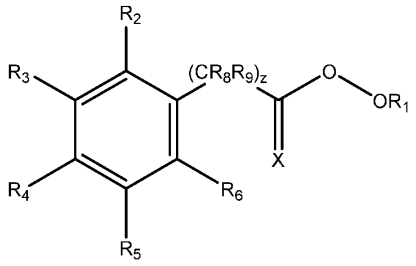
CLAIMS

1. A method of modulating a Src kinase comprising administering a following structure:




**Formula II**

wherein X is O or S;

$R_1$ is a hydrogen, or a substituted or unsubstituted substituent including but not limited to lower alkyl, a lower alkenyl, a lower alkynyl, $-(CH_2)_mR_7$, $(CH_2)_m$-OH, $-(CH_2)_m$-O-lower alkyl, $-(CH_2)_m$-O-lower alkenyl, $-(CH_2)_n$-O-$(CH_2)_m$-$R_7$, $-(CH_2)_m$-SH, $-(CH_2)_m$-S-lower alkyl, $-(CH_2)_m$-S-lower alkenyl, $-(CH_2)_n$-S-$(CH_2)_m$-$R_7$

each of $R_2$-$R_6$ is independently a hydrogen, a hydroxyl, a halogen, a lower alkyl, a lower alkenyl, a lower alkynyl, an amino, a nitro, an azido, a sulfate, a sulfonate, a sulfonamido, $-(CH_2)_mR_7$, $(CH_2)_m$-OH, $-(CH_2)_m$-O-lower alkyl, $-(CH_2)_m$-O-lower alkenyl, $-(CH_2)_n$-O-$(CH_2)_m$-$R_7$, --$(CH_2)_m$-SH, $-(CH_2)_m$-S-lower alkyl, $-(CH_2)_m$-S-lower alkenyl, $-(CH_2)_n$-S-$(CH_2)_m$-$R_7$

$R_7$, $R_8$, and $R_9$ each independently represents, for each occurrence, hydrogen, hydroxyl, or a substituted or unsubstituted alkyl, alkenyl, aryl, aralkyl, benzyl, cycloalkyl, cycloalkenyl, or heterocycle; and

wherein each occurrence of m and n is separately and independently an integer ranging from 1 to 9, and each occurrence of z is independently an integer ranging from 1 to 9;

or a pharmaceutically acceptable salt, hydrate, solvate, clathrate, enantiomer, diastereomer, racemate or mixture of steroisomers thereof.

2. The method of claim 1, wherein $R_3$ and $R_4$ are each -OH.

3. The method of claim 1, wherein $R_2$ and $R_3$ are each -OH.

4. The method of claim 1, wherein z is 2 and $R_8$ and $R_9$ are each -H.

5. The method of claim 1, wherein z is 2; $R_1$, $R_2$, $R_5$, $R_6$, $R_8$ and $R_9$ are each -H; and $R_3$ and $R_4$ are each -OH.

6. The method of claim 1, wherein X is O.

7. The method of claim 1, wherein

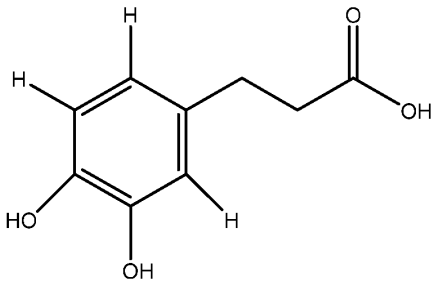
$R_1$, $R_2$, $R_3$, $R_6$, $R_8$, and $R_9$ are each -H;

$R_3$ and $R_4$ are each -OH;

X is O; and

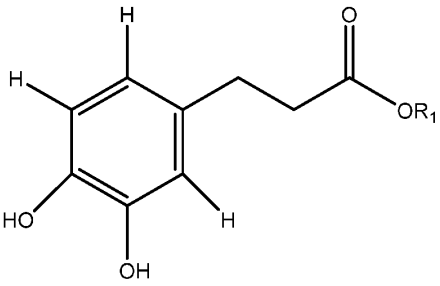
Z is 2.

8. The method of claim 1, wherein the compound of formula II has the following structure:



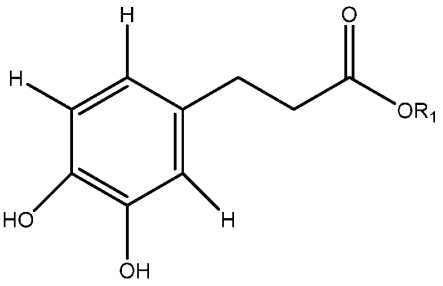

or a pharmaceutically acceptable salt, hydrate, solvate, clathrate, enantiomer, diastereomer, racemate or mixture of steroisomers thereof.

9. The method of claim 1, wherein the compound of formula II is a prodrug of the following structure:



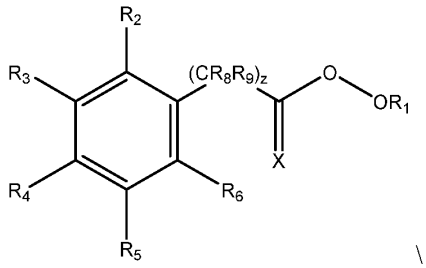

wherein $R_1$ comprises esters including ethyl esters, morpholinoethanol esters, acetate, dialkylaminoacetates, formates, phosphates, sulfates and benzoate derivatives; carbamates including N,N-dimethylaminocarbonyl of hydroxy functional groups, and N-acyl derivatives.

10. A prodrug of formula:




wherein $R_1$ comprises esters including ethyl esters, morpholinoethanol esters, acetate, dialkylaminoacetates, formates, phosphates, sulfates and benzoate derivatives; carbamates including N,N-dimethylaminocarbonyl of hydroxy functional groups, and N-acyl derivatives.

11. A method of treating chronic myeloid leukemia (CML), acute myeloid leukemia (AML), acute lymphocytic leukemia (ALL), breast cancer, and colon cancer comprising administering a following structure:




**Formula II**

wherein X is O or S;

$R_1$ is a hydrogen, or a substituted or unsubstituted substituent including but not limited to lower alkyl, a lower alkenyl, a lower alkynyl, $-(CH_2)_mR_7$, $(CH_2)_m$-OH, $-(CH_2)_m$-O-lower alkyl, $-(CH_2)_m$-O-lower alkenyl, $-(CH_2)_n$-O-$(CH_2)_m$-$R_7$, $-(CH_2)_m$-SH, $-(CH_2)_m$-S-lower alkyl, $-(CH_2)_m$-S-lower alkenyl, $-(CH_2)_n$-S-$(CH_2)_m$-$R_7$

each of $R_2$-$R_6$ is independently a hydrogen, a hydroxyl, a halogen, a lower alkyl, a lower alkenyl, a lower alkynyl, an amino, a nitro, an azido, a sulfate, a sulfonate, a sulfonamido, $-(CH_2)_mR_7$, $(CH_2)_m$-OH, $-(CH_2)_m$-O-lower alkyl, $-(CH_2)_m$-O-lower alkenyl, $-(CH_2)_n$-O-$(CH_2)_m$-$R_7$, --$(CH_2)_m$-SH, $-(CH_2)_m$-S-lower alkyl, $-(CH_2)_m$-S-lower alkenyl, $-(CH_2)_n$-S-$(CH_2)_m$-$R_7$

$R_7$, $R_8$, and $R_9$ each independently represents, for each occurrence, hydrogen, hydroxyl, or a substituted or unsubstituted alkyl, alkenyl, aryl, aralkyl, benzyl,

cycloalkyl, cycloalkenyl, or heterocycle; and

wherein each occurrence of m and n is separately and independently an integer ranging from 1 to 9, and each occurrence of z is independently an integer ranging from 1 to 9;

or a pharmaceutically acceptable salt, hydrate, solvate, clathrate, enantiomer, diastereomer, racemate or mixture of steroisomers thereof.

12. The method of claim 11, wherein $R_3$ and $R_4$ are each -OH.

13. The method of claim 11, wherein $R_2$ and $R_3$ are each -OH.

14. The method of claim 11, wherein z is 2 and $R_8$ and $R_9$ are each -H.

15. The method of claim 11, wherein z is 2; $R_1$, $R_2$, $R_5$, $R_6$, $R_8$ and $R_9$ are each -H; and $R_3$ and $R_4$ are each -OH.

16. The method of claim 11, wherein X is O.

17. The method of claim 11, wherein

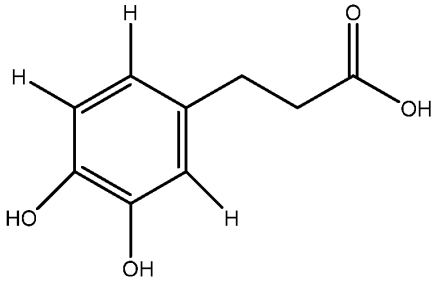
$R_1$, $R_2$, $R_3$, $R_6$, $R_8$, and $R_9$ are each -H;

$R_4$ and $R_5$ are each -OH;

X is O; and

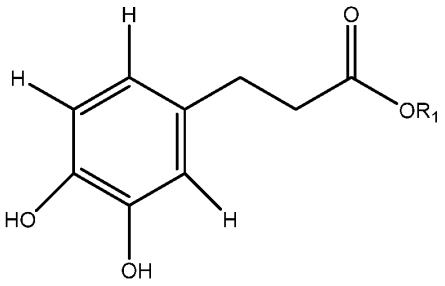
Z is 2.

18. The method of claim 11, wherein the compound of formula II has the following structure:




or a pharmaceutically acceptable salt, hydrate, solvate, clathrate, enantiomer, diastereomer, racemate or mixture of steroisomers thereof.

19. The method of claim 11, wherein the compound of formula II is a prodrug of the following structure:




wherein R1 comprises esters including ethyl esters, morpholinoethanol esters, acetate, dialkylaminoacetates, formates, phosphates, sulfates and benzoate derivatives; carbamates including N,N-dimethylaminocarbonyl of hydroxy functional groups, and N-acyl derivatives.

20. The method of claim 11, further comprising administration of one or more additional therapeutic agents comprising anticancer agents or chemotherapeutic agents.