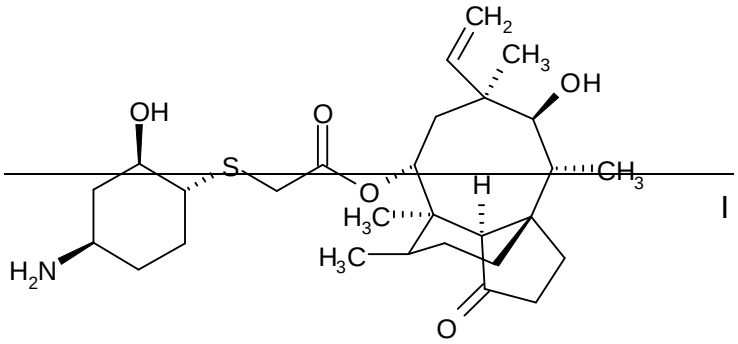
Patent Claims

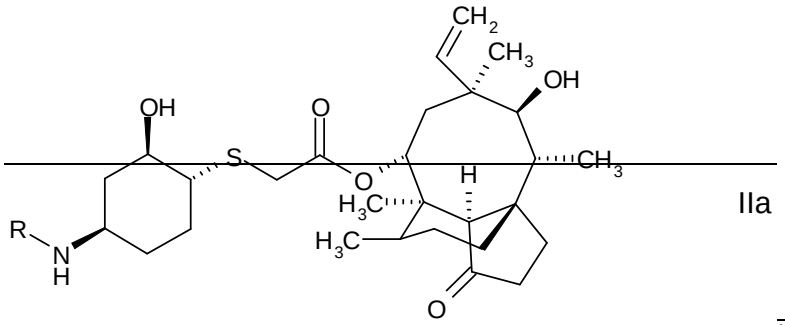
~~1. A process for the preparation of a compound of formula I~~



~~in the form of a single stereoisomer in crystalline form, comprising~~

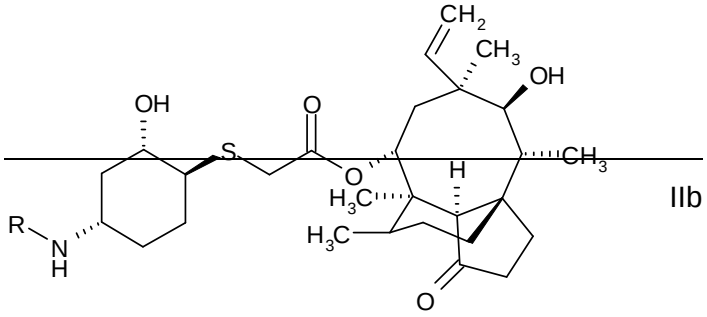
~~deprotecting the amine group~~

~~either in a compound of formula IIa~~



~~, or~~

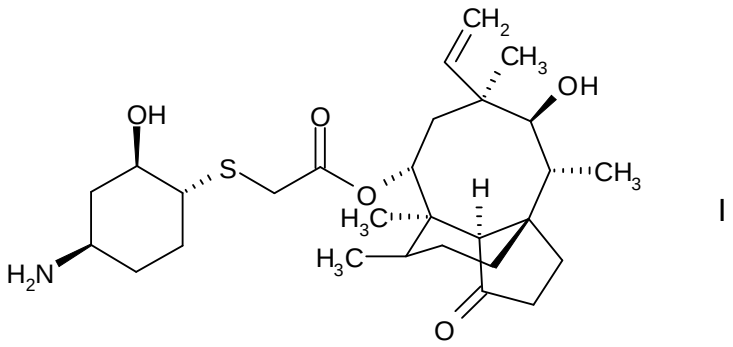
~~in a mixture of a compound of formula IIa with a compound of formula IIb~~



~~wherein R is an amine protecting group, and~~

~~isolating a compound of formula I obtained in the form of a single diastereomer in crystalline form either directly from the reaction mixture or via recrystallization in organic solvent.~~

~~2~~1. A compound of formula I ~~as defined in claim 1~~



I

in the form of a single stereoisomer in crystalline form.

~~3~~2. A compound according to claim ~~2~~1, which is 14-*O*-{[(1*R*,2*R*,4*R*)-4-amino-2-hydroxy-cyclohexylsulfanyl]-acetyl}-mutilin in crystalline Form 1.

~~4~~3. A compound according to claim ~~2~~1, which is 14-*O*-{[(1*R*,2*R*,4*R*)-4-amino-2-hydroxy-cyclohexylsulfanyl]-acetyl}-mutilin in crystalline Form 2 in the form of a *n*-butanol solvate.

~~5~~4. A compound of formula I as defined in claim 1 in the form of a single stereoisomer in the form of a crystalline salt.

~~6~~5. A crystalline salt according to claim ~~5~~4, which is an acetate, lactate or hydrogenmaleate.

~~7~~6. A compound according to any one of claims ~~5~~ 4 or ~~6~~5, which is selected from the group consisting of

14-*O*-{[(1*R*,2*R*,4*R*)-4-amino-2-hydroxy-cyclohexylsulfanyl]-acetyl}-mutilin acetate in crystalline Form A;

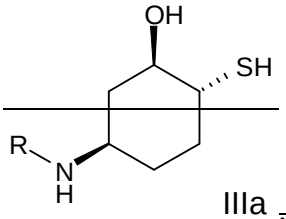
14-*O*-{[(1*R*,2*R*,4*R*)-4-amino-2-hydroxy-cyclohexylsulfanyl]-acetyl}-mutilin acetate in crystalline Form B

14-*O*-{[(1*R*,2*R*,4*R*)-4-amino-2-hydroxy-cyclohexylsulfanyl]-acetyl}-mutilin L-lactate in crystalline Form 1, and

14-*O*-{[(1*R*,2*R*,4*R*)-4-amino-2-hydroxy-cyclohexylsulfanyl]-acetyl}-mutilin hydrogenmaleate in crystalline Form 1.

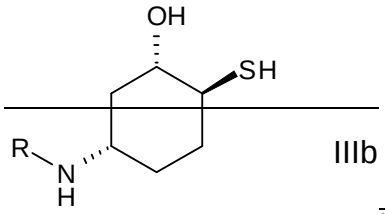
~~8. A process according to claim 1 or claim 2, wherein a compound of formula IIa, or a mixture of a compound of formula IIa with a compound of formula IIb is obtained by coupling~~

~~either a compound of formula IIIa~~



IIIa ~~, or~~

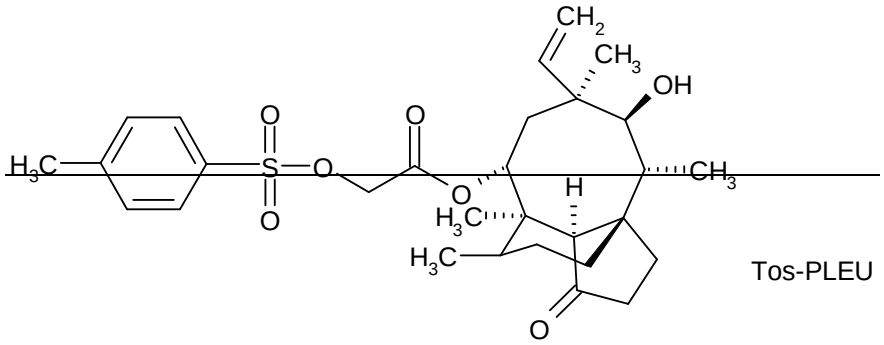
~~a mixture of a compound of formula IIIa with a compound of formula IIIb~~



IIIb ~~, respectively~~

~~wherein R is as defined in claim 1,~~

~~with an activated 14-O-AKT-acetyl-mutilin, wherein AKT is an activating group, optionally mesyl, besyl, tosyl, or -O-AKT is halogen, optionally 14-O-AKT-acetyl-mutilin is a compound of formula~~

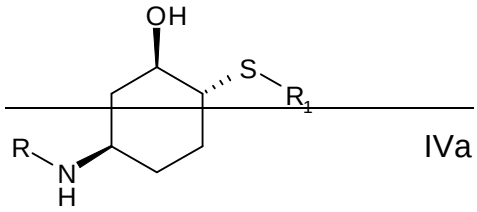


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~~and isolating either a compound of formula IIa or mixture of a compound of formula IIa with a compound of formula IIb, respectively, obtained from the reaction mixture.~~

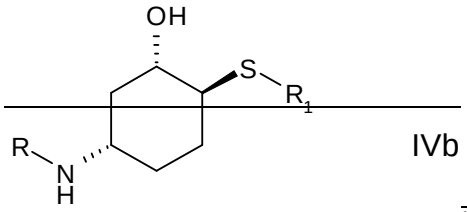
9. A process according to claim 8, wherein a compound of formula IIIa, or a mixture of a compound of formula IIIa with a compound of formula IIIb is obtained by deprotecting the thiol function

either in a compound of formula IVa



IVa

or in a mixture of compound IVa with a compound of formula IVb



IVb

, respectively

wherein R is as defined in claim 8 and R_1 is a thiol protecting group,
and isolating either a compound of formula IIIa, or a mixture of a compound of formula IIIa with a compound of formula IIIb, respectively obtained from the reaction mixture.

11. A compound of formula IIa as defined in claim 1, for use as an intermediate in a process for the production of a compound of formula I as defined in claim 1, in the form of a single stereoisomer.

12. Pharmaceutical composition comprising crystalline 14-O-{[((1R,2R,4R)-4-amino-2-hydroxy-cyclohexyl)sulfanyl]acetyl}mutilin, or comprising an, optionally crystalline, acetate, lactate, or hydrogenmaleate of 14-O-{[((1R,2R,4R)-4-amino-2-hydroxy-cyclohexyl)sulfanyl]acetyl}mutilin as an active ingredient in combination with pharmaceutically acceptable carrier or diluent.

~~13. A compound of formula IIIa as defined in claim 8, for use as an intermediate in a process for the production of a compound of formula IIa as defined in claim 1, in the form of a single stereoisomer~~

~~14. A compound of formula IIa according to claim 1, wherein R is as defined in claim 1.~~

~~15. A compound according to claim 14, wherein R in a compound of formula IIa is *tert*-butoxycarbonyl or trifluoroacetyl.~~

~~16. A compound of formula IIIa according to claim 8, wherein R is as defined in claim 8.~~

~~17. A compound according to claim 16, wherein R in a compound of formula IIIa is *tert*-butoxycarbonyl or trifluoroacetyl.~~