

(II)

or a pharmaceutically acceptable salt thereof, wherein

R^1 is hydrogen, halogen, -OH, $-OR^4$, $-N(R^4)_2$, alkyl, carbocyclyl, heterocyclyl, aryl, heteroaryl, carbocyclylalkyl, heterocyclylalkyl, aralkyl, or heteroarylalkyl;

R^2 is alkyl, carbocyclyl, heterocyclyl, aryl, heteroaryl, carbocyclylalkyl, heterocyclylalkyl, aralkyl, or heteroarylalkyl;

R^3 is hydrogen, halogen, -OH, $-NH_2$, -NH(C1-C3alkyl) or C1-C3alkyl; and

each R^4 is independently hydrogen, alkyl, carbocyclyl, heterocyclyl, aryl, heteroaryl, carbocyclylalkyl, heterocyclylalkyl, aralkyl, or heteroarylalkyl.

[0006] One embodiment provides a pharmaceutical composition comprising a compound of Formula (I), or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable excipient. One embodiment provides a pharmaceutical composition comprising a compound of Formula (II), or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable excipient.

[0007] One embodiment provides a method for inhibiting a histone demethylase enzyme comprising contacting the histone demethylase enzyme with a compound of Formula (I). One embodiment provides a method for inhibiting a histone demethylase enzyme comprising contacting the histone demethylase enzyme with a compound of Formula (II).

[0008] 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. One embodiment provides a method of treating cancer in a patient in need thereof, comprising administering to the patient a compound of Formula (II), or a pharmaceutically acceptable salt thereof.

[0008a] One embodiment provides use of a composition comprising a compound as described herein, or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for treating cancer in a subject in need thereof.

INCORPORATION BY REFERENCE

[0009] 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.

27. The compound of claim 26, or a pharmaceutically acceptable salt thereof, wherein R^4 is CH_2F, CHF_2, or CF_3.

28. The compound of claim 27, or a pharmaceutically acceptable salt thereof, wherein R^4 is CF_3.

29. A pharmaceutical composition comprising a compound of any of the preceeding claims, or a pharmaceutically acceptable salt thereof, and at least one pharmaceutically acceptable excipient.

30. A method for inhibiting histone demethylase enzyme comprising contacting the histone demethylase enzyme with a compound of any of the preceeding claims.

31. Use of a composition comprising a compound of any of the preceeding claims, or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for treating cancer in a subject in need thereof.