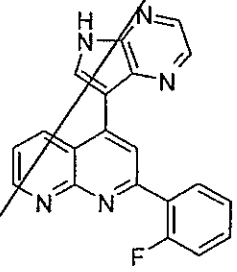
Compound 94	
Compound 95	
Compound 96	
Compound 97	
Compound 98	

Compound 99	
Compound 100	
Compound 101	
Compound 102	

Compound 103	
Compound 104	
Compound 105	
Compound 106	
Compound 107	

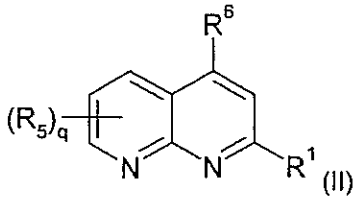
Compound 108	
Compound 109	
Compound 110	
Compound 111	
Compound 112	

Compound 113	
Compound 114	
Compound 115	
Compound 116	
Compound 117	

Compound 118	
Compound 119	
Compound 120	

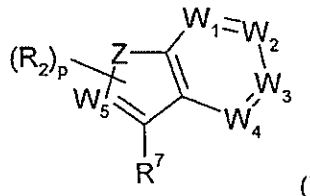
and the physiologically acceptable salts, solvates, stereoisomers and tautomers thereof, including mixtures thereof in all ratios.

9. Process for manufacturing a compound of formula (I) comprising the steps of:
(a) reacting a compound of formula (II)


(II)

wherein
R^6 denotes Hal or $B(OH)_2$, and
R^1, R^5, q and Hal have the meaning as defined above,

with a compound of formula (III)



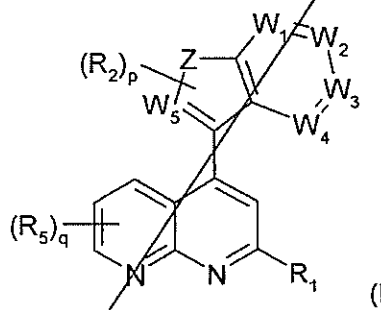
(III)

wherein

R^7 denotes Hal, boronic acid or a ester of boronic acid, and

R^2, p, Z, W_1, W_2, W_3, W_4, W_5 and Hal have the meaning as defined above,

to yield the compound of formula (I)



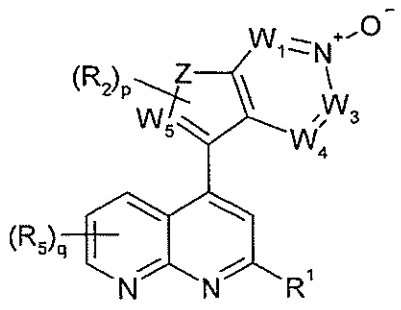
(I)

wherein

R^1, R^2, R^5, p, q, Z, W_1, W_2, W_3, W_4, and W_5 have the meaning as defined above,

or

b) reacting a compound of formula (IV)



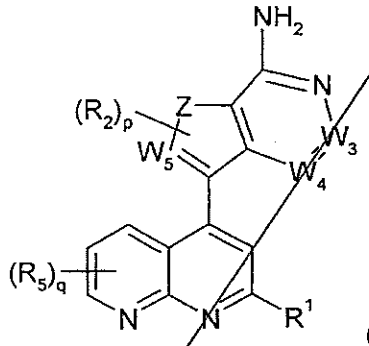
(IV)

wherein

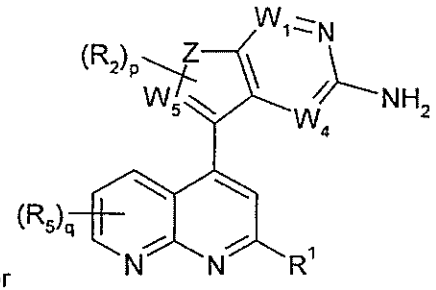
R^1, R^2, R^5, p, q, Z, W_1, W_3, W_4, and W_5 have the meaning as defined above,

with alkyl- or arylsulfonylchloride, such as methanesulfonylchloride or p-toluenesulfonylchloride, pyridine or alkyl-pyridine and a primary alkylamine, such as ethanolamine, propylamine or butylamine,

to yield the compound of formula (I') and/or (I'')



(I') and/or



(I'')

wherein

R^1, R^2, R^5, p, q, Z, W_1, W_3, W_4, and W_5 have the meaning as defined above and for formula (I') W_1 is CR^3 with R^3 being NYY and Y being H and W_2 is N and for formula (I'') W_3 is CR^3 with R^3 being NYY and Y being H and W_2 is N,

and optionally

(c) converting a base or an acid of the compound of formula (I), (I') or (I'') into a salt thereof.

10. Use of compounds according to any of claims 1 to 8 for inhibiting ATP consuming proteins, preferably TGF-beta receptor kinase, RON, TAK1, PKD1, MINK1, SAPK2-alpha, SAPK2-beta and/or CHK2.

11. Medicament comprising at least one compound acoording to any of claims 1 to 8.

12. Medicament comprising at least one compound according to any of claims 1 to 8 for use in the treatment and/or prophylaxis of physiological and/or pathophysiological conditions selected from the group consisting of: "cancer, tumour, malignant tumours, benign tumours, solid tumours, sarcomas, carcinomas, hyperproliferative disorders, carcinoids, Ewing sarcomas, Kaposi sarcomas, brain tumours, tumours originating from the brain and/or the nervous system and/or the meninges, gliomas, glioblastomas, neuroblastomas, stomach cancer, kidney cancer, kidney cell carcinomas, prostate cancer, prostate carcinomas, connective tissue tumours, soft tissue sarcomas, pancreas tumours, liver tumours, head tumours, neck tumours, laryngeal cancer, oesophageal cancer, thyroid cancer, osteosarcomas, retinoblastomas, thymoma, testicular cancer, lung cancer, lung adenocarcinoma, small cell lung carcinoma, bronchial carcinomas, breast cancer, mamma carcinomas, intestinal cancer, colorectal tumours, colon carcinomas, rectum carcinomas, gynaecological tumours, ovary tumours/ovarian tumours, uterine cancer, cervical cancer, cervix carcinomas, cancer of body of uterus, corpus carcinomas, endometrial carcinomas, urinary bladder cancer, urogenital tract cancer, bladder cancer, skin cancer, epithelial tumours, squamous epithelial carcinoma, basaliomas, spinaliomas, melanomas, intraocular melanomas, leukaemias, monocyte leukaemia, chronic leukaemias, chronic myelotic leukaemia, chronic lymphatic leukemia, acute leukaemias, acute myelotic leukaemia, acute lymphatic leukemia, lymphomas, opthalmic diseases, choroidal neovascularization, diabetic retinopathy, inflammatory diseases, arthritis, neurodegeneration, transplant rejection, metastatic growth, fibrosis, restenosis, HIV infection, atherosclerosis, inflammation and disorders of wound healing, angiogenesis, cardiovascular system, bone, CNS and/or PNS."

13. The medicament according to any of claims 11 to 12, wherein in such medicament comprises at least one additional pharmacologically active substance.

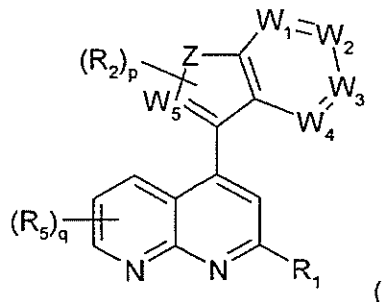
14. The medicament according to any of claims 11 to 12, wherein the medicament is applied before and/or during and/or after treatment with at least one additional pharmacologically active substance.

15. Pharmaceutical composition comprising a therapeutically effective amount of at least one compound according to any of claims 1 to 8, optionally further comprising at least one additional compound selected from the group consisting of physiologically acceptable excipients, auxiliaries, adjuvants, diluents, carriers and/or additional pharmaceutically active substance other than the compound according to any of claims 1 to 8.

16. Kit comprising a therapeutically effective amount of at least one compound according to any of claims 1 to 8 and/or at least one pharmaceutical composition according to claim 15 and a therapeutically effective amount of at least one further pharmacologically active substance other than the compound according to any of claims 1 to 8.

Claims

1. Compounds of formula (I)



(I)

wherein:

W_1, W_2, W_3, W_4 denotes independently from each other N or CR^3,

W_5 denotes N or C, preferably denotes N or CR^3, more preferably denotes N,

Z denotes

C=C, $N(R^4)CO$, NR^4, C=N, O, $CON(R^4)$, S, CH or N=N,

R^1 denotes a monocyclic aryl having 5, 6, 7, 8, 9 or 10 C atoms or a monocyclic heteroaryl having 5, 6, 7, 8, 9, 10, 11, 12, 13 or 14 C atoms and 1, 2, 3, 4 or 5 N, O and/or S atoms, each of which can be independently substituted by at least one substituent selected from the group consisting of Y, Hal, CN, CF_3 or OY,

R^2 denotes H, Hal, A, $-(CYY)_n-OY$, $-(CYY)_n-NYY$, $-(CYY)_n-Het$, SY, NO_2, CN, COOY, -CO-NYY, -NY-COA, $-NY-SO_2A$, $-SO_2-NYY$, $S(O)_mA$, -CO-Het, $-O(CYY)_n-OY$, $-O(CYY)_n-NYY$, $-O(CYY)_n-Het$, -NH-COOA, -NH-CO-NYY, -NH-COO-$(CYY)_n-NYY$, $-NH-COO-(CYY)_n-Het$, $-NH-CO-NH-(CYY)_n-NYY$, $-NH-CO-NH(CYY)_n-Het$, $-OCO-NH-(CYY)_n-NYY$, -

		$OCO\text{-}NH\text{-}(CYY)_n\text{-}Het$, CHO, COA, or a monocyclic aryl having 5, 6, 7, 8, 9 or 10 C atoms or a monocyclic heteroaryl having 5, 6, 7, 8, 9, 10, 11, 12, 13 or 14 C atoms and 1, 2, 3, 4 or 5 N, O and/or S atoms, each of monocyclic aryl and monocyclic heteroaryl can be independently substituted by at least one substituent selected from the group consisting of Y, Hal, CN, CF_3 or OY,
	R^3	denotes H, OY, NYY, NY-COY, $NY\text{-}CO\text{-}(CYY)_n\text{-}OY$, NY-COY-NYY, $NY\text{-}(CYY)_n\text{-}NYY$, $O\text{-}(CYY)_n\text{-}NYY$ or $O\text{-}(CYY)_n\text{-}Het$,
	R^4	denotes H, A, $\text{-}(CYY)_o\text{-}Het$, $\text{-}(CYY)_o\text{-}NYY$ or $\text{-}(CYY)_o\text{-}OY$,
	R^5	denotes H, A, OY, NYY or Het,
	Y	denotes H or A, in case of $\text{-}(CYY)_{n/o}\text{-}$ Y denotes H, A or OH,
	A	denotes unbranched or branched alkyl having 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 C atoms, in which 1, 2, 3, 4, 5, 6 or 7 H atoms can be replaced independently from one another by Hal and/or in which one or two CH_2 groups can be replaced independently of one another by a O, S, SO, SO_2, a -CY=CY- group and/or a -C≡C- group; alternatively, A denotes cycloalkyl with 3, 4, 5, 6, 7 or 8 C-atoms,
	Het	denotes a saturated or unsaturated, mono, bi- or tricyclic heterocycle having 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 or 20 C atoms and 1, 2, 3, 4 or 5 N, O and/or S atoms, which can be substituted by at least one substituent selected from the group consisting of Y, Hal, CN, CF_3, OY,
	Hal	denotes F, Cl, Br or I,

m denotes 0, 1 or 2,

n denotes 0, 1, 2, 3 or 4,

o denotes 0, 1, 2, 3 or 4, preferably if Z is NR^4, o additionally denotes 2, 3 or 4,

p denotes 0, 1, 2 or 3,

q denotes 0, 1, 2 or 3,

with the proviso that the following compounds are excluded:

(a) 2-(5-chloro-2-fluoro-phenyl)-4-isoquinolin-4-yl-[1,8]naphthyridine,

(b) 4-isoquinolin-4-yl-2-(6-methyl-pyridin-2-yl)-[1,8]naphthyridine,

(c) 4-[2-(2-fluoro-phenyl)-[1,8]naphthyridin-4-yl]-[2,7]naphthyridin-1-ylamine,

(d) 4-[2-(2,5-difluoro-phenyl)-[1,8]naphthyridin-4-yl]-[2,7]naphthyridin-1-ylamine,

(e) N-{4-[2-(2-fluoro-phenyl)-[1,8]naphthyridin-4-yl]-[2,7]naphthyridin-1-yl}-acetamide,

(f) 2-(2-fluoro-phenyl)-4-[2,7]naphthyridin-4-yl-[1,8]naphthyridine,

(g) 5-[2-(2-fluoro-phenyl)-[1,8]naphthyridin-4-yl]-[2,7]naphthyridin-1-ylamine,

(h) 5-[2-(5-chloro-2-fluoro-phenyl)-[1,8]naphthyridin-4-yl]-[1,7]naphthyridine,

(i) 4-[2-(5-chloro-2-fluoro-phenyl)-[1,8]naphthyridin-4-yl]-[2,7]naphthyridin-1-ylamine,

and the physiologically acceptable salts, solvates, stereoisomers and tautomers thereof, including mixtures thereof in all ratios.

2. Compound according to claim 1, with the further proviso that W_5 denotes N and/or Z excludes N=C, i.e. Z denotes C=C, $N(R^4)CO$, NR^4, C=N, O, $CON(R^4)$, S, CH or N=N,
and the physiologically acceptable salts, solvates, stereoisomers and tautomers thereof, including mixtures thereof in all ratios.

3. Compound according to claim 1 or 2, wherein Z is selected from the group consisting of:

(a) C=C, or

(b) $N(R^4)CO$, or

(c) NR^4, or

(d) C=N, or

(e) O, or

(f) $CON(R^4)$,

and preferably is C=C,

and the physiologically acceptable salts, solvates, stereoisomers and tautomers thereof, including mixtures thereof in all ratios.

4. Compound according to any of claims 1 to 3, wherein

(a) W_1, W_3, W_4 denote independently from each other CR^3, and
W_2 denotes N, or

(b) W_2, W_3, W_4 denote independently from each other CR^3, and
W_1 denotes N, or

(c) W_1, W_2, W_4 denote independently from each other CR^3, and
W_3 denotes N, or

(d) W_1, W_2, W_3, W_4 denote independently from each other CR^3, or

(e) W_1, W_3 denote independently from each other CR^3, and
W_2, W_4 denotes N,

and the physiologically acceptable salts, solvates, stereoisomers and tautomers thereof, including mixtures thereof in all ratios.

5. Compound according to any of claims 1 to 4, wherein

R^1 denotes phenyl, which can be substituted by at least one substituent selected from the group consisting of Y, Hal, CN, CF_3 or OY,

and the physiologically acceptable salts, solvates, stereoisomers and tautomers thereof, including mixtures thereof in all ratios.

6. Compound according to any of claims 1 to 5, wherein

R^2 is absent or denotes H, A, Hal, $-(CYY)_n-OY$, NO_2, $-(CYY)_n-NYY$, $-(CYY)_n-Het$, $-O-(CYY)_n-Het$, $-O-(CYY)_n-OY$, $-O-(CYY)_n-NYY$,

NY-$(CYY)_n$-NYY, NY-COY or a monocyclic heteroaryl having 5, 6, 7, 8, 9, 10, 11, 12, 13 or 14 C atoms and 1, 2, 3, 4 or 5 N, O and/or S atoms, where the monocyclic heteroaryl can be independently substituted by at least one substituent selected from the group consisting of Y, Hal, CN, CF_3 or OY,

and the physiologically acceptable salts, solvates, stereoisomers and tautomers thereof, including mixtures thereof in all ratios.

7. Compound according to any of claims 1 to 6, wherein

W_1, W_3, W_4 denote independently from each other CR^3, and

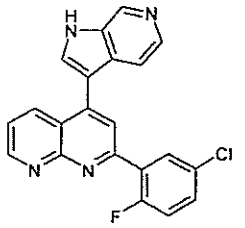
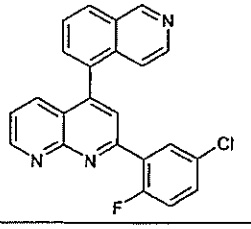
W_2, W_5 denote N, and

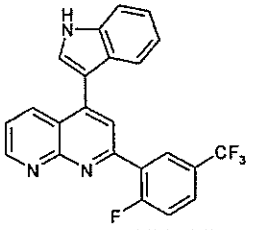
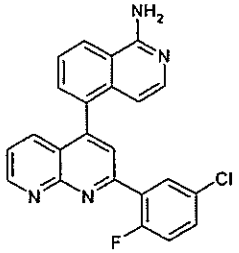
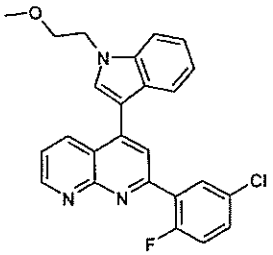
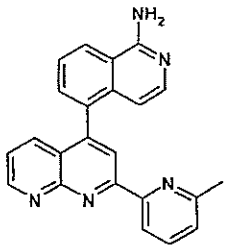
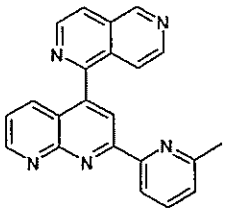
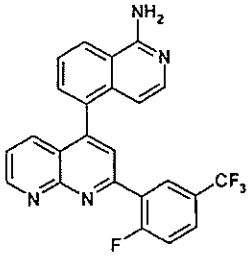
Z denotes C=C, and

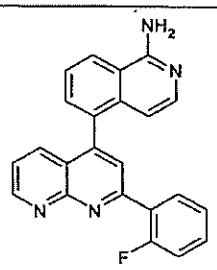
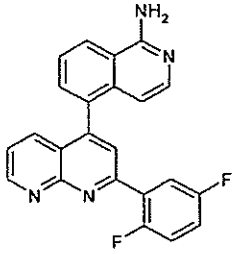
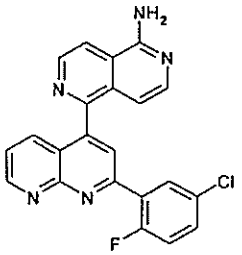
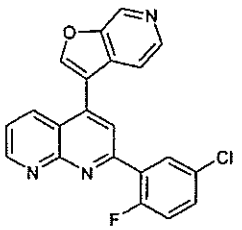
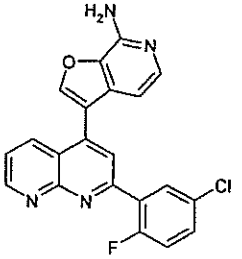
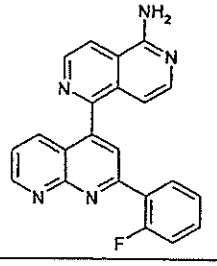
R^1 denotes phenyl, which can be substituted by at least one substituent selected from the group consisting of Y, Hal, CN, CF_3 or OY,

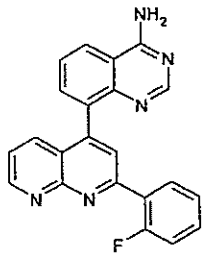
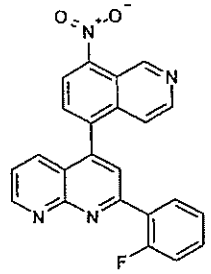
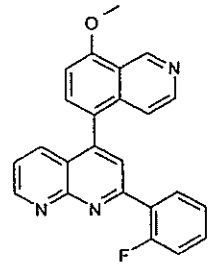
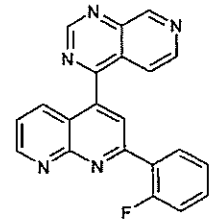
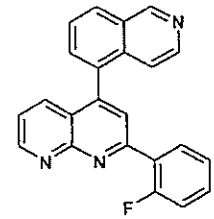
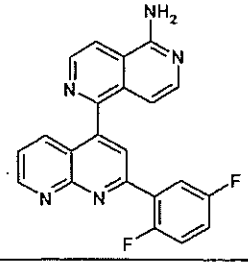
and the physiologically acceptable salts, solvates, stereoisomers and tautomers thereof, including mixtures thereof in all ratios.

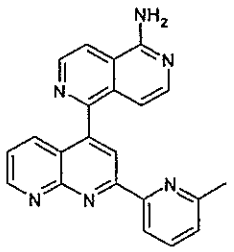
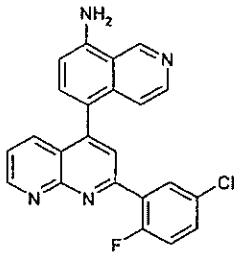
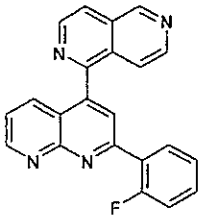
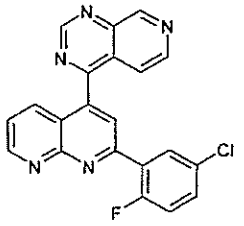
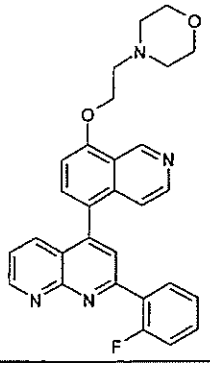
8. Compounds according to any of claims 1 to 7, which are selected from the group consisting of:

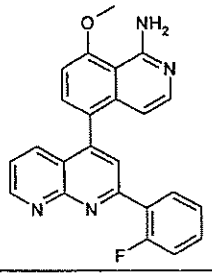
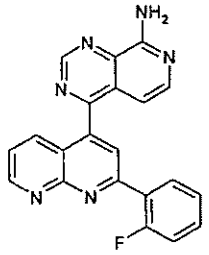
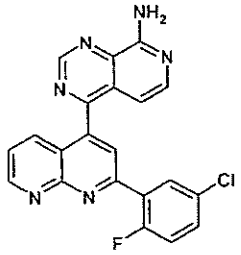
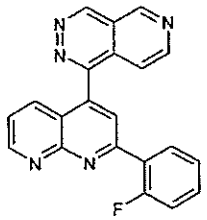
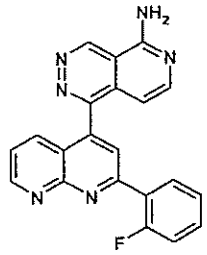
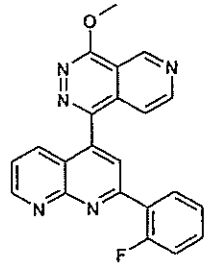
Compound 1	
Compound 2	

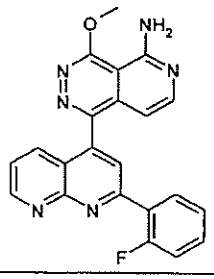
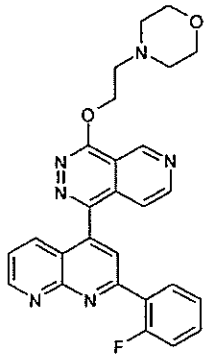
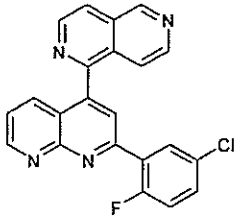
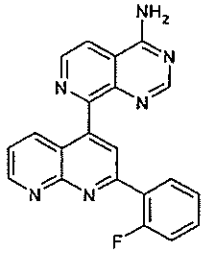
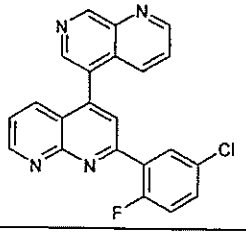
Compound 3	
Compound 4	
Compound 5	
Compound 6	
Compound 7	
Compound 8	

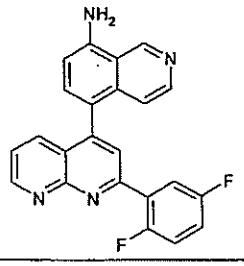
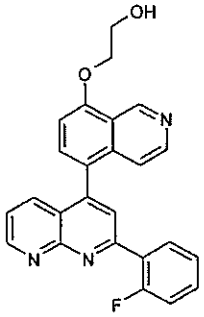
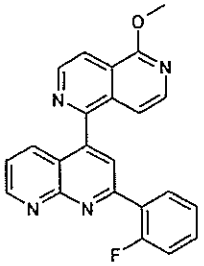
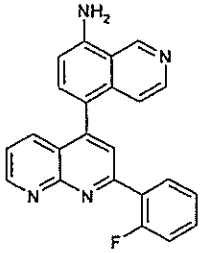
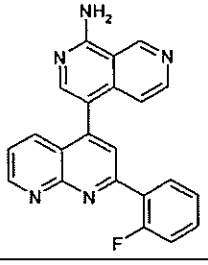
Compound 9	
Compound 10	
Compound 11	
Compound 12	
Compound 13	
Compound 14	

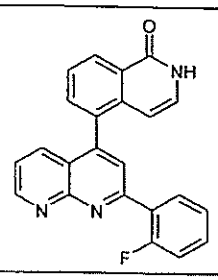
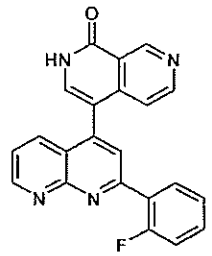
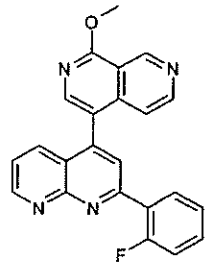
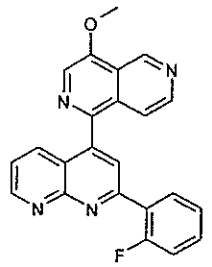
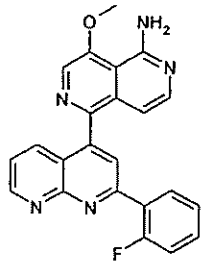
Compound 15	
Compound 16	
Compound 17	
Compound 18	
Compound 19	
Compound 20	

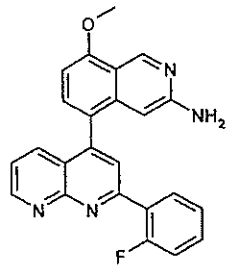
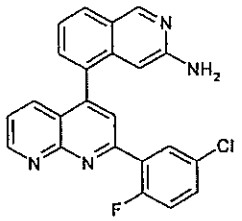
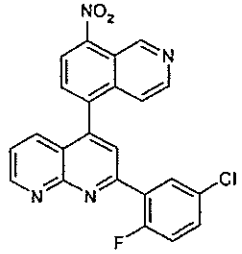
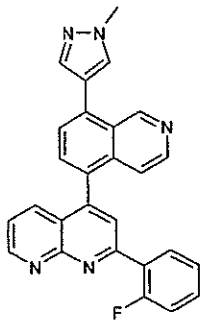
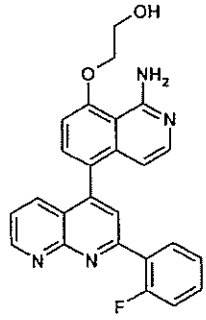
Compound 21	
Compound 22	
Compound 23	
Compound 24	
Compound 25	

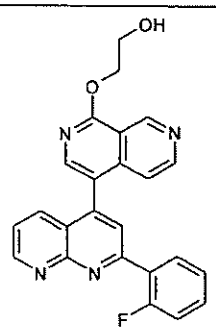
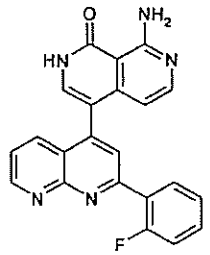
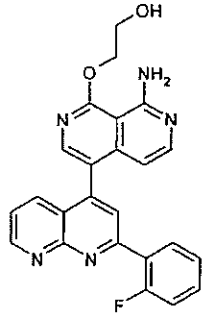
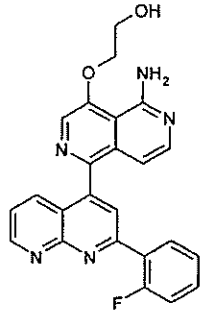
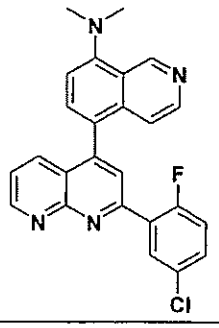
Compound 26	
Compound 28	
Compound 29	
Compound 30	
Compound 31	
Compound 32	

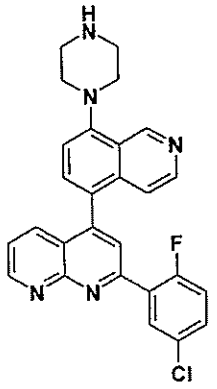
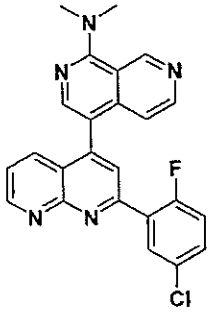
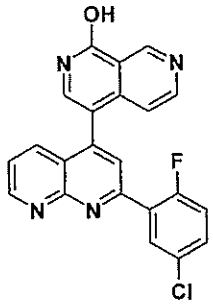
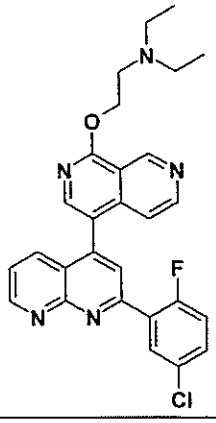
Compound 33	
Compound 34	
Compound 35	
Compound 36	
Compound 37	

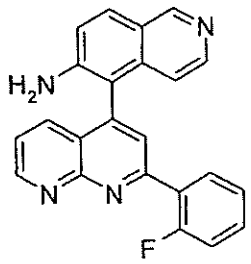
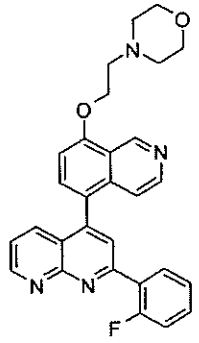
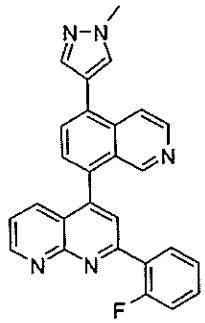
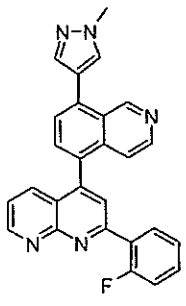
Compound 38	
Compound 39	
Compound 40	
Compound 41	
Compound 42	

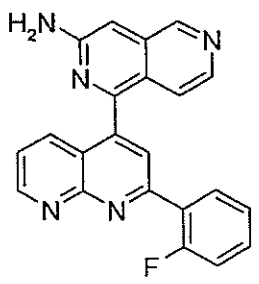
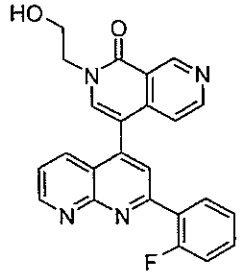
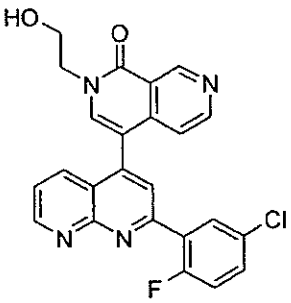
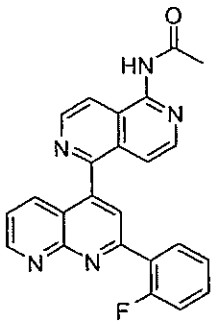
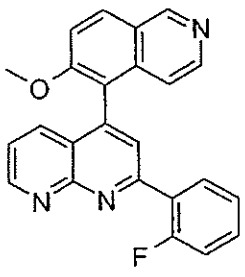
Compound 43	
Compound 44	
Compound 45	
Compound 46	
Compound 47	

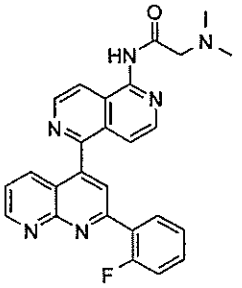
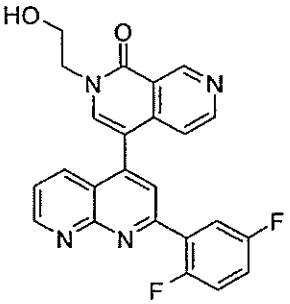
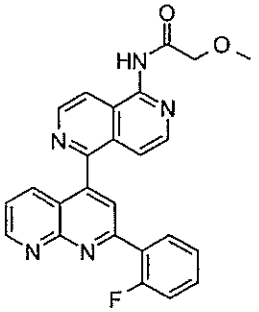
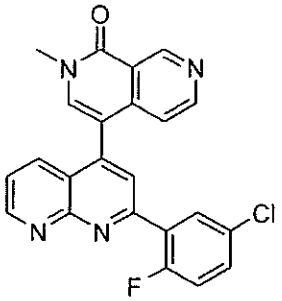
Compound 48	
Compound 49	
Compound 50	
Compound 51	
Compound 52	

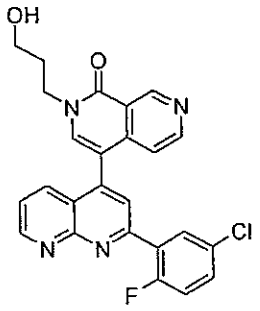
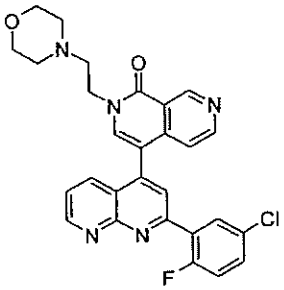
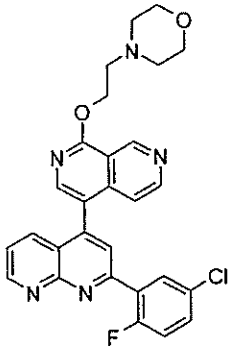
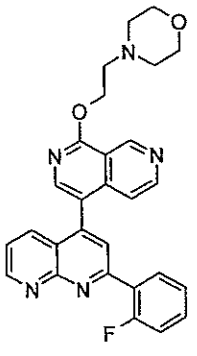
Compound 53	
Compound 54	
Compound 55	
Compound 56	
Compound 57	

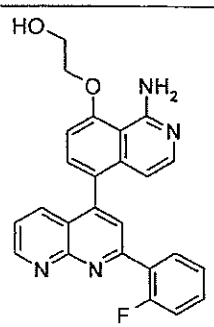
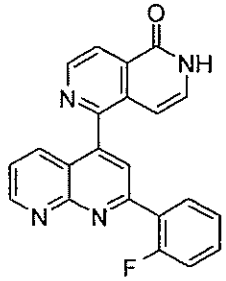
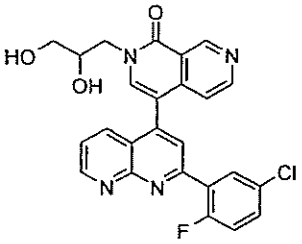
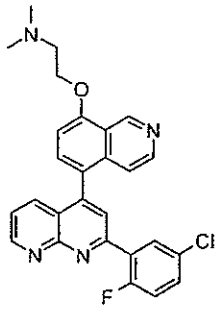
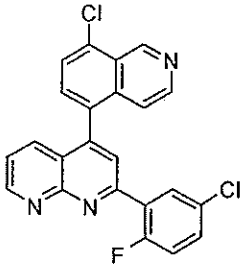
Compound 58	
Compound 59	
Compound 60	
Compound 61	

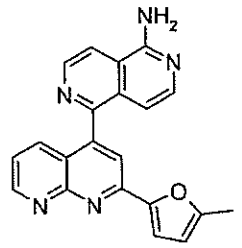
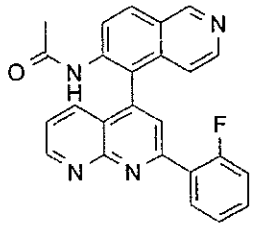
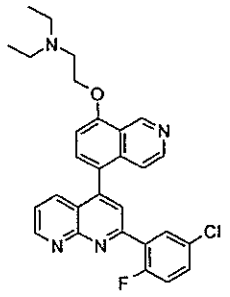
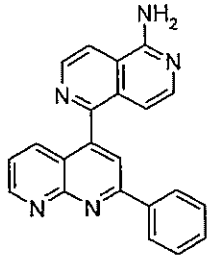
Compound 62	
Compound 63	
Compound 64	
Compound 65	

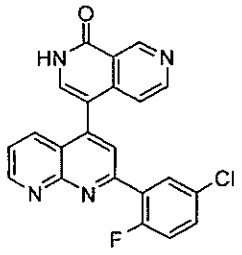
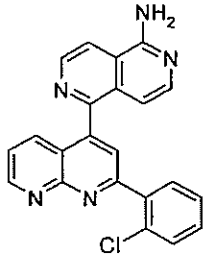
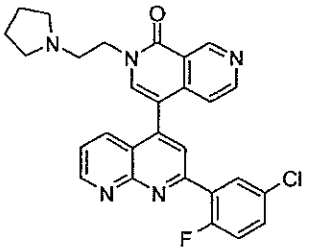
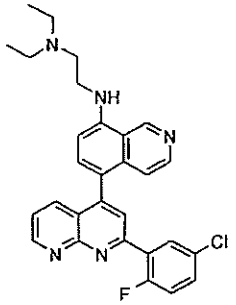
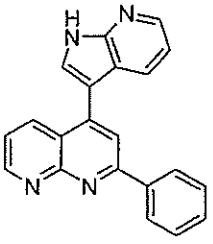
Compound 66	
Compound 67	
Compound 68	
Compound 69	
Compound 70	

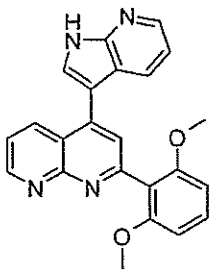
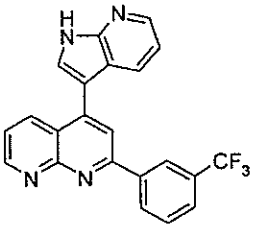
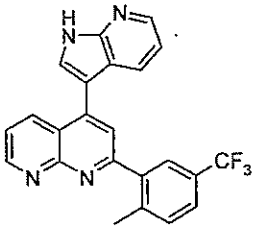
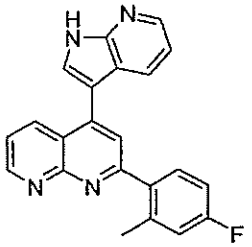
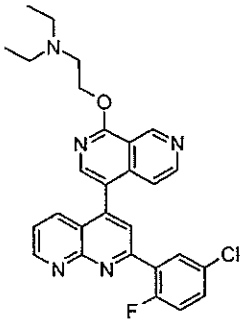
Compound 71	
Compound 72	
Compound 73	
Compound 74	

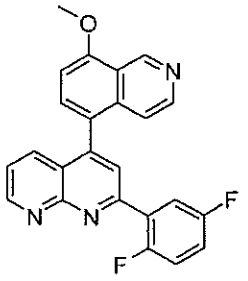
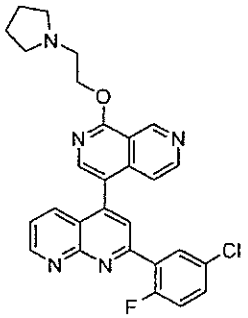
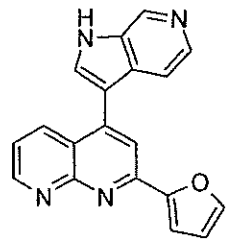
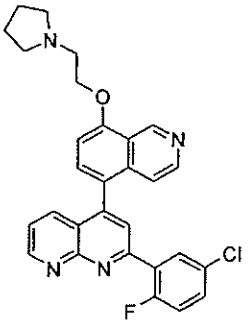
Compound 75	
Compound 76	
Compound 77	
Compound 78	

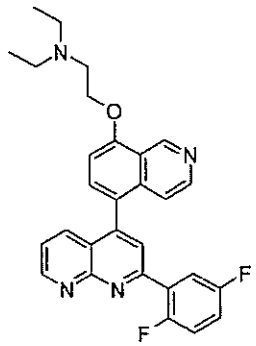
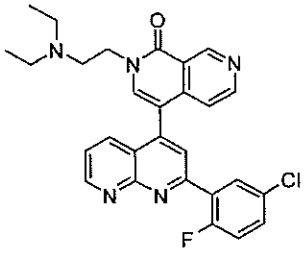
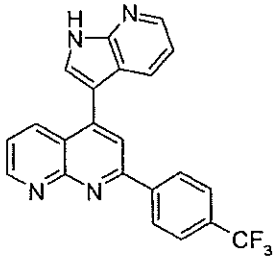
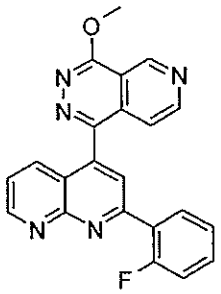
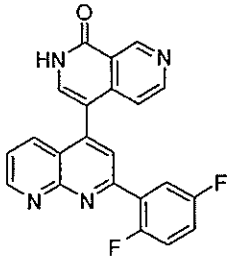
Compound 79	
Compound 80	
Compound 81	
Compound 82	
Compound 83	

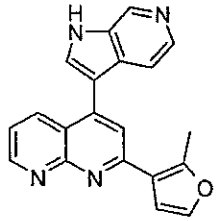
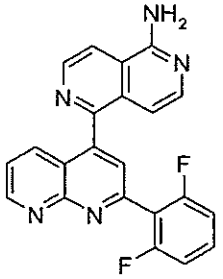
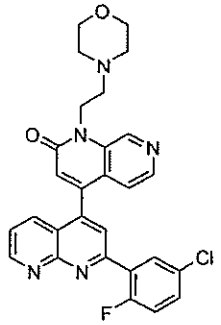
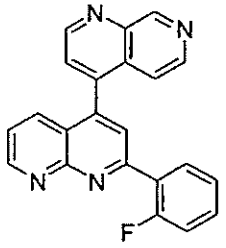
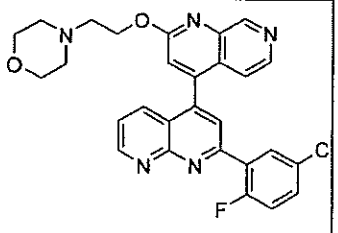
Compound 84	
Compound 85	
Compound 86	
Compound 87	

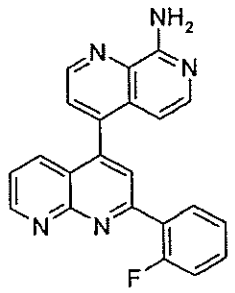
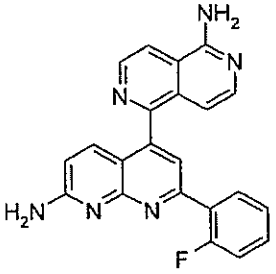
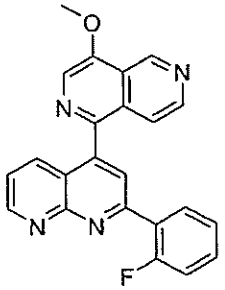
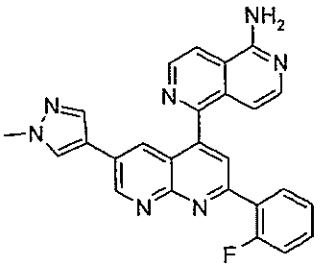
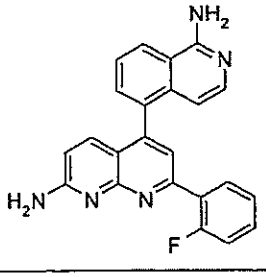
Compound 89	
Compound 90	
Compound 91	
Compound 92	
Compound 93	

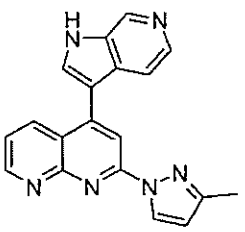
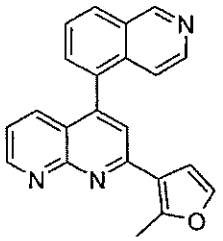
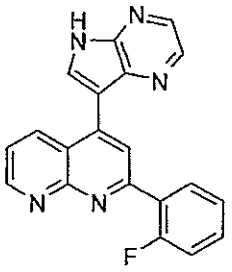
Compound 94	
Compound 95	
Compound 96	
Compound 97	
Compound 98	

Compound 99	
Compound 100	
Compound 101	
Compound 102	

Compound 103	
Compound 104	
Compound 105	
Compound 106	
Compound 107	

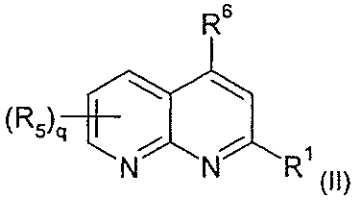
Compound 108	
Compound 109	
Compound 110	
Compound 111	
Compound 112	

Compound 113	
Compound 114	
Compound 115	
Compound 116	
Compound 117	

Compound 118	
Compound 119	
Compound 120	

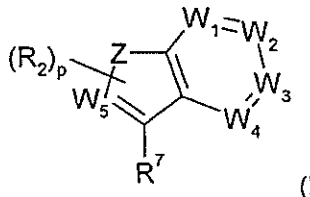
and the physiologically acceptable salts, solvates, stereoisomers and tautomers thereof, including mixtures thereof in all ratios.

9. Process for manufacturing a compound of formula (I) comprising the steps of:
(a) reacting a compound of formula (II)


(II)

wherein
R^6 denotes Hal or $B(OH)_2$, and
R^1, R^5, q and Hal have the meaning as defined above,

with a compound of formula (III)



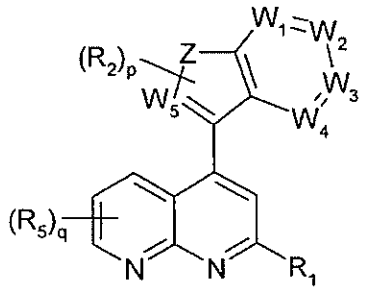
(III)

wherein

R^7 denotes Hal, boronic acid or a ester of boronic acid, and

R^2, p, Z, W_1, W_2, W_3, W_4, W_5 and Hal have the meaning as defined above,

to yield the compound of formula (I)



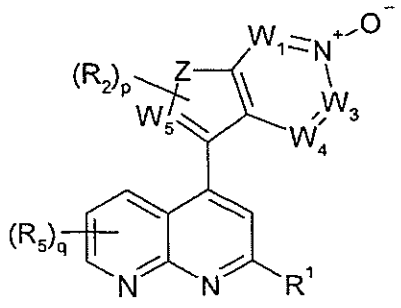
(I)

wherein

R^1, R^2, R^5, p, q, Z, W_1, W_2, W_3, W_4, and W_5 have the meaning as defined above,

or

b) reacting a compound of formula (IV)



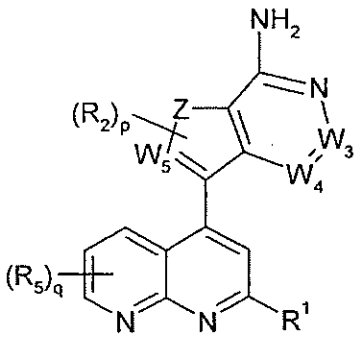
(IV)

wherein

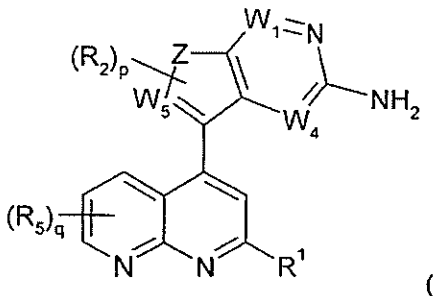
R^1, R^2, R^5, p, q, Z, W_1, W_3, W_4, and W_5 have the meaning as defined above,

with alkyl- or arylsulfonylchloride, such as methanesulfonylchloride or p-toluenesulfonylchloride, pyridine or alkyl-pyridine and a primary alkylamine, such as ethanolamine, propylamine or butylamine,

to yield the compound of formula (I') and/or (I'')



(I') and/or



(I'')

wherein

R^1, R^2, R^5, p, q, Z, W_1, W_3, W_4, and W_5 have the meaning as defined above and for formula (I') W_1 is CR^3 with R^3 being NYY and Y being H and W_2 is N and for formula (I'') W_3 is CR^3 with R^3 being NYY and Y being H and W_2 is N,

and optionally

(c) converting a base or an acid of the compound of formula (I), (I') or (I'') into a salt thereof.

10. Use of compounds according to any of claims 1 to 8 for inhibiting ATP consuming proteins, preferably TGF-beta receptor kinase, RON, TAK1, PKD1, MINK1, SAPK2-alpha, SAPK2-beta and/or CHK2.

11. Medicament comprising at least one compound acoording to any of claims 1 to 8.

12. Medicament comprising at least one compound according to any of claims 1 to 8 for use in the treatment and/or prophylaxis of physiological and/or pathophysiological conditions selected from the group consisting of: "cancer, tumour, malignant tumours, benign tumours, solid tumours, sarcomas, carcinomas, hyperproliferative disorders, carcinoids, Ewing sarcomas, Kaposi sarcomas, brain tumours, tumours originating from the brain and/or the nervous system and/or the meninges, gliomas, glioblastomas, neuroblastomas, stomach cancer, kidney cancer, kidney cell carcinomas, prostate cancer, prostate carcinomas, connective tissue tumours, soft tissue sarcomas, pancreas tumours, liver tumours, head tumours, neck tumours, laryngeal cancer, oesophageal cancer, thyroid cancer, osteosarcomas, retinoblastomas, thymoma, testicular cancer, lung cancer, lung adenocarcinoma, small cell lung carcinoma, bronchial carcinomas, breast cancer, mamma carcinomas, intestinal cancer, colorectal tumours, colon carcinomas, rectum carcinomas, gynaecological tumours, ovary tumours/ovarian tumours, uterine cancer, cervical cancer, cervix carcinomas, cancer of body of uterus, corpus carcinomas, endometrial carcinomas, urinary bladder cancer, urogenital tract cancer, bladder cancer, skin cancer, epithelial tumours, squamous epithelial carcinoma, basaliomas, spinaliomas, melanomas, intraocular melanomas, leukaemias, monocyte leukaemia, chronic leukaemias, chronic myelotic leukaemia, chronic lymphatic leukemia, acute leukaemias, acute myelotic leukaemia, acute lymphatic leukemia, lymphomas, opthalmic diseases, choroidal neovascularization, diabetic retinopathy, inflammatory diseases, arthritis, neurodegeneration, transplant rejection, metastatic growth, fibrosis, restenosis, HIV infection, atherosclerosis, inflammation and disorders of wound healing, angiogenesis, cardiovascular system, bone, CNS and/or PNS."

13. The medicament according to any of claims 11 to 12, wherein in such medicament comprises at least one additional pharmacologically active substance.

14. The medicament according to any of claims 11 to 12, wherein the medicament is applied before and/or during and/or after treatment with at least one additional pharmacologically active substance.

15. Pharmaceutical composition comprising a therapeutically effective amount of at least one compound according to any of claims 1 to 8, optionally further comprising at least one additional compound selected from the group consisting of physiologically acceptable excipients, auxiliaries, adjuvants, diluents, carriers and/or additional pharmaceutically active substance other than the compound according to any of claims 1 to 8.