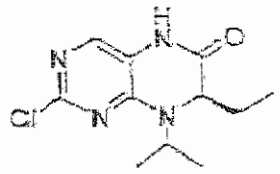
The aim of the present invention is to provide an improved process for preparing compounds of formula (I), particularly 7,8-dihydro-5H-pteridin-6-one derivatives.

Summary

In one aspect, there is provided the compound with the following name and structure

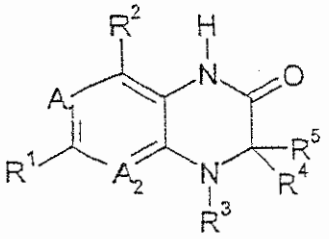


(7R)-2-chloro-7-ethyl-8-isopropyl-7,8-dihydro-5H-pteridin-6-one.

Detailed description of the invention

The present invention solves the problem outlined above by the method of synthesising compounds of formula (I) described hereinafter.

The invention thus relates to a process for preparing compounds of general formula I



(I)

wherein

$R^1$ denotes a group selected from the group consisting of chlorine, fluorine, bromine, methanesulphonyl, ethanesulphonyl, trifluoromethanesulphonyl, para-toluenesulphonyl, $CH_3S(=O)$- and phenylS(=O)-

$R^2$ denotes hydrogen or $C_1$-$C_3$-alkyl,

$R^3$ denotes hydrogen or a group selected from the group consisting of optionally substituted $C_1$-$C_{12}$-alkyl, $C_2$-$C_{12}$-alkenyl, $C_2$-$C_{12}$-alkynyl and $C_6$-$C_{14}$-aryl, or a group selected from the group consisting of optionally substituted and/or bridged $C_3$-$C_{12}$-cycloalkyl, $C_3$-$C_{12}$-cycloalkenyl, $C_7$-$C_{12}$-polycycloalkyl, $C_7$-$C_{12}$-polycycloalkenyl, $C_5$-$C_{12}$-spirocycloalkyl and saturated or unsaturated $C_3$-$C_{12}$-heterocycloalkyl, which contains 1 to 2 heteroatoms,

$R^4$, $R^5$ which may be identical or different denote hydrogen or optionally substituted $C_1$-$C_6$-alkyl, or

$R^4$ and $R^5$ together denote a 2- to 5-membered alkyl bridge which may contain 1 to 2 heteroatoms, or

$R^4$ and $R^3$ or $R^5$ and $R^3$ together denote a saturated or unsaturated $C_3$-$C_4$-alkyl bridge, which may optionally contain 1 heteroatom,