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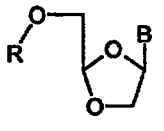

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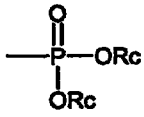

(a)

(57) Abstract

The present invention provides a novel method for treating leukemia and more particularly acute myelogenous leukemia (AML) in a host comprising administering to the host a therapeutically effective amount of a compound having formula (I): wherein B is cytosine or 5–fluorocytosine and R is selected from the group comprising H, monophosphate, diphosphate, triphosphate, carbonyl substituted with a C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{6-10} aryl, and (a) wherein each Rc is independently selected from the group comprising H, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl and an hydroxy protecting group; and wherein said compound is substantially in the form of the (–) enantiomer.