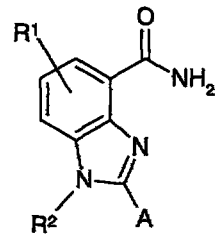
Cycloalkyl-substituted benzimidazoles, their preparation and use

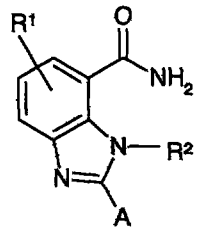
Abstract

Compounds of the formula I or II



I

or



II

in which

A is a saturated or monounsaturated carbocyclic system which has 3 to 8 carbon atoms and may additionally have a fused-on benzene ring, it being possible for the rings to be substituted by one or two different or identical radicals R^3 and also the radical R^4, and

R^1 is hydrogen, chlorine, fluorine, bromine, iodine, branched and unbranched C_1-C_6-alkyl, OH, nitro, CF_3, CN, $NR^{11}R^{12}$, NH-CO-R^{13}, O-C_1-C_4-alkyl where

R^{11} and R^{12} are, independently of one another, hydrogen or C_1-C_4-alkyl, and

R^{13} is hydrogen, C_1-C_4-alkyl, C_1-C_4-alkyl-phenyl or phenyl, and

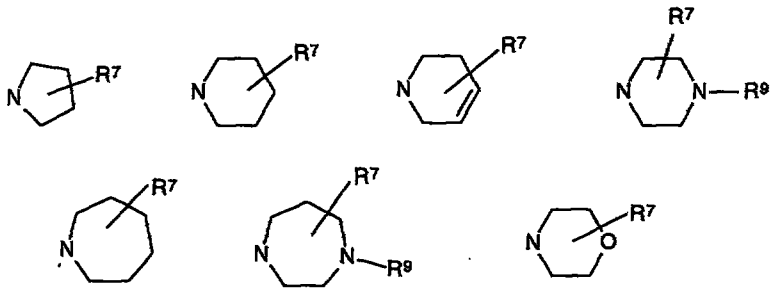
R^2 is hydrogen, branched and unbranched C_1-C_6-alkyl, C_1-C_4-alkyl-phenyl and

R^3 is C_1-C_6-alkyl, OH, O-C_1-C_4-alkyl, O-C_1-C_4-alkyl-phenyl, $NR^{11}R^{12}$, phenyl, C_1-C_4-alkyl-phenyl, CF_3, COOH, $COOC_1$-C_4-alkyl, CONH-C_1-C_4-alkyl, $CONH_2$, it being possible for the phenyl rings also to be substituted by a maximum of two identical or different radicals R^{31}, and

R^{31} is OH, C_1-C_6-alkyl, O-C_1-C_4-alkyl, chlorine, bromine, iodine, fluorine, CF_3, nitro, $NR^{11}R^{12}$, and

R^4 is $-(O)_p-(CH_2)_q-B$, where

B is $NR^{41}R^{42}$ and



where

p can be 0 and 1, and

q can be 0, 1, 2 or 3, where if q is 0 p is also 0, and

R^{41} is hydrogen, C_1-C_6-alkyl, $(CH_2)_r$-E and

R^{42} is hydrogen, C_1-C_6-alkyl, $-CO-R^8$, SO_2-R^8, $-(C=N)-R^8$ and $-(C=N)-NHR^8$ and

r is 0,1,2,3,4 and

E is phenyl which may also carry a maximum of two radicals R^{72}, and, if R ≠ 0, 1, also $NR^{11}R^{12}$, NH-C_1-C_4-alkyl-phenyl, pyrrolidine, piperidine, dihydropiperidine, morpholine, homopiperidine, piperazine, which may also be substituted by C_1-C_6-alkyl and C_1-C_4-alkyl-phenyl, and homopiperazine, which may also be substituted by C_1-C_6-alkyl and C_1-C_4-alkyl-phenyl, and

R^7 is hydrogen, C_1-C_6-alkyl, phenyl, it being possible for the ring also to be substituted by up to two identical or different radicals R^{71}, and

R^{71} is OH, C_1-C_6-alkyl, O-C_1-C_4-alkyl, chlorine, bromine, iodine, fluorine, CF_3, nitro, $NR^{11}R^{12}$, $NHOC_1$-C_4-alkyl, and

R^{72} is OH, C_1-C_6-alkyl, O-C_1-C_4-alkyl, chlorine, bromine, iodine, fluorine, CF_3, nitro, $NR^{11}R^{12}$, $NHOC_1$-C_4-alkyl and

R^8 is C_1-C_6-alkyl, phenyl, C_1-C_4-alkyl-phenyl-0-C_1-C_4-alkyl-phenyl [sic], it being possible for the rings also to be substituted by up to two identical or different radicals R^{81}, and

R^{81} is OH, C_1-C_6-alkyl, O-C_1-C_4-alkyl, chlorine, bromine, iodine, fluorine, CF_3, nitro, $NR^{11}R^{12}$, and

R^9 is hydrogen, C_1-C_6-alkyl, C_1-C_4-alkyl-phenyl, phenyl, it being possible for the rings also to be substituted by up to two radicals R^{91}, and

R^{91} can be OH, C_1-C_6-alkyl, O-C_1-C_4-alkyl, chlorine, bromine, iodine, fluorine, CF_3, nitro, $NR^{11}R^{12}$, and

and their tautomeric forms, possible enantiomeric and diastereomeric forms, possible cis.trans isomers on the rings in A and prodrugs thereof.