Title (en)

REGIOISOMERIC BENZOTHIOPYRANOPYRIDINES HAVING ANTITUMOR ACTIVITY

Title (de

REGIOISOMERE BENZOTHIOPYRANOPYRIDINE MIT ANTITUMOR- AKTIVITÄT

Title (fr)

BENZOTHIOPYRANOPYRIDINES REGIOISOMERES A ACTIVITE ANTITUMORALE

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Application

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Priority

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Abstract (en)

[origin: WO9849172A1] This invention is directed to benzothiopyrano [2,3-b]-, [3,2-b]- and [3,2-c]-pyridines substituted in the positions 6 and 9. The compounds of the invention have general formula (I) wherein: one of X, Y or Z is nitrogen (-N=), the others being carbon (-CH=); R' is selected from the group consisting of (C1-C4)alkyl, nitro or -NH-R1, wherein R1 is selected from the group consisting of -CO-CH2-NR2R3, (C1-C10)alkyl, (C2-C10)alkyl having one or two substituents selected from the group consisting of -OR4 and -NR2R3, (C2-C10)alkyl interrupted by one or two oxygen atoms or by one -NR5- group, and said (C2-C10)alkyl being optionally substituted by one or two hydroxy or -NR2R3 groups; R is selected in the group consisting of hydrogen, (C1-C10)alkyl, (C2-C10)alkyl having one or two substituents selected from the group consisting of -OR4 and -NR2R3, (C2-C10)alkyl interrupted by one or two oxygen atoms or by one -NR5- group, and said (C2-C10)alkyl being optionally substituted by one or two hydroxy or -NR2R3 groups. These compounds have antitumor activity against human leukemias and solid tumors sensitive to treatment with mitoxantrone and antitumor antibiotics, such as doxorubicin.

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