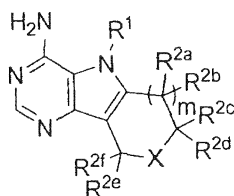


We claim:

1. A compound of the Formula 1:



Formula 1

wherein m is an integer from 0 to 1;

n is an integer for 0 to 2;

R¹ is selected from alkyl, heteroalkyl, carbocyclyl, or heterocyclyl;

R¹ is also selected from aryl or heteroaryl, wherein the aryl and heteroaryl may be further substituted by the groups selected from:

- 1) Halogen,
- 2) Alkoxy,
- 3) Amino,
- 4) -N(H)C(O)O-alkyl
- 5) -N(H)SO₂-aryl,
- 6) -N(H)SO₂-heteroaryl,
- 7) -N(H)CON(H)-aryl,
- 8) and -N(H)CON(H)-heteroaryl;

R^{2a}, R^{2b}, R^{2c}, R^{2d}, R^{2e}, R^{2f} are independently selected from hydrogen, alkyl,

heteroalkyl, carbocyclyl, heterocyclyl, aryl, heteroaryl. R^{2a} and R^{2b}, R^{2c} and R^{2d} or R^{2e}

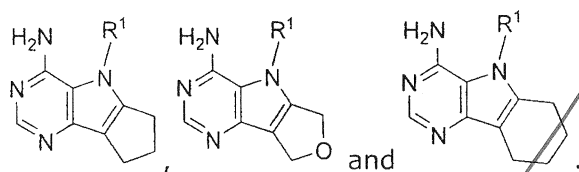
and R^{2f} can be fused to form a 3 to 8 membered cycloalkyl or heterocyclyl ring system;

X is selected from CH_2 , O, $S(O)_n$, NR^3 ;

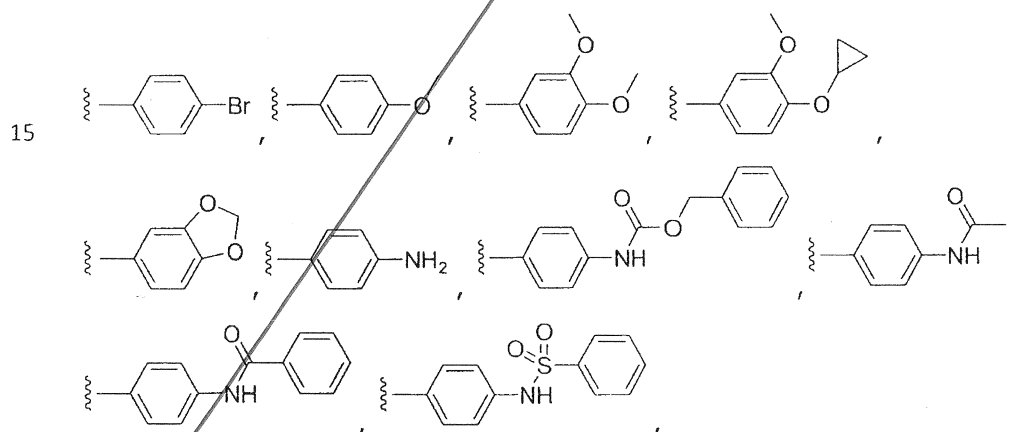
R^3 is selected from hydrogen, alkyl, heteroalkyl, carbocyclyl, heterocyclyl, aryl, heteroaryl, $-C(O)R^4$, $-C(O)OR^4$, $-S(O)_2R^4$, $-C(O)NR^4R^5$, $-S(O)_2NR^4R^5$, $-C(S)NR^4R^5$; and

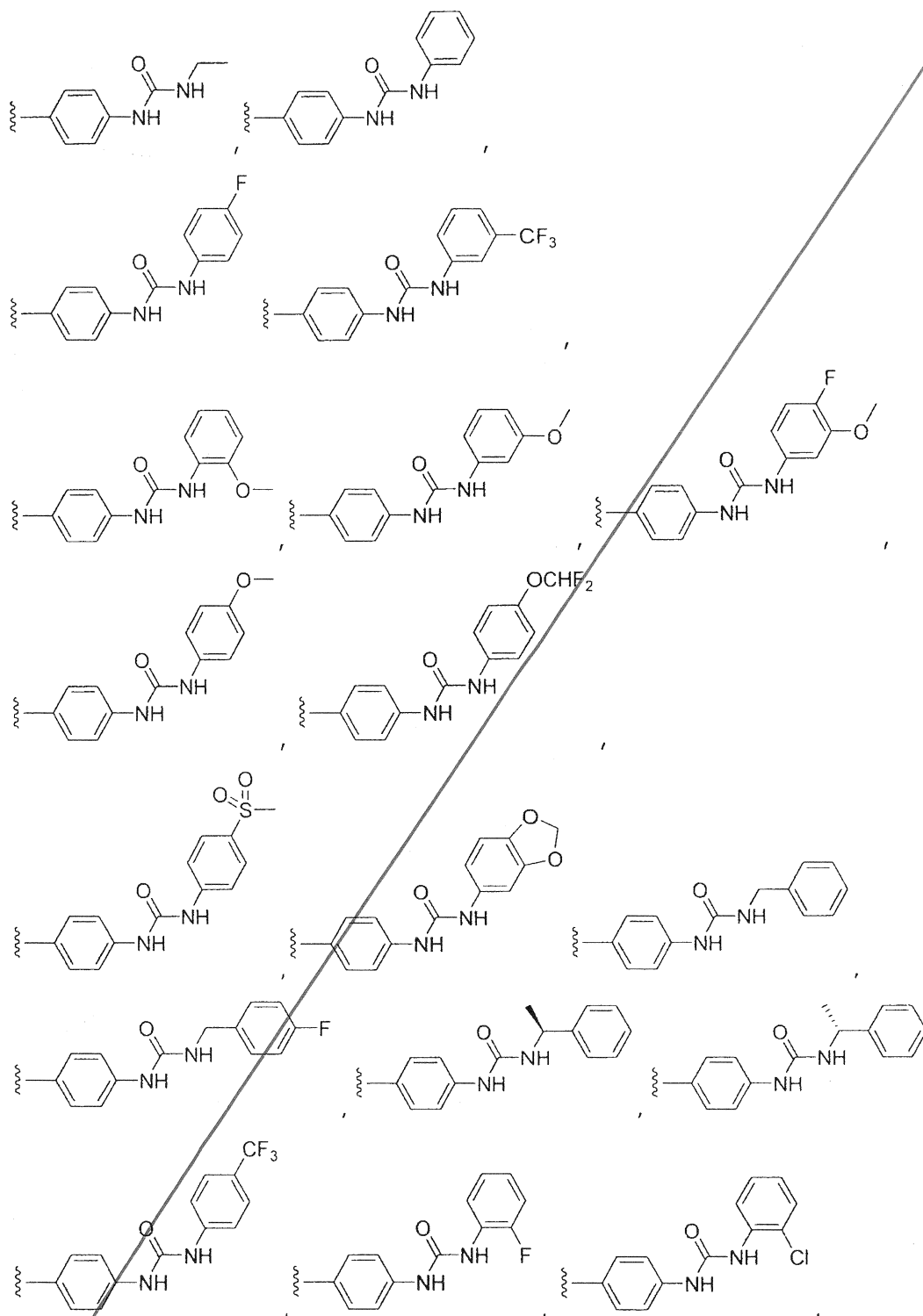
R^4 and R^5 are independently selected from alkyl, heteroalkyl, carbocyclyl, heterocyclyl, aryl, heteroaryl or R^4 and R^5 can be fused to form a 3 to 8 membered heterocyclyl ring system.

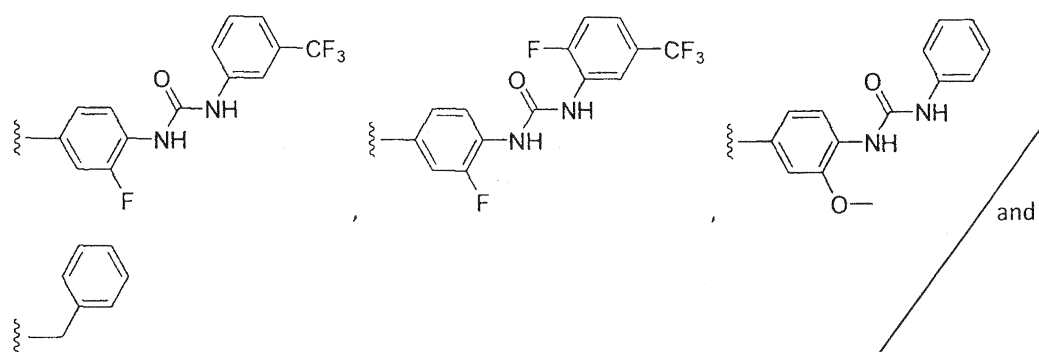
2. The compound according to claim 1 wherein Formula I is selected from the group consisting of:



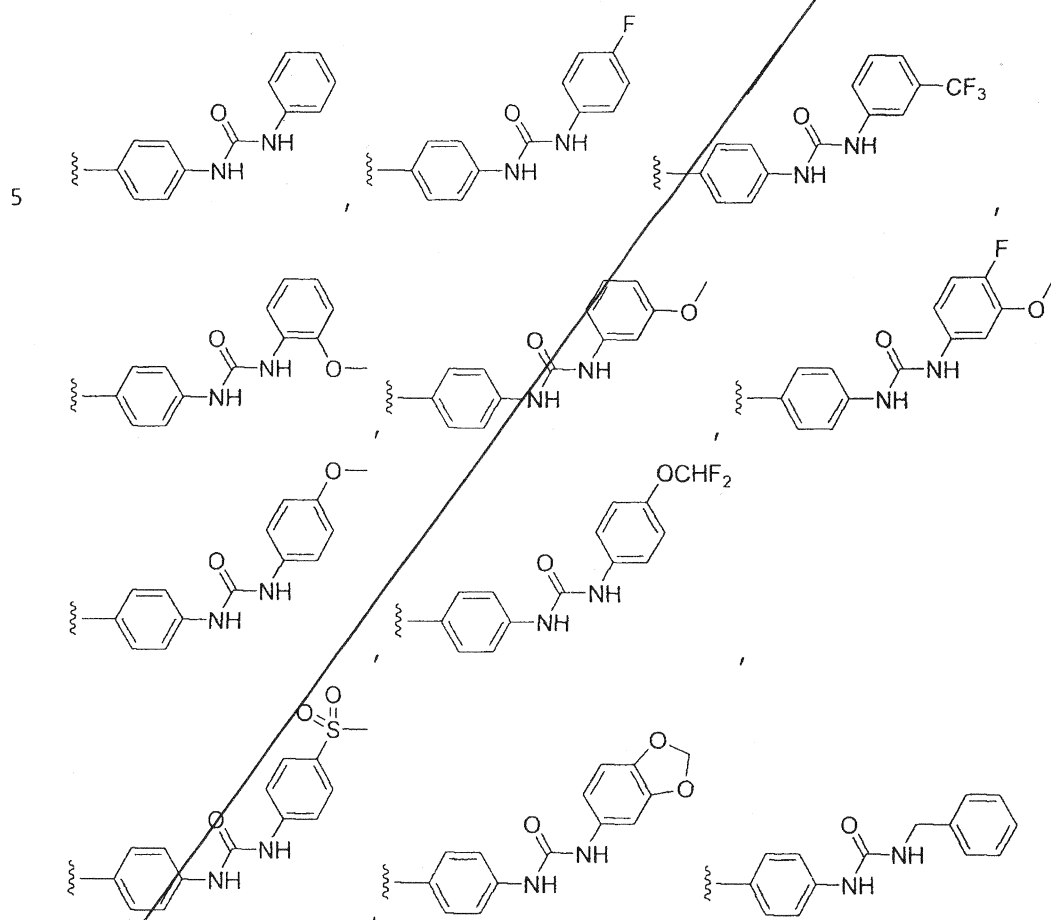
3. A compound of claims 1 or 2 wherein R^1 is selected from the group consisting of:

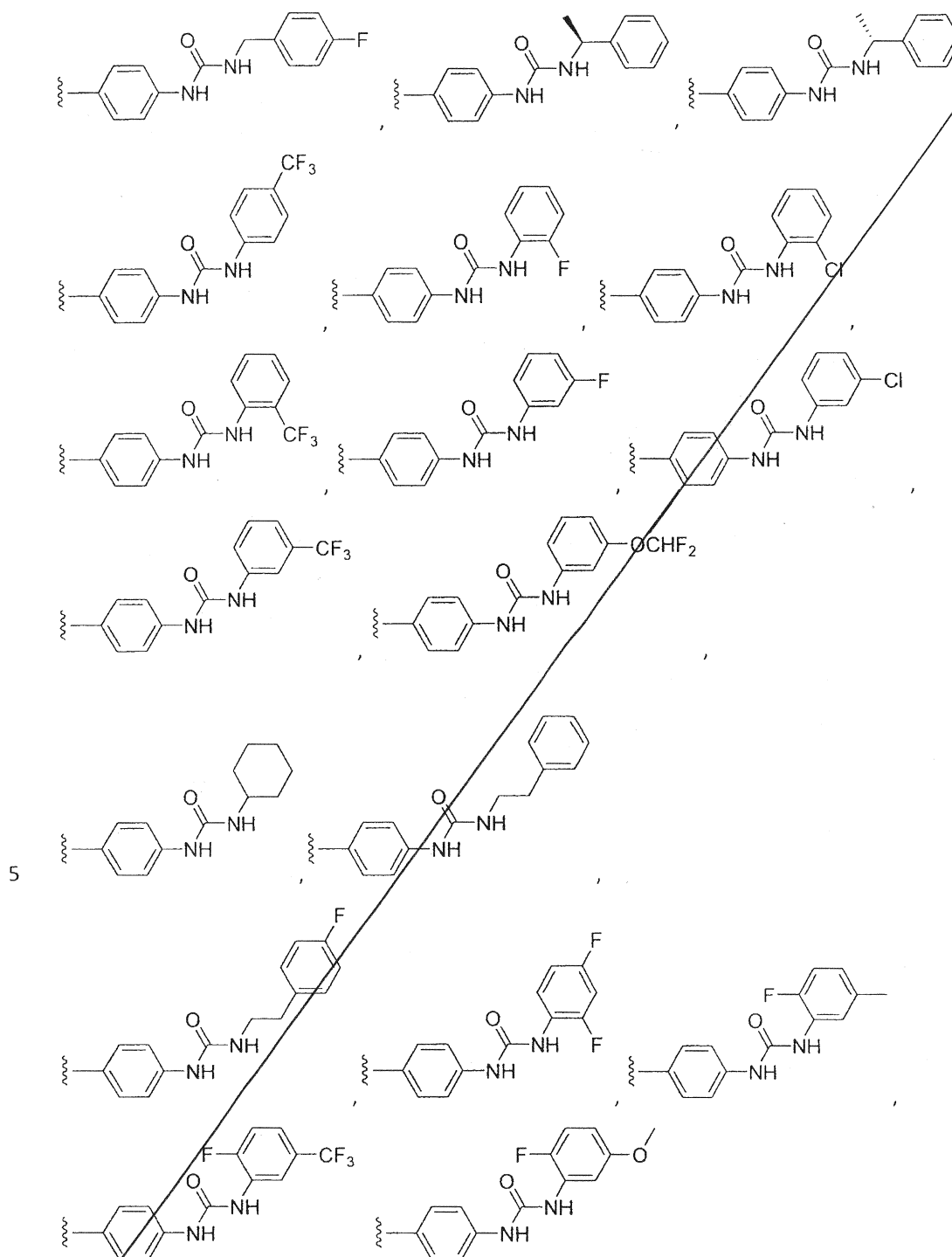


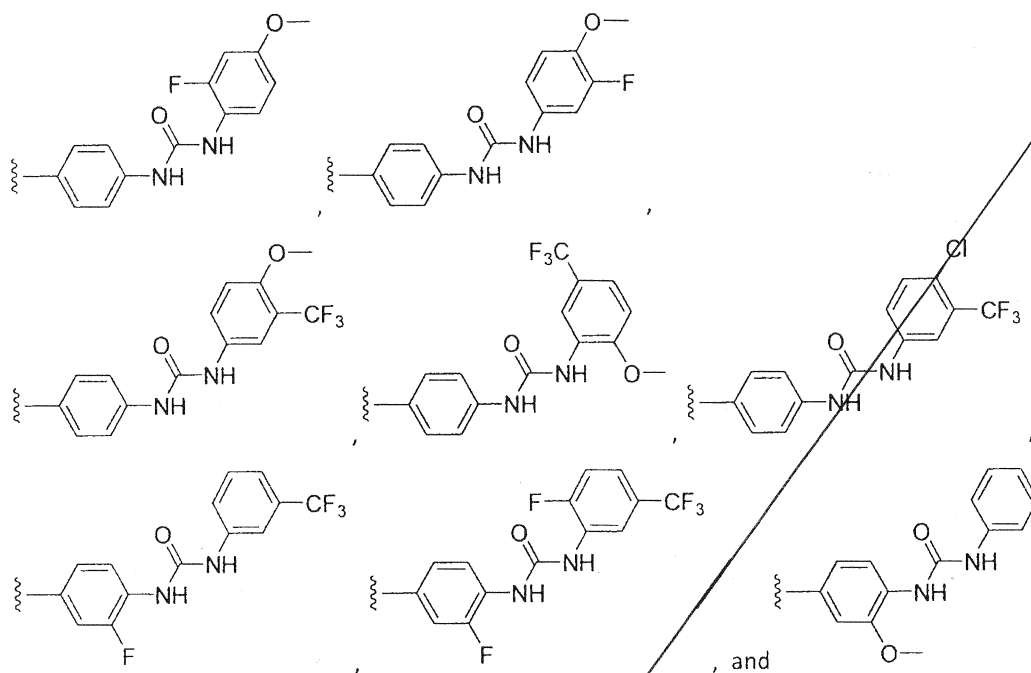




4. The compound according to any one of claims 1 to 3 wherein R³ is selected from:

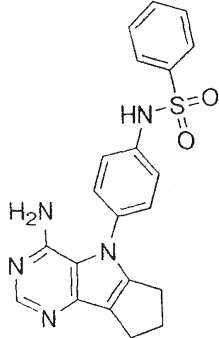
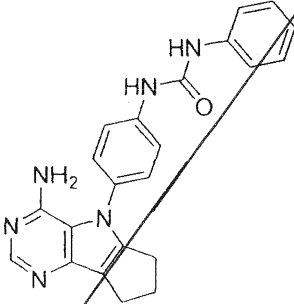
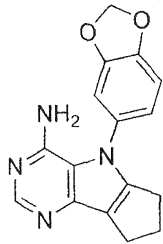
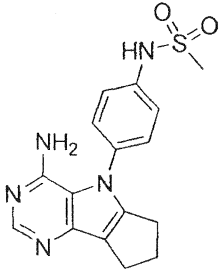


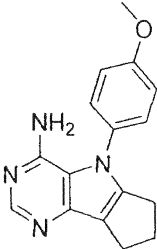
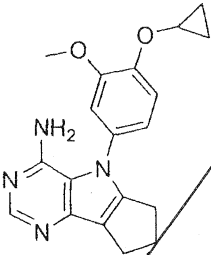
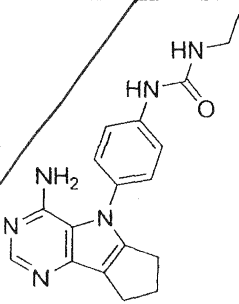
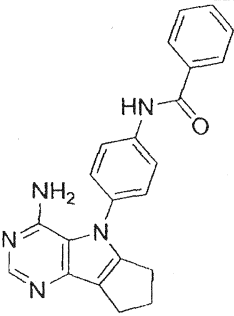


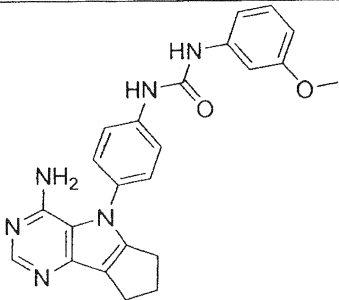
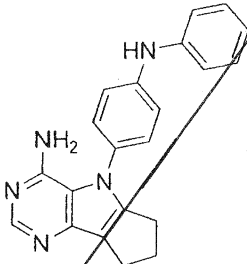
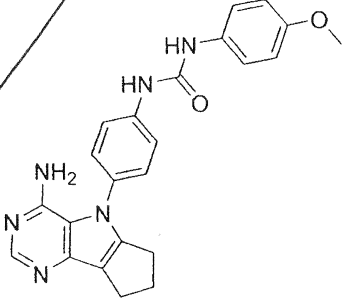
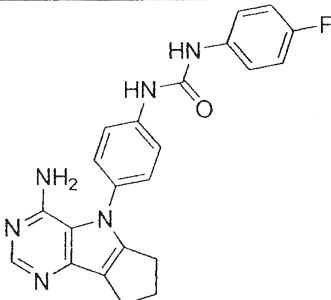


5. A compound selected from the group consisting of:

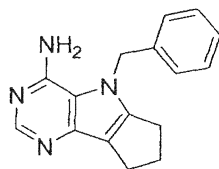
Compound	Structure
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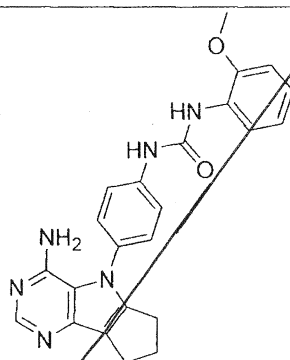
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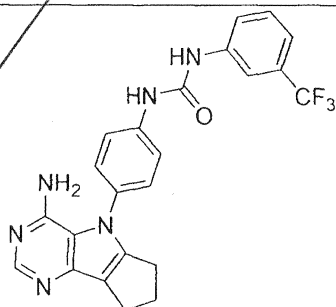
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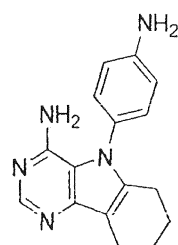
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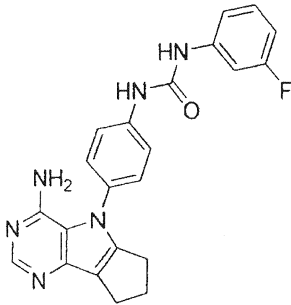
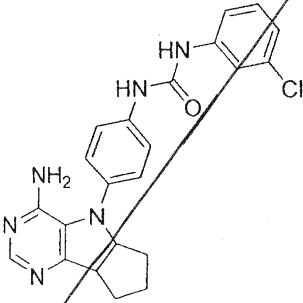
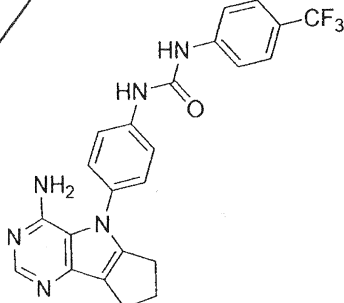
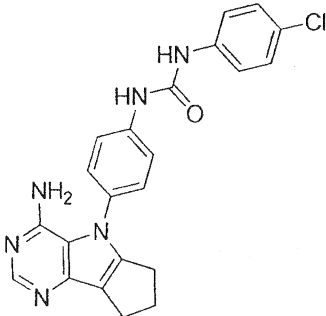


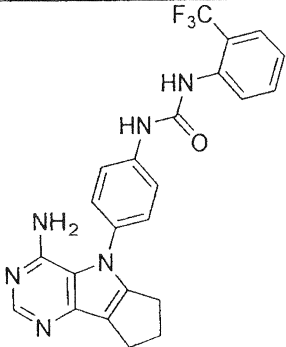
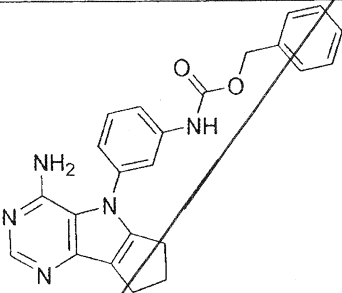
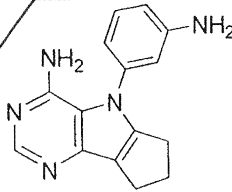
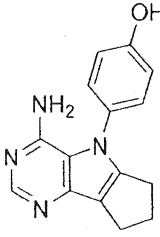
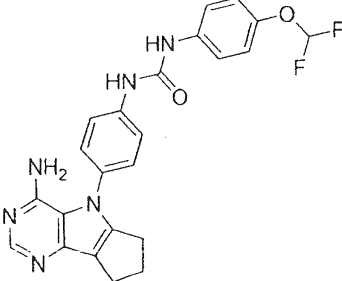
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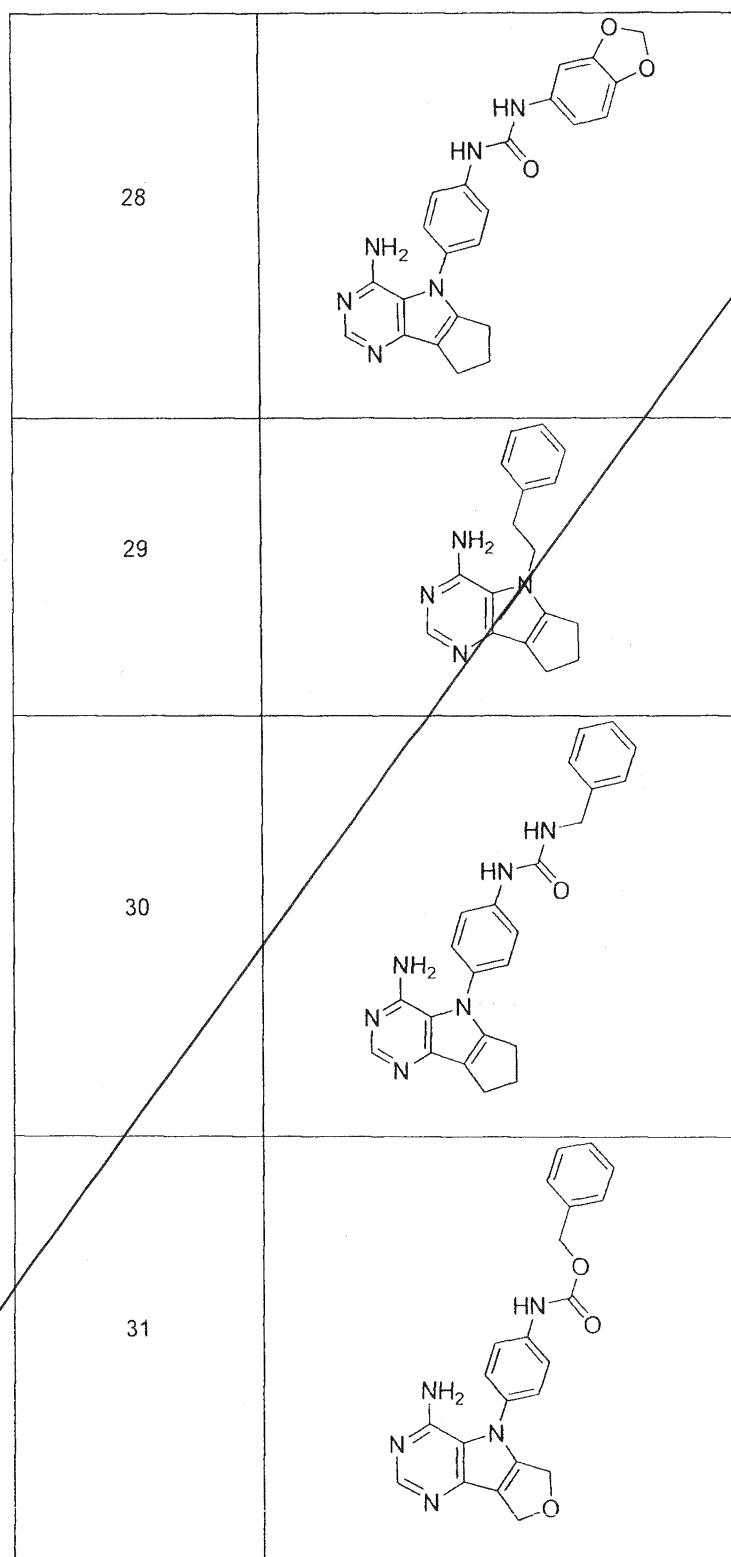


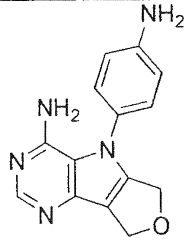
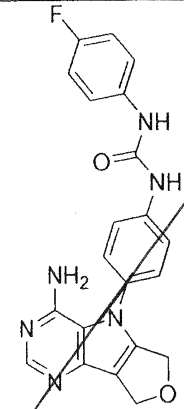
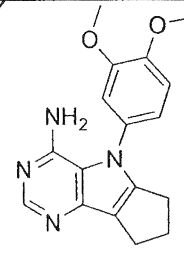
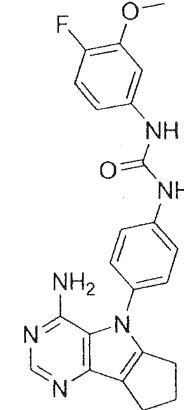
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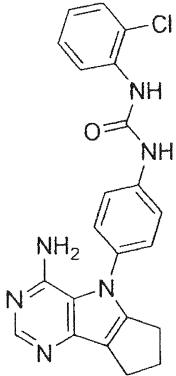
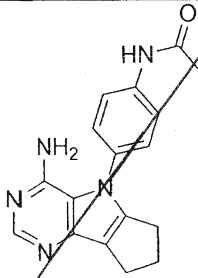
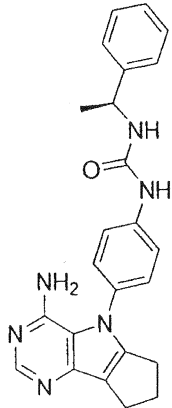
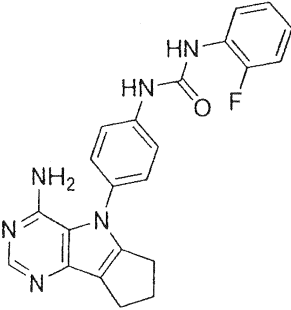


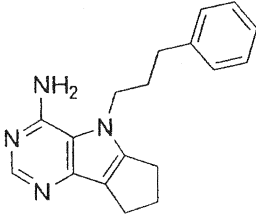
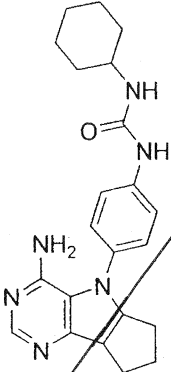
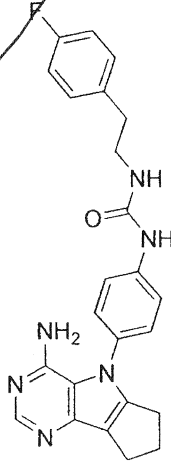
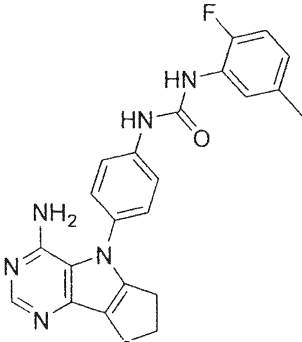
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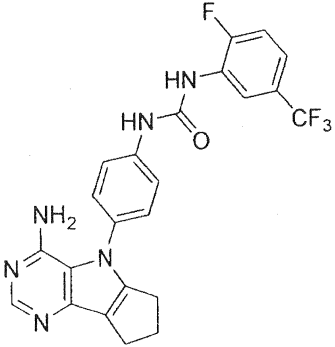
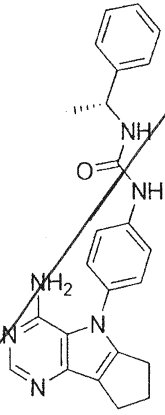
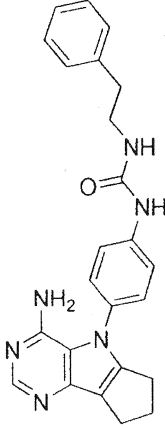
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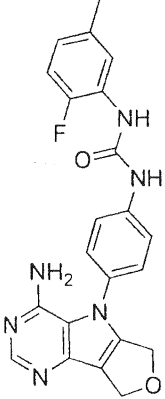
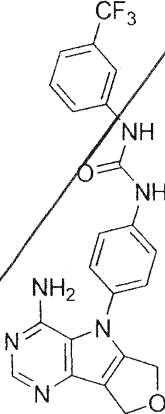
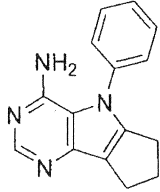
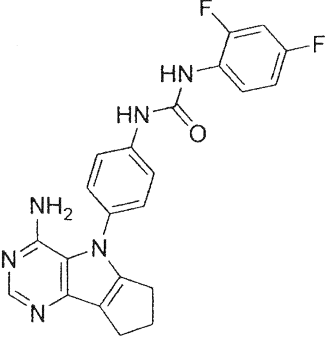


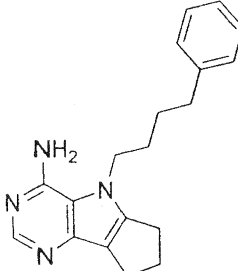
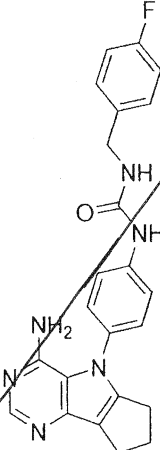
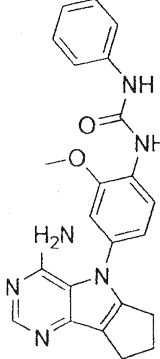
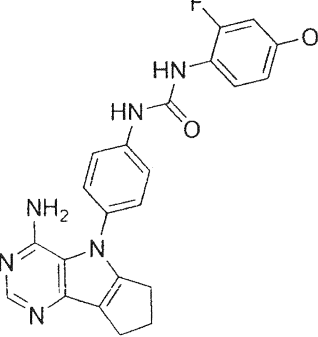
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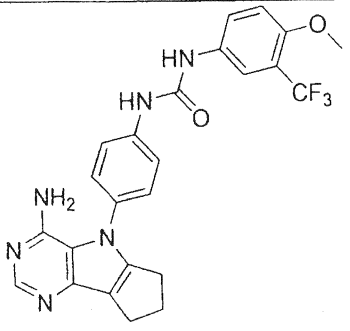
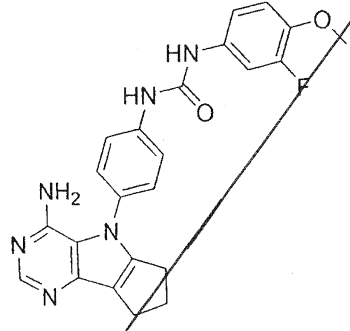
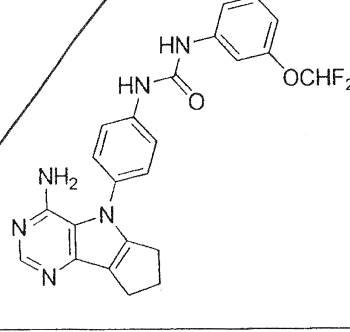
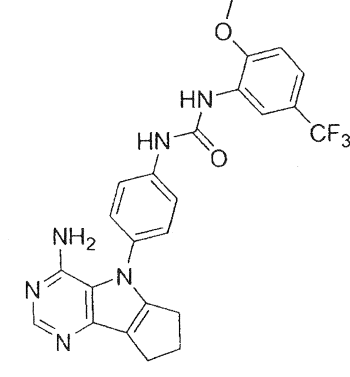
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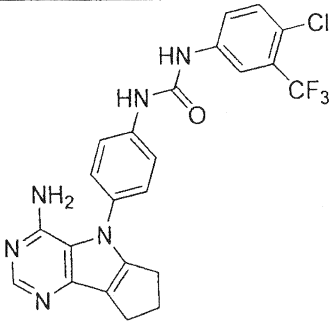
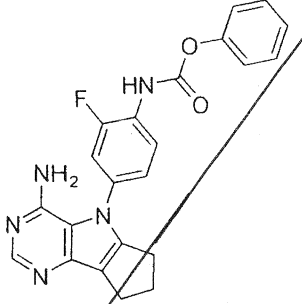
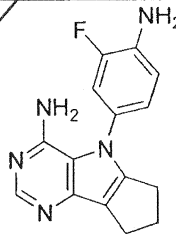
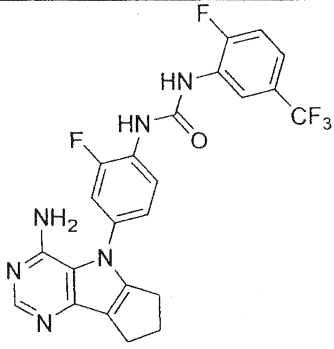
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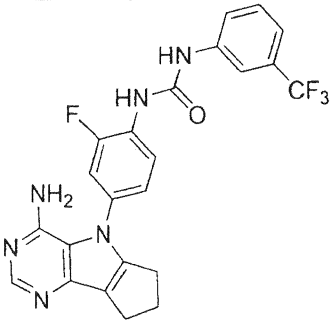
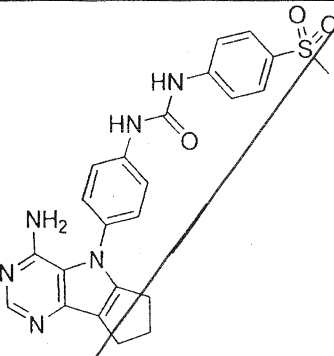
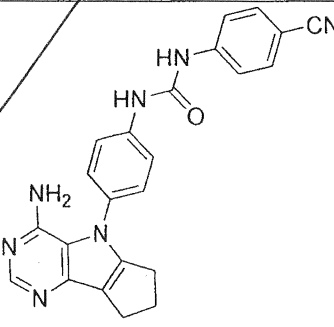
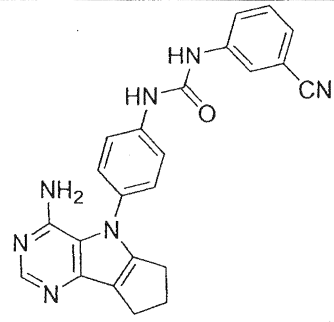
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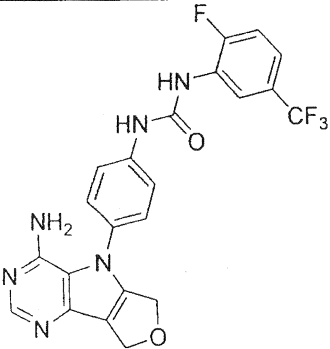
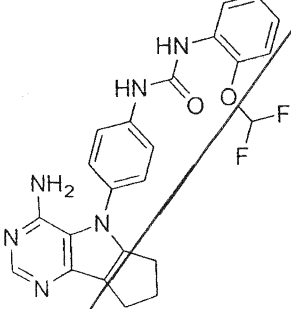
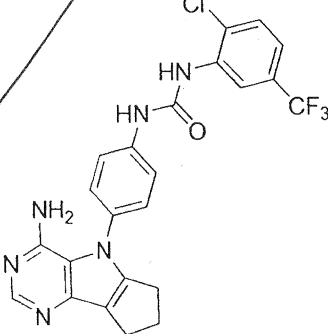
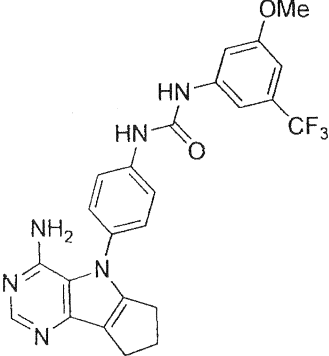
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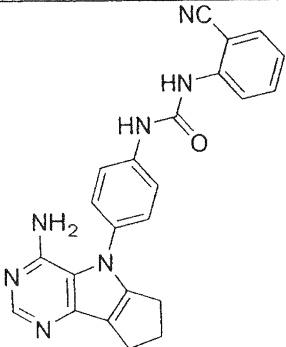
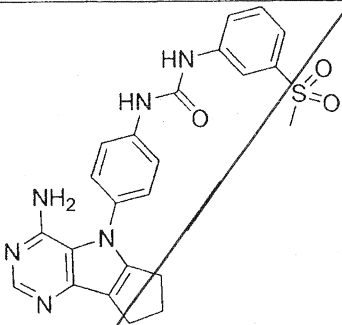
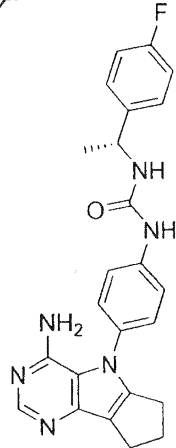
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52	 <chem>Fc1ccc(cc1)CCCN2C(=O)Nc3ccccc3N2c4ccccc4</chem>
53	 <chem>COc1ccc(cc1)CCCN2C(=O)Nc3ccccc3N2c4ccccc4</chem>
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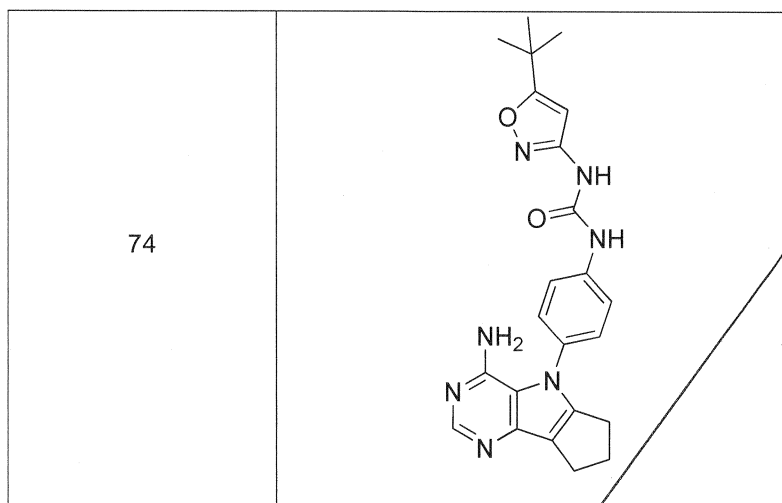
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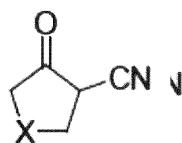
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68	 <chem>Nc1ncnc2c1n(c2)c3ccccc3C(=O)Nc4ccc(cc4)C(F)(F)F</chem>
69	 <chem>Nc1ncnc2c1n(c2)c3ccccc3C(=O)Nc4ccc(cc4)C(F)(F)F</chem>
70	 <chem>Nc1ncnc2c1n(c2)c3ccccc3C(=O)Nc4ccc(cc4)C(F)(F)F</chem>

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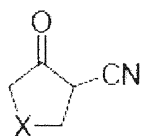


6. The compound according to claim 5, wherein the compound is selected from the group consisting of compounds 1, 2, 18, 24, 25, 31, 32, 60 and 61.
7. The compound according to claim 5, wherein the compound is selected from the group consisting of compounds 3, 5, 6, 7, 8, 9, 10, 12, 15, 26, 29, 34, 37, 40, 49 and 51.
8. The compound according to claim 5, wherein the compound is selected from the group consisting of compounds 14, 16, 17, 20, 21, 23, 30, 33, 36, 39, 41, 44, 45, 46, 47, 50, 55, 57, 58, 59, 62, 63, 64, 66, 67, 68, 69, 72 and 73.
9. The compound according to claim 5, wherein the compound is selected from the group consisting of compounds 11, 13, 19, 27, 28, 35, 43, 48, 54, 56 and 74.
10. A pharmaceutical composition comprising a compound of any one of claims 1 to 9 and a pharmaceutically acceptable carrier or diluent.
11. Use of a compound of any one of claims 1 to 9 or a pharmaceutical composition of claim 10 in the manufacture of a medicament for modulating the target kinase function.

12. The use according to claim 11, wherein the target kinase function is a function of kinase selected from the PDGFR, FGFR, VEGFR.
13. The use according to claim 12, wherein the kinase is cFMS, Flt3, KDR, FGFR1 or Tie2.
14. A compound of any one of claims 1 to 9 for use as an inhibitor of a protein kinase.
15. The compound according to claim 14, wherein the protein kinase is selected from the group consisting of PDGFR, FGFR and VEGFR.
16. The compound according to claim 14, wherein the protein kinase is selected from the group consisting of cFMS, Flt3, KDR, FGFR1 or Tie2.
17. A probe comprising a compound of any one of claims 1 to 9 and a detectable label or affinity tag for said compound.
18. The probe according to claim 17, wherein the detectable label is selected from a fluorescent moiety, a chemiluminescent moiety, a paramagnetic contrast agent, a metal chelate, a radioactive isotope-containing moiety, and biotin.
19. Use of a compound of any one of claims 1 to 9 in a manufacture of a medicament for modulating target kinase function, wherein the medicament is to be contacted to a cell in an amount sufficient to modulate the target kinase function, whereby the target kinase activity and signaling is modulated.
20. A process for preparing a compound of formula i-e, comprising the steps of:
- (a) alkylation of R^1NH_2 with bromoacetonitrile to provide intermediate i-a



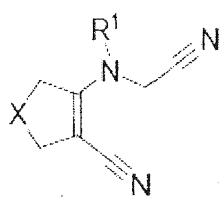
i-b



i-b

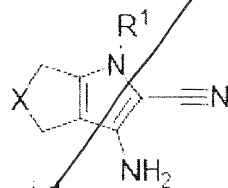
(b) condensation of i-a with
intermediate i-c

in the presence of an acid to provide



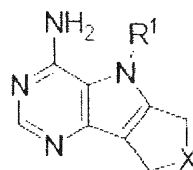
i-c

(c) treatment of intermediate i-c with a base to provide intermediate i-d



i-d

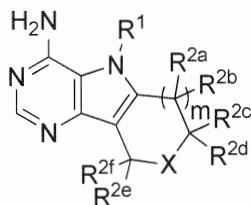
(d) treatment of intermediate i-d with formamidine acetate in an alcohol to
provided a compound of formula i-e



i-e

We claim:

1. A compound of the Formula 1:



Formula 1

wherein m is an integer from 0 to 1;

n is an integer for 0 to 2;

R¹ is selected from alkyl, heteroalkyl, carbocyclyl, or heterocyclyl;

R¹ is also selected from aryl or heteroaryl, wherein the aryl and heteroaryl may be further substituted by the groups selected from:

- 1) Halogen,
- 2) Alkoxy,
- 3) Amino,
- 4) -N(H)C(O)O-alkyl
- 5) -N(H)SO₂-aryl,
- 6) -N(H)SO₂-heteroaryl,
- 7) -N(H)CON(H)-aryl,
- 8) and -N(H)CON(H)-heteroaryl;

R^{2a}, R^{2b}, R^{2c}, R^{2d}, R^{2e}, R^{2f} are independently selected from hydrogen, alkyl, heteroalkyl, carbocyclyl, heterocyclyl, aryl, heteroaryl. R^{2a} and R^{2b}, R^{2c} and R^{2d} or R^{2e} and R^{2f} can be fused to form a 3 to 8 membered cycloalkyl or heterocyclyl ring system;

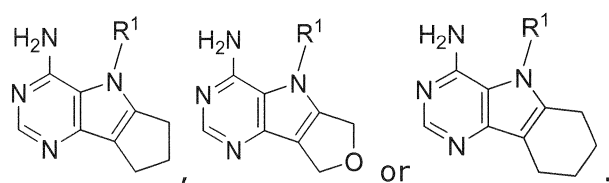
X is selected from CH₂, O, S(O)_n, NR³;

R³ is selected from hydrogen, alkyl, heteroalkyl, carbocyclyl, heterocyclyl, aryl, heteroaryl, -C(O)R⁴, -C(O)OR⁴, -S(O)₂R⁴, -C(O)NR⁴R⁵, -S(O)₂NR⁴R⁵, -C(S)NR⁴R⁵;

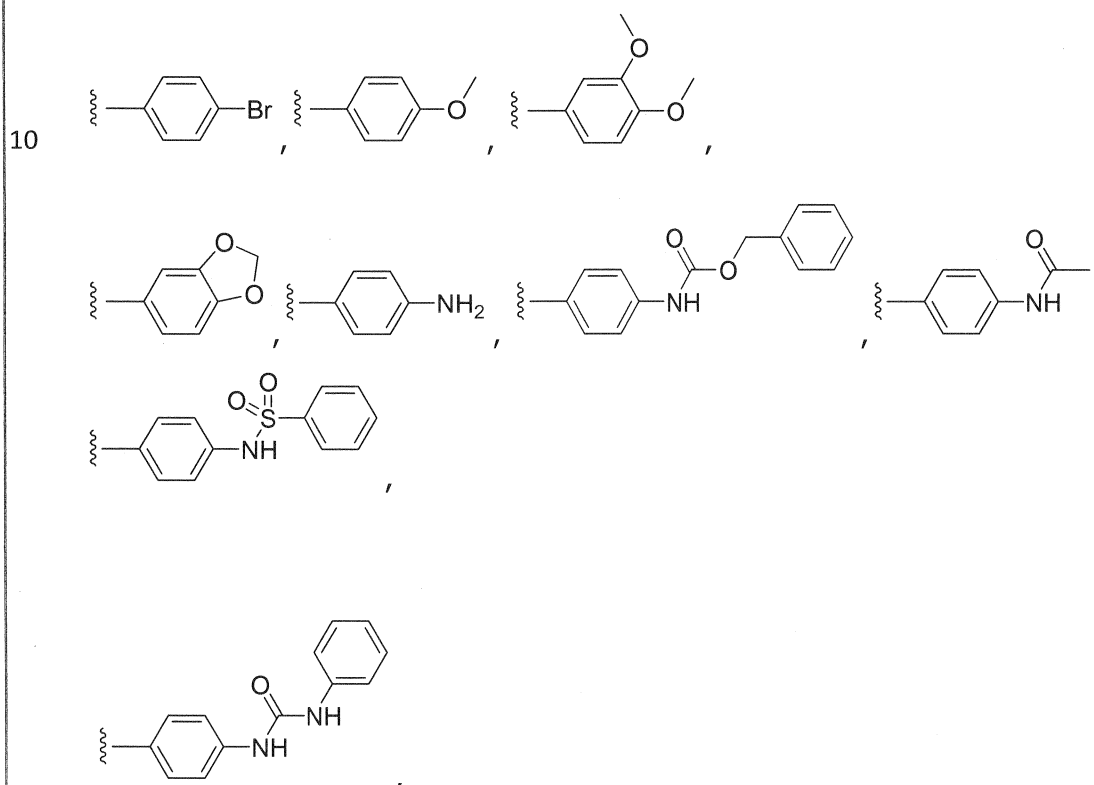
R⁴ and R⁵ are independently selected from alkyl, heteroalkyl, carbocyclyl,

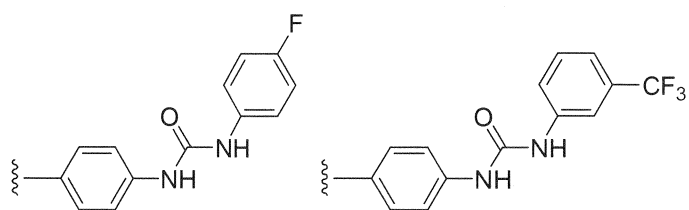
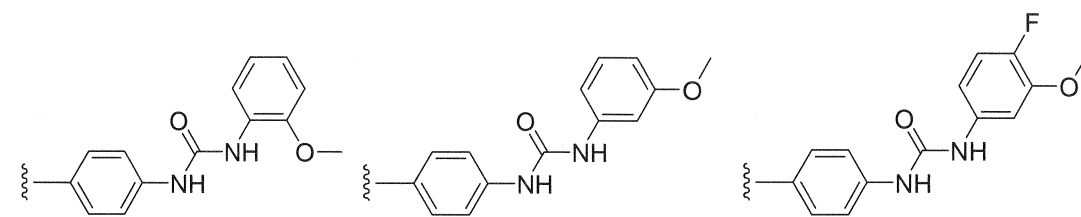
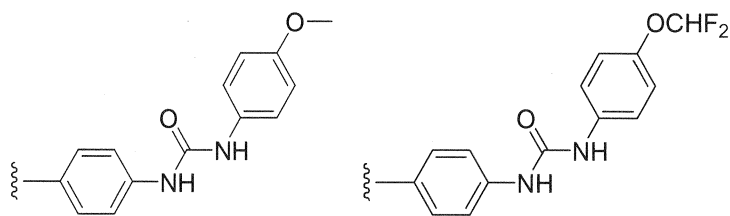
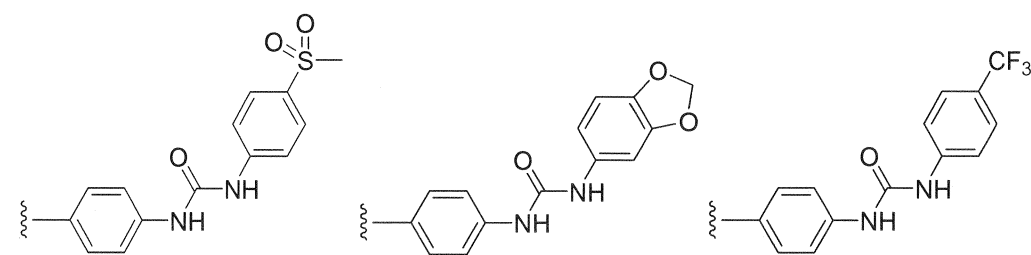
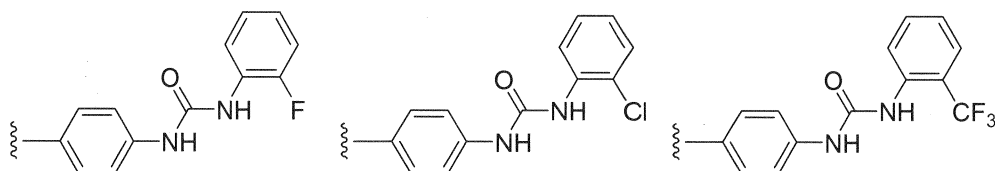
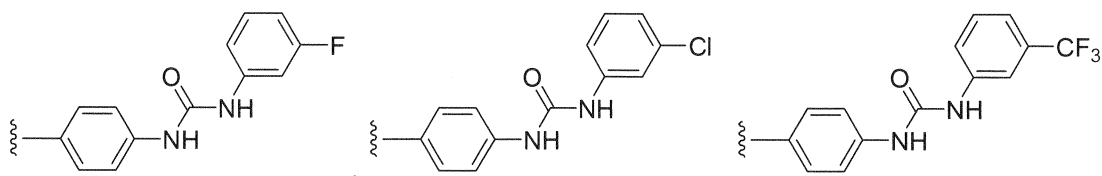
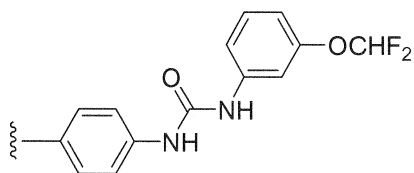
5 heterocyclyl, aryl, heteroaryl or R⁴ and R⁵ can be fused to form a 3 to 8 membered heterocyclyl ring system;

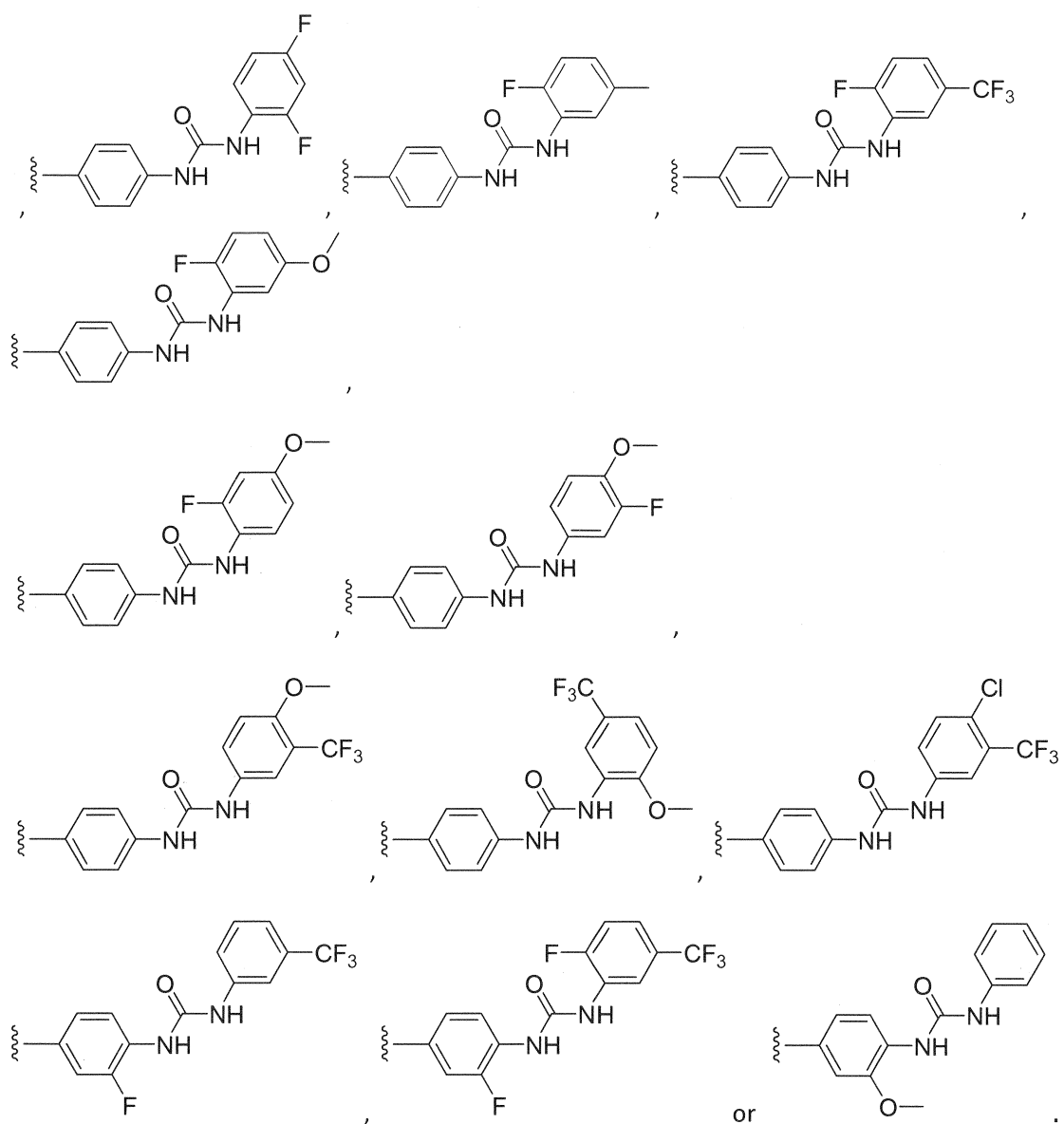
2. The compound according to claim 1 wherein Formula I is selected from:



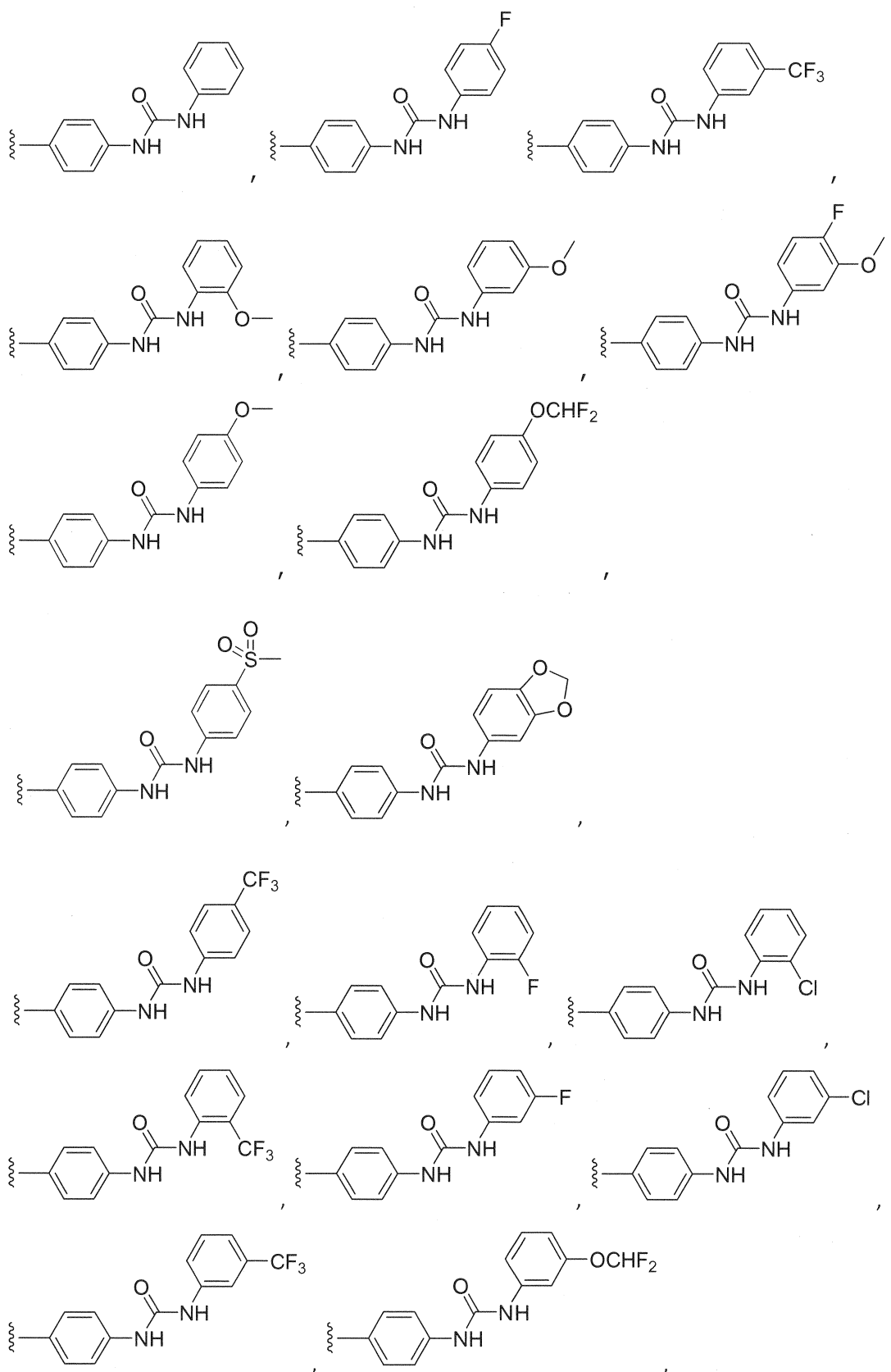
3. A compound of claims 1 or 2 wherein R¹ is selected from:

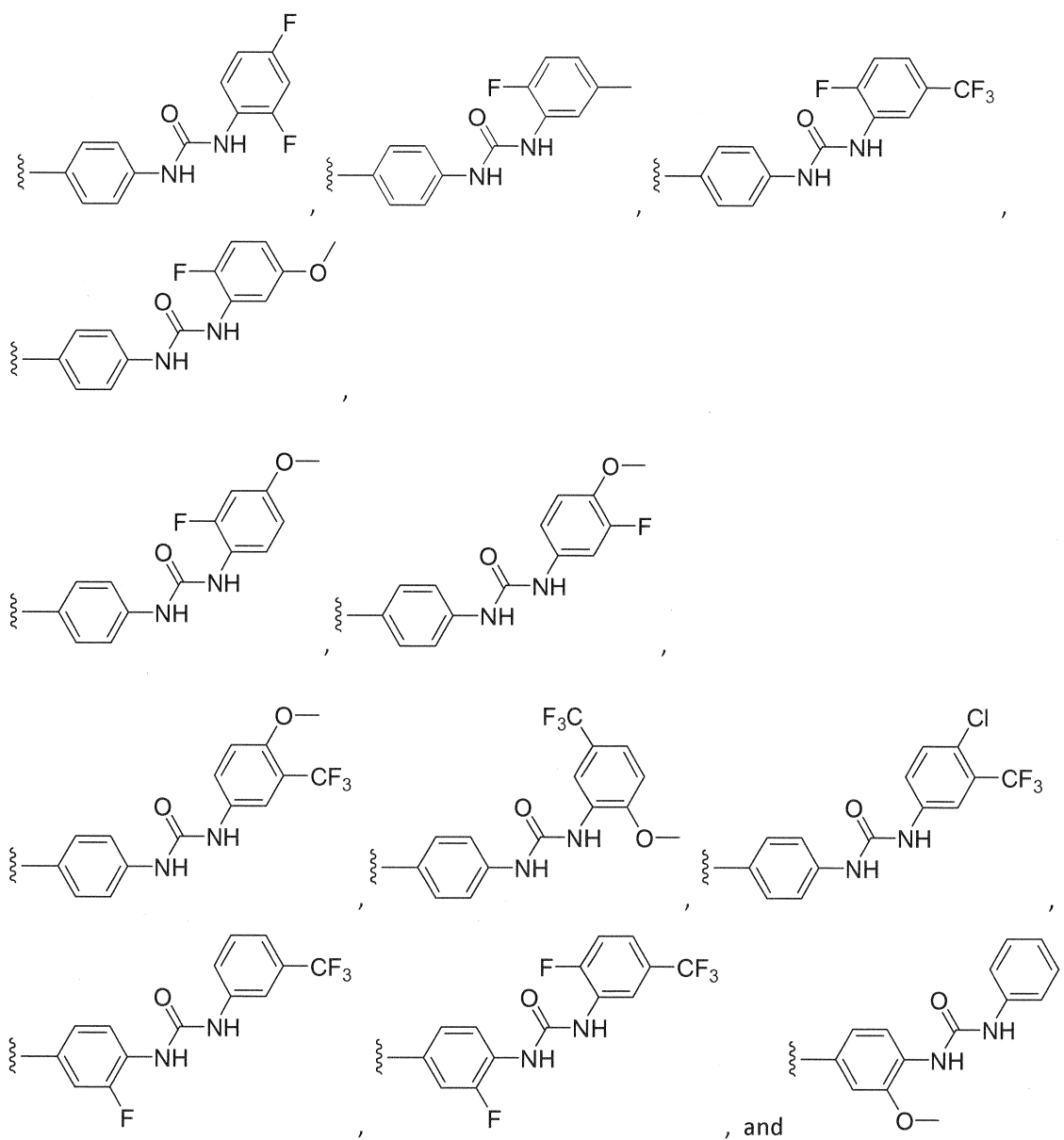






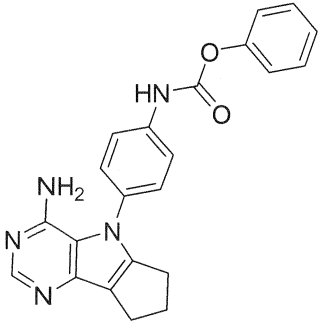
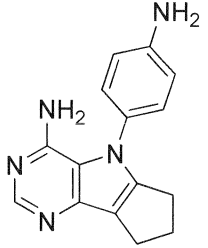
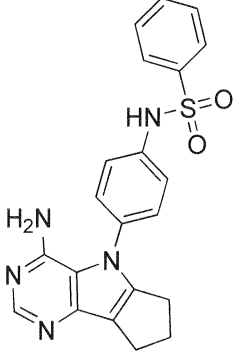
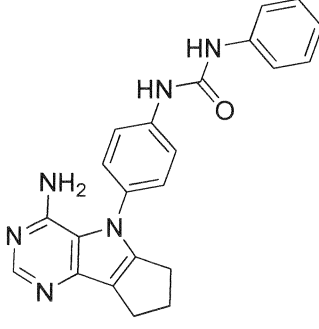
4. The compound according to any one of claims 1 to 3 wherein R¹ is selected from:

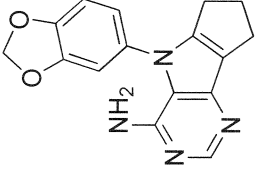
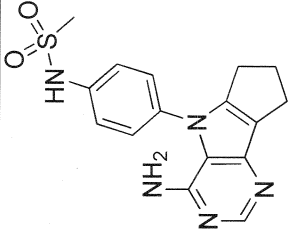
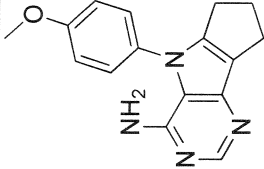
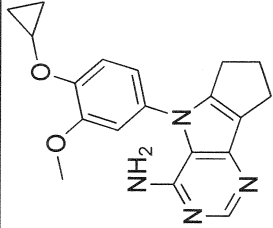
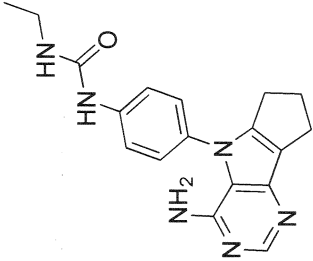


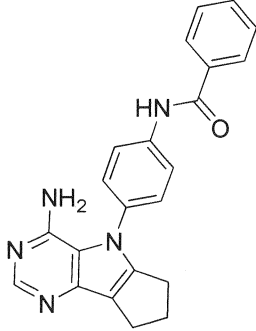
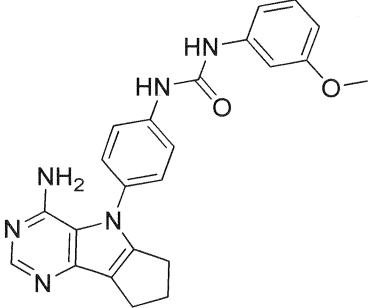
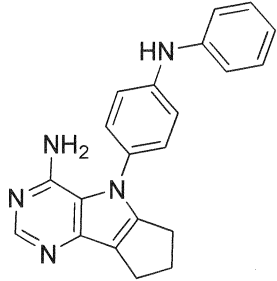
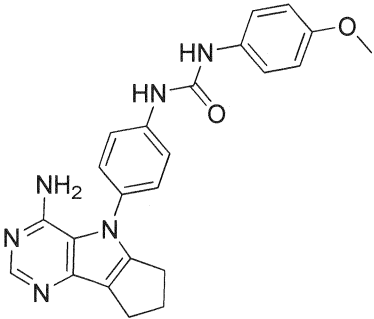


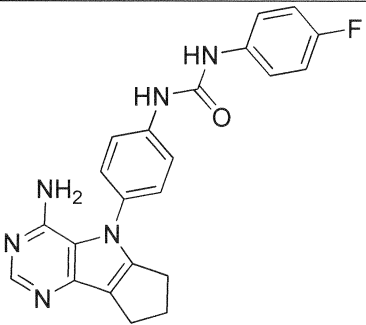
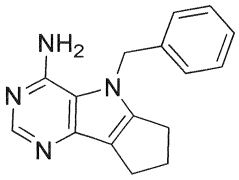
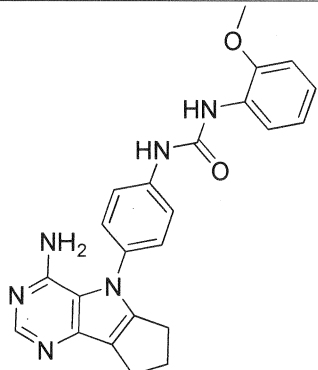
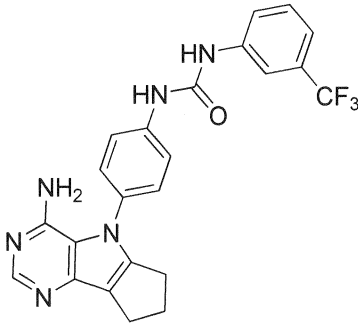
5. A compound selected from the group consisting of:

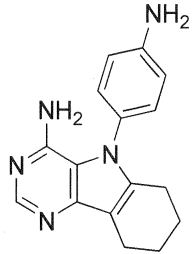
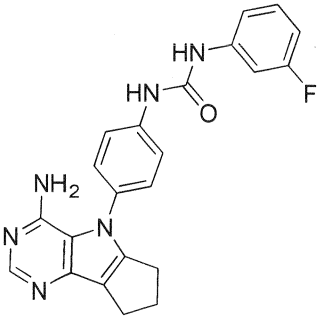
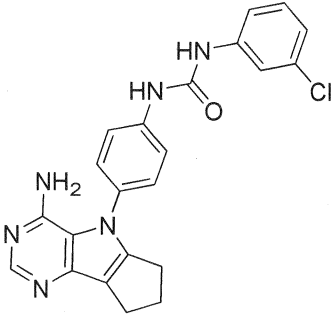
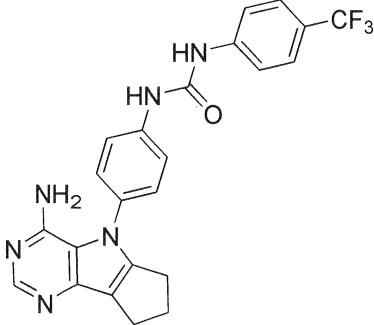
Compound	Structure
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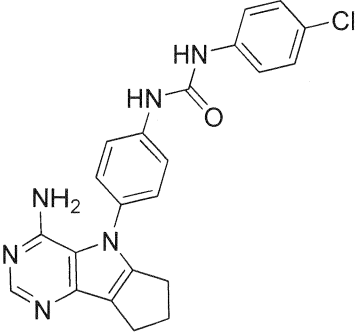
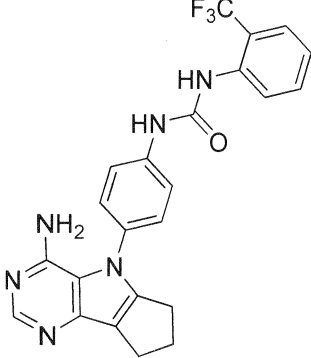
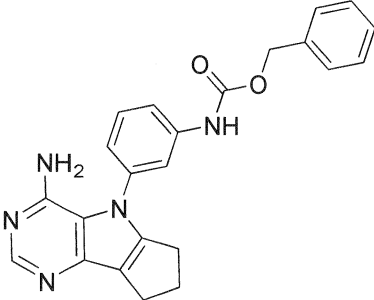
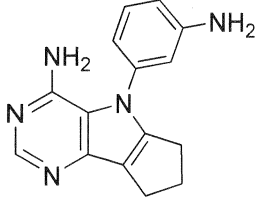
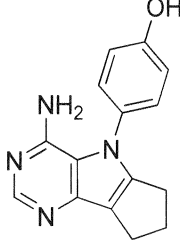
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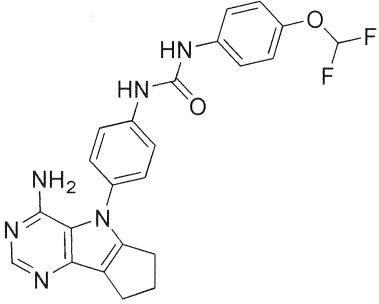
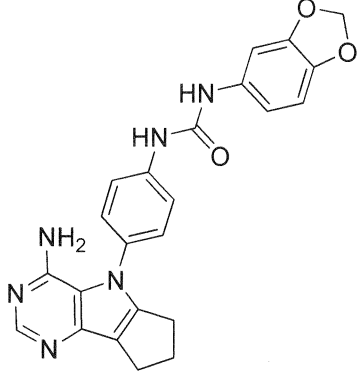
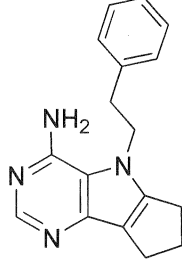
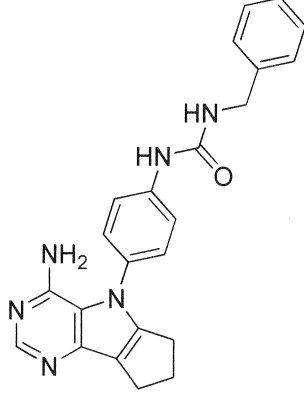
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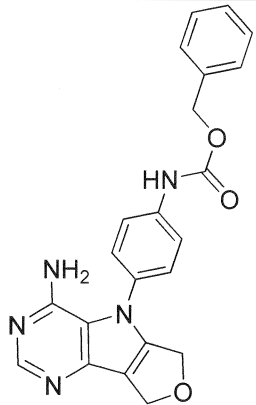
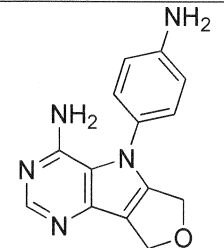
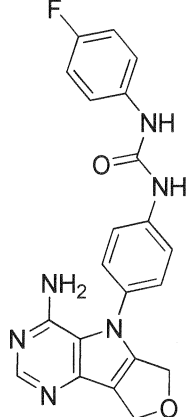
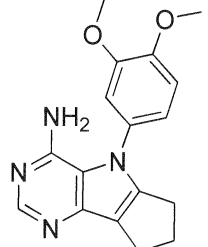
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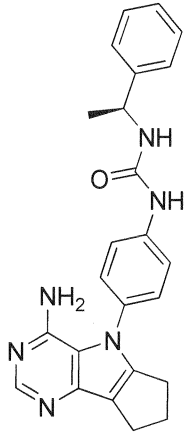
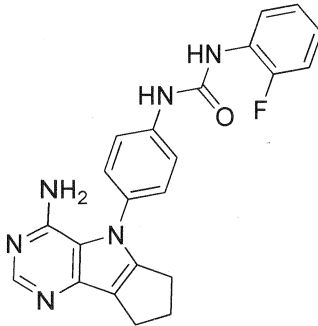
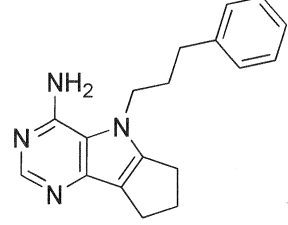
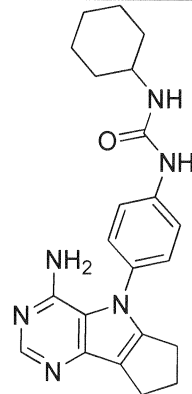
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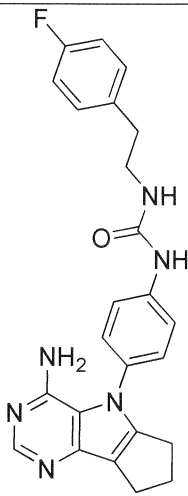
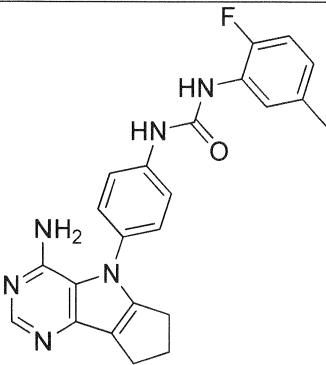
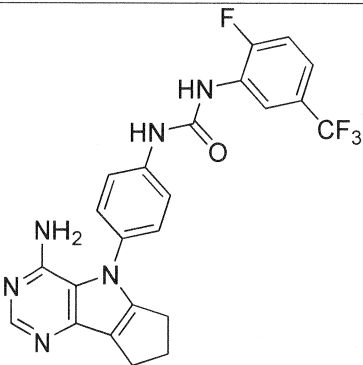
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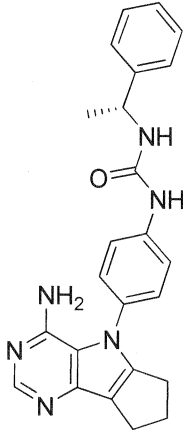
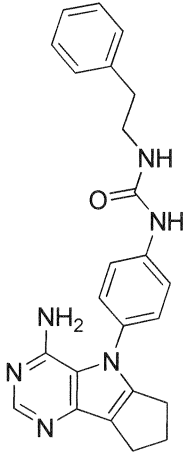
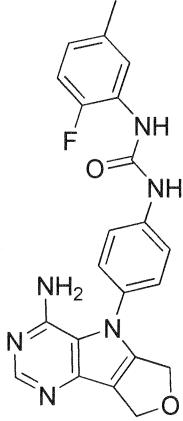
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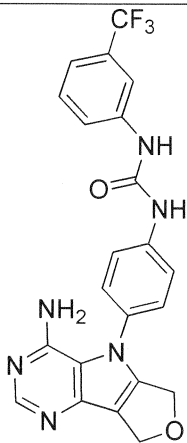
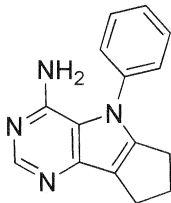
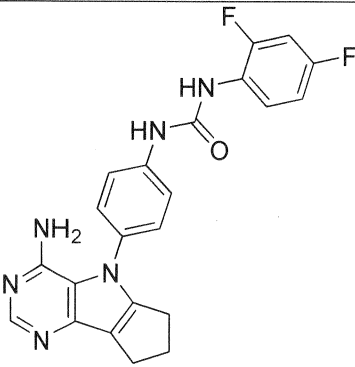
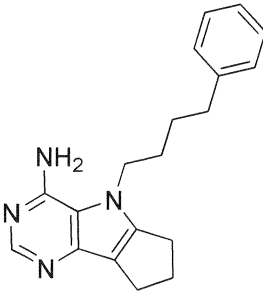
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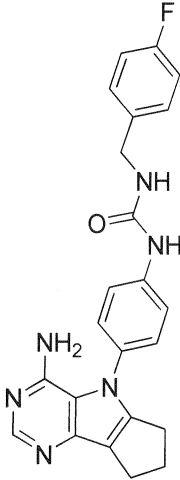
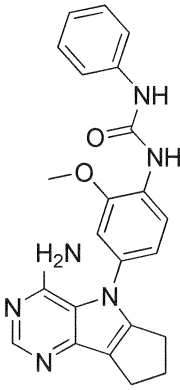
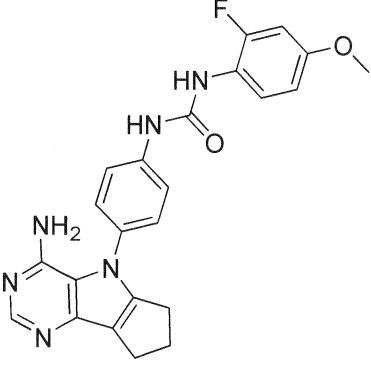
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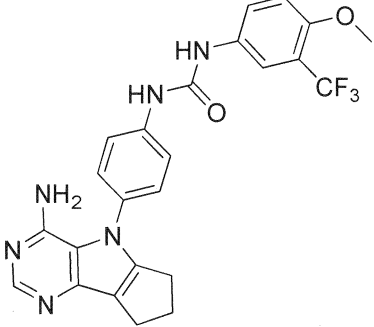
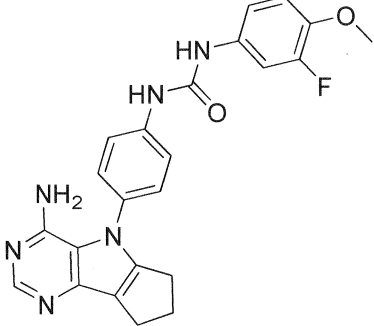
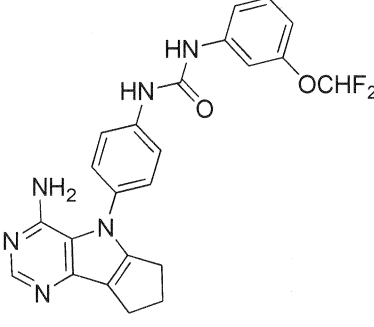
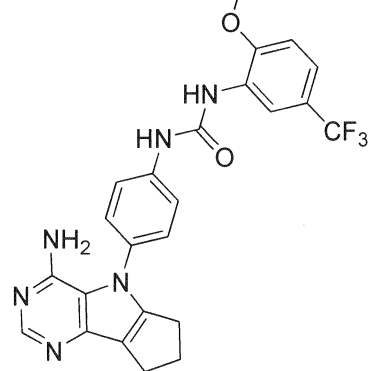
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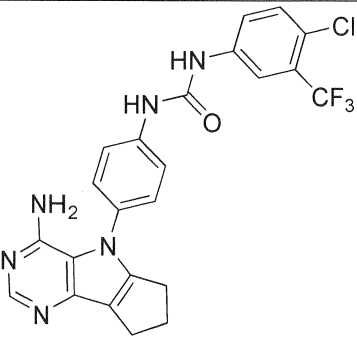
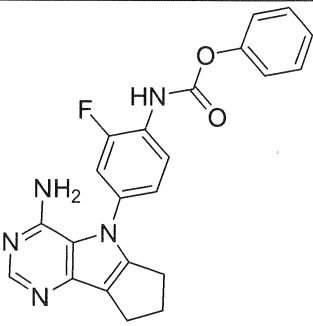
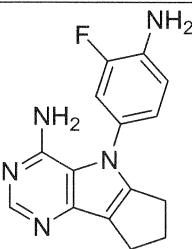
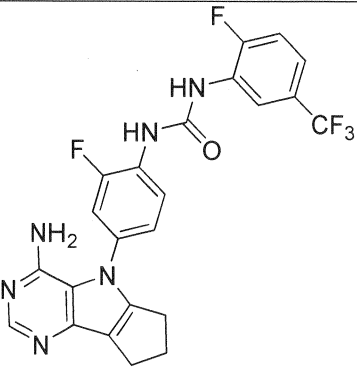
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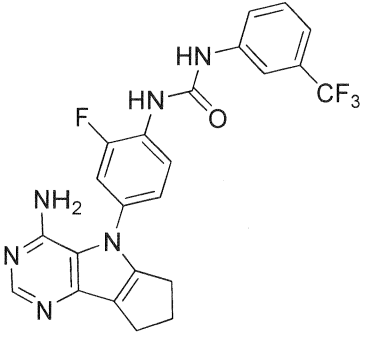
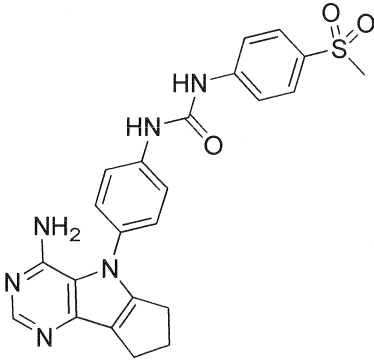
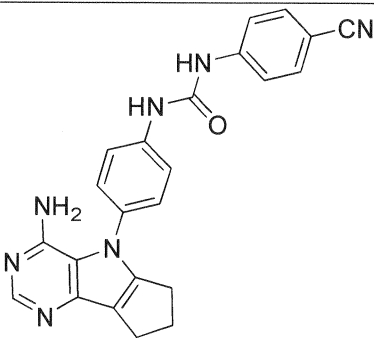
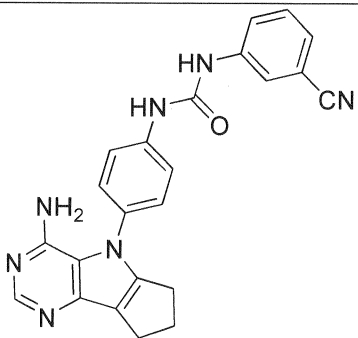
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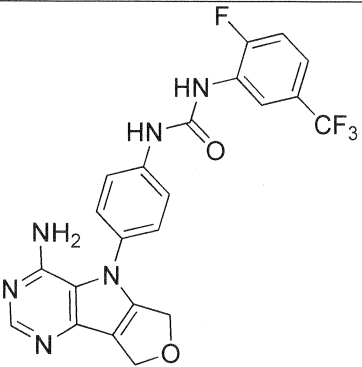
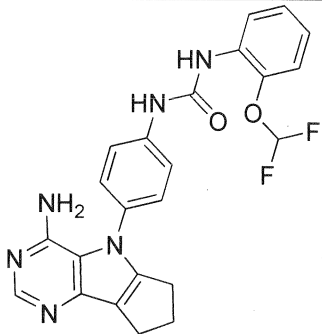
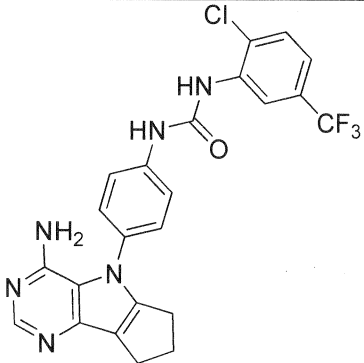
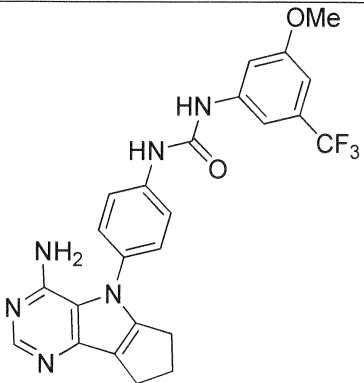
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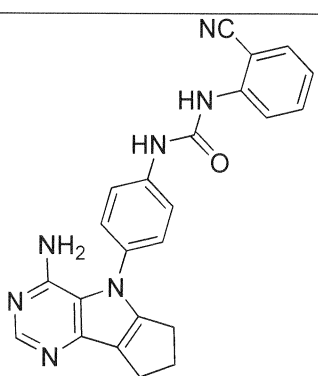
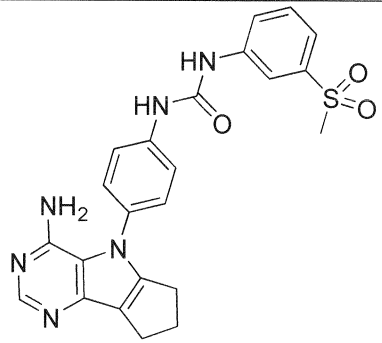
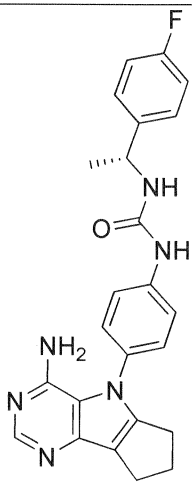
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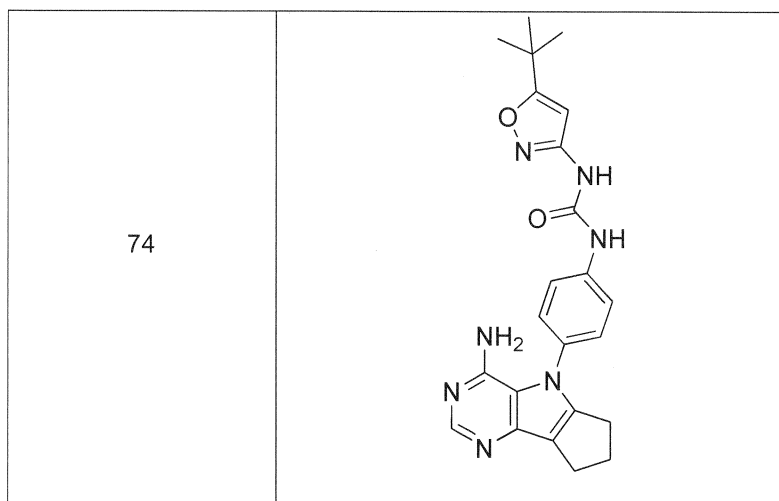
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63	 <chem>Nc1nc2c(c1)ccc2Nc3ccc(NC(=O)c4ccc(C(F)(F)F)cc4)cc3</chem>
64	 <chem>Nc1nc2c(c1)ccc2Nc3ccc(NC(=O)c4ccc(S(=O)(=O)C)cc4)cc3</chem>
65	 <chem>Nc1nc2c(c1)ccc2Nc3ccc(NC(=O)c4ccc(C#N)cc4)cc3</chem>
66	 <chem>Nc1nc2c(c1)ccc2Nc3ccc(NC(=O)c4ccccc4C#N)cc3</chem>

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6. The compound according to claim 5, wherein the compound is selected from the group consisting of compounds 1, 2, 18, 24, 25, 31, 32, 60 and 61.

7. The compound according to claim 5, wherein the compound is selected from the group consisting of compounds 3, 5, 6, 7, 8, 9, 10, 12, 15, 26, 29, 34, 37, 40, 49 and 51.

8. The compound according to claim 5, wherein the compound is selected from the group consisting of compounds 14, 16, 17, 20, 21, 23, 30, 33, 36, 39, 41, 44, 45, 46, 47, 50, 55, 57, 58, 59, 62, 63, 64, 66, 67, 68, 69, 72 and 73.

9. The compound according to claim 5, wherein the compound is selected from the group consisting of compounds 11, 13, 19, 27, 28, 35, 43, 48, 54, 56 and 74.

10. A pharmaceutical composition comprising a compound of any one of claims 1 to 9 and a pharmaceutically acceptable carrier or diluent.

11. Use of a compound of any one of claims 1 to 9 or a pharmaceutical composition of claim 10 in the manufacture of a medicament for modulating the target kinase function.

12. The use according to claim 11, wherein the target kinase function is a function of kinase selected from the PDGFR, FGFR, VEGFR.

13. The use according to claim 12, wherein the kinase is cFMS, Flt3, KDR, FGFR1 or Tie2.

5 14. A compound of any one of claims 1 to 9 for use as an inhibitor of a protein kinase.

15. The compound according to claim 14, wherein the protein kinase is selected from the group consisting of PDGFR, FGFR and VEGFR.

10 16. The compound according to claim 14, wherein the protein kinase is selected from the group consisting of cFMS, Flt3, KDR, FGFR1 or Tie2.

15 17. The compound according to any one of claims 1 to 6 for use as an inhibitor of kinases or kinase families in the treatment of diseases or disorders such as: cancer, arthritis, myeloproliferative disorders, cardiac hypertrophy, lung fibrosis, hepatic fibrosis, atherosclerosis, restenosis, glomerulonephritis, psoriasis, lupus, multiple sclerosis, macular degeneration, asthma and reactive synoviotides.

20 18. The compound according to any one of claims 1 to 6 for use in the treatment of: arthritis, tenosynovial giant cell tumour, pigmented villonodular synovitis and other reactive synoviotides, bone metastases formation and progression, acute myeloid leukemia or human cancer by inhibition of cFMS; or acute myeloid leukemia or arthritis by inhibition of Flt3; or arthritis or cancer by VEGF or Tie2 inhibition; or select subsets of cancer, for example breast tumours and gastric cancer by inhibition of FGFR.

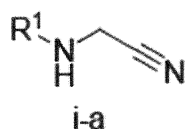
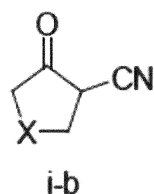
19. A probe comprising a compound of any one of claims 1 to 9 and a detectable label or affinity tag for said compound.

20. The probe according to claim 19, wherein the detectable label is selected from a fluorescent moiety, a chemiluminescent moiety, a paramagnetic contrast agent, a metal chelate, a radioactive isotope-containing moiety, and biotin.

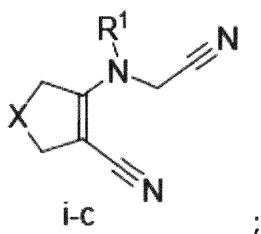
21. Use of a compound of any one of claims 1 to 9 in a manufacture of a medicament for modulating target kinase function, wherein the medicament is to be contacted to a cell in an amount sufficient to modulate the target kinase function, whereby the target kinase activity and signaling is modulated.

22. A process for preparing a compound according to claim 1, wherein m is 0 and R^{2c-f} are H, a compound of formula i-e, comprising the steps of:

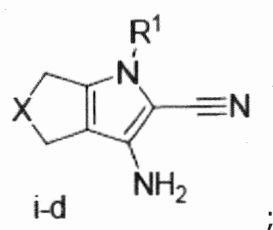
(a) alkylation of R^1NH_2 with bromoacetonitrile to provide intermediate i-a



(b) condensation of i-a with i-b in the presence of an acid to provide intermediate i-c



(c) treatment of intermediate i-c with a base to provide intermediate i-d



(d) treatment of intermediate i-d with formamidine acetate in an alcohol to provided a compound of formula i-e

