

Y is chosen from hydrogen, halogen, optionally substituted alkyl, optionally substituted cycloalkyl, or optionally substituted cycloalkylalkyl; and

Z is chosen from an optionally substituted *N*-heterocyclyl, optionally substituted -N(H)-heterocyclylalkyl, optionally substituted -N(Me)-heterocyclylalkyl, or -N(R³)₂.

[0005] One embodiment provides a pharmaceutical composition comprising a compound of Formula (I), or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable excipient.

[0006] One embodiment provides a method of regulating gene transcription in a cell comprising inhibiting lysine-specific demethylase 1 activity by exposing the lysine-specific demethylase 1 enzyme to a compound of Formula (I).

[0007] One embodiment provides a method of treating cancer in a patient in need thereof, comprising administering to the patient a compound of Formula (I), or a pharmaceutically acceptable salt thereof.

[0007a] One embodiment provides the use of a compound of Formula (I), wherein W₁ is CH or CF; W₂ is CH or CF; D is N or CR₃, R₃ = H; B is N or C; Y is H, halogen, optionally substituted cycloalkyl or substituted alkyl; A is C or N; X is substituted aryl, or substituted heteroaryl; and Z is optionally substituted *N*-heterocyclyl, optionally substituted -N(H)-heterocyclylalkyl, or optionally substituted -N(Me)-heterocyclylalkyl in the manufacture of a medicament for regulating gene transcription in a cell by inhibiting lysine-specific demethylase 1 activity.

[0007b] Use of a compound of Formula (I), or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for treating acute myeloid leukemia, breast or prostate cancer in a patient in need thereof.

INCORPORATION BY REFERENCE

[0008] All publications, patents, and patent applications mentioned in this specification are herein incorporated by reference to the same extent as if each individual publication, patent, or patent application was specifically and individually indicated to be incorporated by reference.

DETAILED DESCRIPTION OF THE INVENTION

[0009] As used herein and in the appended claims, the singular forms "a," "and," and "the" include plural referents unless the context clearly dictates otherwise. Thus, for example, reference to "an agent" includes a plurality of such agents, and reference to "the cell" includes reference to one or more cells (or to a plurality of cells) and equivalents thereof known to those skilled in the art, and so forth. When ranges are used herein for physical properties, such as molecular weight, or chemical properties, such as chemical formulae, all combinations and subcombinations of ranges and specific embodiments therein are intended to be included. The term "about" when referring to a number or a numerical range means that the number or numerical range referred to is an approximation within experimental variability (or within statistical experimental error), and thus the number or numerical range may vary between 1% and 15% of the stated number or numerical range. The term "comprising" (and related terms such as "comprise" or "comprises" or "having" or "including") is not intended to exclude that in other certain embodiments, for example, an embodiment of any composition of matter,

25. The compound or pharmaceutically acceptable salt of any one of claims 1-24, wherein A is N; B is C; and D is N.
26. The compound or pharmaceutically acceptable salt of any one of claims 1-24, wherein A is C; B is N; and D is C-R³.
27. The compound or pharmaceutically acceptable salt of claim 26, wherein R³ is hydrogen.
28. The compound or pharmaceutically acceptable salt of claim 26, wherein R³ is optionally substituted alkyl.
29. A pharmaceutical composition comprising a compound of Formula (I), or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable excipient.
30. Use of a compound of Formula (I), wherein W1 is CH or CF; W2 is CH or CF; D is N or CR₃, R₃ = H; B is N or C; Y is H, halogen, optionally substituted cycloalkyl or substituted alkyl; A is C or N; X is substituted aryl, or substituted heteroaryl; and Z is optionally substituted N-heterocyclyl, optionally substituted –N(H)-heterocyclylalkyl, or optionally substituted –N(Me)-heterocyclylalkyl in the manufacture of a medicament for regulating gene transcription in a cell by inhibiting lysine-specific demethylase 1 activity.
31. Use of a compound of Formula (I), or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for treating acute myeloid leukemia, breast or prostate cancer in a patient in need thereof.