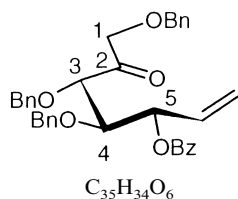
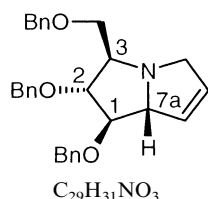


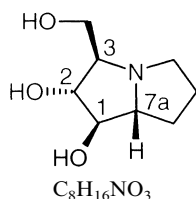
Lauriane Rambaud, Philippe Compain and Olivier R. Martin*

Tetrahedron: Asymmetry 12 (2001) 18075-*O*-Benzoyl-1,3,4-tri-*O*-benzyl-6,7-dideoxy-L-xylo-hept-6-en-2-ulose $[\alpha]_D -19$ (*c* 15.1, $CHCl_3$)Source of chirality: 2,3,5-tri-*O*-benzyl-D-arabinofuranose and diastereoselective nucleophilic addition (C-5)Absolute configuration: (3*S*,4*R*,5*S*)

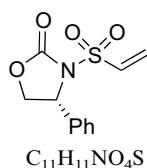
Lauriane Rambaud, Philippe Compain and Olivier R. Martin*

Tetrahedron: Asymmetry 12 (2001) 1807(1*R*,2*R*,3*R*,7*aR*)-1,2-Dibenzyloxy-3-benzyloxymethyl-2,3,5,7*a*-tetrahydro-1*H*-pyrrolizine $[\alpha]_D +42$ (*c* 1.6, $CHCl_3$)Source of chirality: 2,3,5-tri-*O*-benzyl-D-arabinofuranose and diastereoselective synthesis (C-3 and C-7*a*)Absolute configuration: (1*R*,2*R*,3*R*,7*aR*)

Lauriane Rambaud, Philippe Compain and Olivier R. Martin*

Tetrahedron: Asymmetry 12 (2001) 1807(1*R*,2*R*,3*R*,7*aR*)-1,2-Dihydroxy-3-hydroxymethylpyrrolizidine $[\alpha]_D +12.5$ (*c* 0.4, H_2O)Source of chirality: 2,3,5-tri-*O*-benzyl-D-arabinofuranose and diastereoselective synthesis (C-3 and C-7*a*)Absolute configuration: (1*R*,2*R*,3*R*,7*aR*)

M. Carmen Bernabeu, Rafael Chinchilla, Larry R. Falvello and Carmen Nájera*

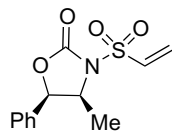
Tetrahedron: Asymmetry 12 (2001) 1811(4*R*)-4-Phenyl-3-vinylsulfonyl-1,3-oxazolidin-2-one

E.e. >99%

 $[\alpha]_D^{24} = -51.3$ (*c* 2.1, $CHCl_3$)Source of chirality: (*R*)-phenylglycinolAbsolute configuration: (*R*)

M. Carmen Bernabeu, Rafael Chinchilla, Larry R. Falvello and Carmen Nájera*

Tetrahedron: Asymmetry 12 (2001) 1811



$C_{12}H_{13}NO_4S$

(4*S*,5*R*)-4-Methyl-5-phenyl-3-vinylsulfonyl-1,3-oxazolidin-2-one

E.e. >99%

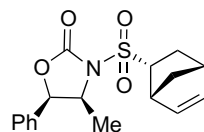
$[\alpha]_D^{27} = -67.3$ (*c* 1.2, $CHCl_3$)

Source of chirality: (1*R*,2*S*)-norephedrine

Absolute configuration: (4*S*,5*R*)

M. Carmen Bernabeu, Rafael Chinchilla, Larry R. Falvello and Carmen Nájera*

Tetrahedron: Asymmetry 12 (2001) 1811



$C_{17}H_{19}NO_4S$

(4*S*,5*R*)-3-[(1*R*,2*R*,4*R*)-Bicyclo[2.2.1]hept-5-en-2-ylsulfonyl]-4-methyl-5-phenyl-1,3-oxazolidin-2-one

D.e. >99%

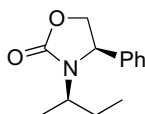
$[\alpha]_D^{25} = -13.4$ (*c* 1.2, $CHCl_3$)

Source of chirality: (1*R*,2*S*)-norephedrine

Absolute configuration: (4*S*,5*R*,1'*R*,2'*R*,4'*R*)

Mary-Lorène Leroux, Thierry Le Gall* and Charles Mioskowski*

Tetrahedron: Asymmetry 12 (2001) 1817



$C_{13}H_{17}NO_2$

(4*R*,1'*R*)-3-(1'-Methylpropyl)-4-phenyloxazolidin-2-one **4a**

E.e. >95%

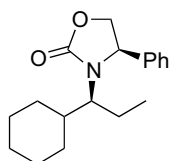
$[\alpha]_D = -52$ (*c* 0.53, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (4*R*,1'*R*)

Mary-Lorène Leroux, Thierry Le Gall* and Charles Mioskowski*

Tetrahedron: Asymmetry 12 (2001) 1817



$C_{18}H_{25}NO_2$

(4*R*,1'*S*)-3-(1'-Cyclohexylpropyl)-4-phenyloxazolidin-2-one **4b**

E.e. >95%

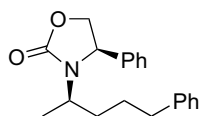
$[\alpha]_D = +2.2$ (*c* 1.15, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (4*R*,1'*S*)

Mary-Lorène Leroux, Thierry Le Gall* and Charles Mioskowski*

Tetrahedron: Asymmetry 12 (2001) 1817



$C_{20}H_{23}NO_2$

(4*R*,1'*R*)-3-(1'-Methyl-4'-phenylbutyl)-4-phenyloxazolidin-2-one **4c**

E.e. >95%

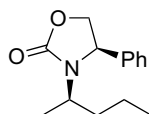
$[\alpha]_D = -56.9$ (*c* 1.10, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (4*R*,1'*R*)

Mary-Lorène Leroux, Thierry Le Gall* and Charles Mioskowski*

Tetrahedron: Asymmetry 12 (2001) 1817



$C_{14}H_{19}NO_2$

(4*R*,1'*R*)-3-(1'-Methylbutyl)-4-phenyloxazolidin-2-one **4d**

E.e. >95%

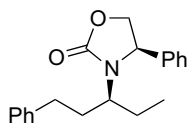
$[\alpha]_D = -49.8$ (*c* 1.54, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (4*R*,1'*R*)

Mary-Lorène Leroux, Thierry Le Gall* and Charles Mioskowski*

Tetrahedron: Asymmetry 12 (2001) 1817



$C_{20}H_{23}NO_2$

(4*R*,1'*S*)-3-(1'-Ethyl-3'-phenylpropyl)-4-phenyloxazolidin-2-one **4e**

E.e. >95%

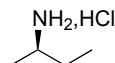
$[\alpha]_D = +22.3$ (*c* 1.21, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (4*R*,1'*S*)

Mary-Lorène Leroux, Thierry Le Gall* and Charles Mioskowski*

Tetrahedron: Asymmetry 12 (2001) 1817



$C_4H_{12}ClN$

(*R*)-2-Aminobutane hydrochloride **5a**

E.e. = 88%

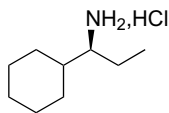
$[\alpha]_D = +1.0$ (*c* 1.04, EtOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Mary-Lorène Leroux, Thierry Le Gall* and Charles Mioskowski*

Tetrahedron: Asymmetry 12 (2001) 1817



$C_9H_{17}ClN$

(*S*)-1-Amino-1-cyclohexylpropane hydrochloride **5b**

E.e. >95%

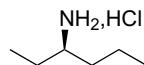
$[\alpha]_D = -7.7$ (c 1.00, EtOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)

Mary-Lorène Leroux, Thierry Le Gall* and Charles Mioskowski*

Tetrahedron: Asymmetry 12 (2001) 1817



$C_{16}H_{19}ClN$

(*R*)-2-Amino-5-phenylpentane hydrochloride **5c**

E.e. >95%

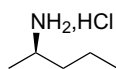
$[\alpha]_D = +3.0$ (c 0.63, EtOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Mary-Lorène Leroux, Thierry Le Gall* and Charles Mioskowski*

Tetrahedron: Asymmetry 12 (2001) 1817



$C_5H_{14}ClN$

(*R*)-2-Aminopentane hydrochloride **5d**

E.e. not determined

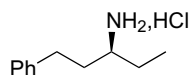
$[\alpha]_D = +6.1$ (c 0.40, EtOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Mary-Lorène Leroux, Thierry Le Gall* and Charles Mioskowski*

Tetrahedron: Asymmetry 12 (2001) 1817



$C_{11}H_{18}ClN$

(*S*)-3-Amino-1-phenylpentane hydrochloride **5e**

E.e. >95%

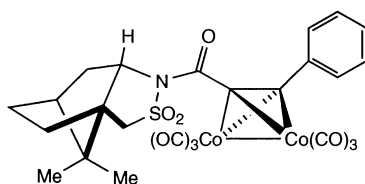
$[\alpha]_D = -0.4$ (c 0.68, EtOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)

Jordi Vázquez, Sílvia Fonquerna, Albert Moyano,*
Miquel A. Pericàs* and Antoni Riera

Tetrahedron: Asymmetry 12 (2001) 1837



Dicobalt hexacarbonyl complex of (1*R*,5*S*,7*S*)-1-(10,10-dimethyl-3,3-dioxo-3-thia-4-azatricyclo[5.2.1.0^{1,5}]decan-4-yl)-3-phenyl-3-propyn-1-one

E.e. = 100%

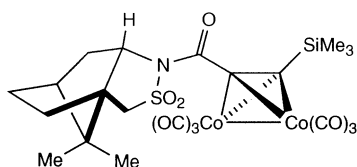
CD (CH₂Cl₂, 2.5×10⁻⁴ M): λ_{max} = 343 nm (Δε = 1.88)

Source of chirality: synthesis from enantiomerically pure (+)-2,10-camphorsultam

Absolute configuration: 1*R*,5*S*,7*S*

Jordi Vázquez, Sílvia Fonquerna, Albert Moyano,*
Miquel A. Pericàs* and Antoni Riera

Tetrahedron: Asymmetry 12 (2001) 1837



Dicobalt hexacarbonyl complex of (1*R*,5*S*,7*S*)-1-(10,10-dimethyl-3,3-dioxo-3-thia-4-azatricyclo[5.2.1.0^{1,5}]decan-4-yl)-3-trimethylsilyl-3-propyn-1-one

E.e. = 100%

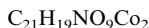
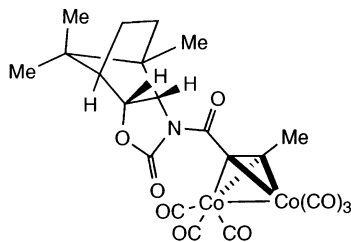
CD (CH₂Cl₂, 5.0×10⁻⁴ M): λ_{max} = 360 nm (Δε = 1.30)

Source of chirality: synthesis from enantiomerically pure (+)-2,10-camphorsultam

Absolute configuration: 1*R*,5*S*,7*S*

Jordi Vázquez, Sílvia Fonquerna, Albert Moyano,*
Miquel A. Pericàs* and Antoni Riera

Tetrahedron: Asymmetry 12 (2001) 1837



Dicobalt hexacarbonyl complex of (1*S*,2*R*,6*S*,7*R*)-7,10,10-trimethyl-5-(2-butynoyl)-3-oxa-5-azatricyclo[5.2.1.0^{2,6}]decan-4-one

E.e. = 100%

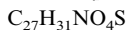
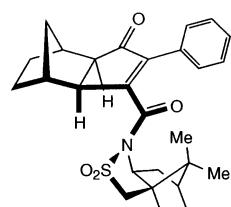
CD (CH₂Cl₂, 3.0×10⁻⁴ M): λ_{max} = 341 nm (Δε = 4.84)

Source of chirality: synthesis from enantiomerically pure (+)-camphor

Absolute configuration: 1*S*,2*R*,6*S*,7*R*

Jordi Vázquez, Sílvia Fonquerna, Albert Moyano,*
Miquel A. Pericàs* and Antoni Riera

Tetrahedron: Asymmetry 12 (2001) 1837



(1*S*,2*R*,6*S*,7*R*)-5-((1*R*,5*S*,7*S*)-10,10-Dimethyl-3,3-dioxo-3-thia-4-azatricyclo[5.2.1.0^{1,5}]decan-4-carbonyl)-4-phenyltricyclo[5.2.1.0^{2,6}]dec-4-en-3-one

D.r. = 125:1 (HPLC)

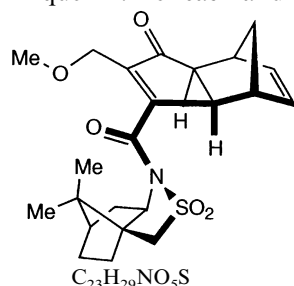
[α]_D²⁵ = -18.8 (c = 0.63, CHCl₃)

Source of chirality: synthesis from enantiomerically pure (+)-2,10-camphorsultam

Absolute configuration: 1*S*,2*R*,6*S*,7*R*

Jordi Vázquez, Sílvia Fonquerna, Albert Moyano,*
Miquel A. Pericàs* and Antoni Riera

Tetrahedron: Asymmetry 12 (2001) 1837



$C_{23}H_{29}NO_5S$
(1*R*,2*R*,6*S*,7*S*)-5-((1*S*,5*R*,7*R*)-(10,10-dimethyl-3,3-dioxo-3-thia-4-azatricyclo[5.2.1.0^{1,5}]decan-4-carbonyl)-4-methoxymethyltricyclo[5.2.1.0^{2,6}]deca-4,8-dien-3-one

D.r. >800:1 (HPLC)

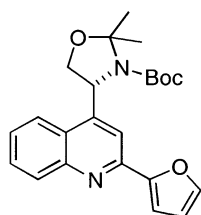
$[\alpha]_{435}^{25} = +111.2$ ($c = 0.34$, CHCl₃)

Source of chirality: synthesis from enantiomerically pure (–)-2,10-camphorsultam

Absolute configuration: 1*R*,2*R*,6*S*,7*S*

Gemma Cabarrocas, Montserrat Ventura, Miguel Maestro,
José Mahía and José M. Villalgordo*

Tetrahedron: Asymmetry 12 (2001) 1851



$C_{23}H_{26}N_2O_4$

4-(2-Furan-2-yl-quinolin-4-yl)-2,2-dimethyl-oxazolidine-3-carboxylic acid *tert*-butyl ester

Ee = 100%

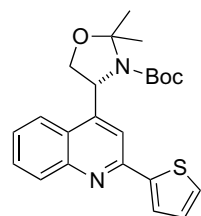
$[\alpha]_D^{20} = -127.4$ (c 0.94, MeOH)

Source of chirality: stereoselective synthesis

Absolute configuration: 4*R*

Gemma Cabarrocas, Montserrat Ventura, Miguel Maestro,
José Mahía and José M. Villalgordo*

Tetrahedron: Asymmetry 12 (2001) 1851



$C_{23}H_{26}N_2O_3S$

2,2-Dimethyl-4-(2-thiophen-2-yl-quinolin-4-yl)-oxazolidine-3-carboxylic acid *tert*-butyl ester

Ee = 100%

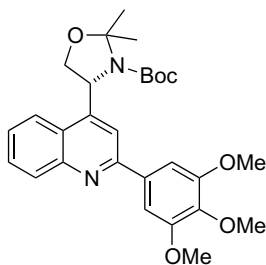
$[\alpha]_D^{20} = -199.8$ (c 0.84, MeOH)

Source of chirality: stereoselective synthesis

Absolute configuration: 4*R*

Gemma Cabarrocas, Montserrat Ventura, Miguel Maestro,
José Mahía and José M. Villalgordo*

Tetrahedron: Asymmetry 12 (2001) 1851



$C_{28}H_{34}N_2O_6$

2,2-Dimethyl-4-[2-(3,4,5-trimethoxy-phenyl)-quinolin-4-yl]-oxazolidine-3-carboxylic acid *tert*-butyl ester

Ee = 100%

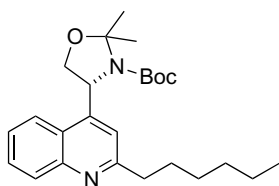
$[\alpha]_D^{20} = -139.2$ (c 0.75, MeOH)

Source of chirality: stereoselective synthesis

Absolute configuration: 4*R*

Gemma Cabarrocas, Montserrat Ventura, Miguel Maestro,
José Mahía and José M. Villalgordo*

Tetrahedron: Asymmetry 12 (2001) 1851



$C_{25}H_{36}N_2O_3$

4-(2-Hexyl-quinolin-4-yl)-2,2-dimethyl-oxazolidine-3-carboxylic acid *tert*-butyl ester

Ee = 100%

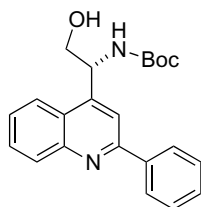
$[\alpha]_D^{20} = -88.3$ (c 0.89, MeOH)

Source of chirality: stereoselective synthesis

Absolute configuration: 4*R*

Gemma Cabarrocas, Montserrat Ventura, Miguel Maestro,
José Mahía and José M. Villalgordo*

Tetrahedron: Asymmetry 12 (2001) 1851



$C_{22}H_{24}N_2O_3$

[2-Hydroxy-1-(2-phenyl-quinolin-4-yl)-ethyl]-carbamic acid *tert*-butyl ester

Ee = 100%

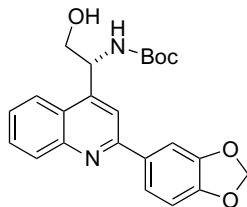
$[\alpha]_D^{20} = -71.4$ (c 0.82, MeOH)

Source of chirality: stereoselective synthesis

Absolute configuration: 1*R*

Gemma Cabarrocas, Montserrat Ventura, Miguel Maestro,
José Mahía and José M. Villalgordo*

Tetrahedron: Asymmetry 12 (2001) 1851



$C_{23}H_{24}N_2O_5$

[1-(2-Benzo[1,3]dioxol-5-yl-quinolin-4-yl)-2-hydroxy-ethyl]-carbamic acid *tert*-butyl ester

Ee = 100%

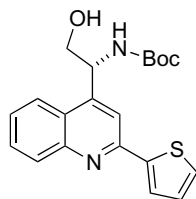
$[\alpha]_D^{20} = -85.3$ (c 0.99, MeOH)

Source of chirality: stereoselective synthesis

Absolute configuration: 1*R*

Gemma Cabarrocas, Montserrat Ventura, Miguel Maestro,
José Mahía and José M. Villalgordo*

Tetrahedron: Asymmetry 12 (2001) 1851



$C_{20}H_{22}N_2O_3S$

[2-Hydroxy-1-(2-thiophen-2-yl-quinolin-4-yl)-ethyl]-carbamic acid *tert*-butyl ester

Ee = 100%

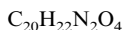
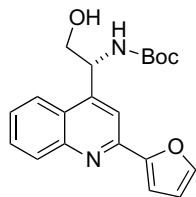
$[\alpha]_D^{20} = -81.8$ (c 0.80, MeOH)

Source of chirality: stereoselective synthesis

Absolute configuration: 1*R*

Gemma Cabarrocas, Montserrat Ventura, Miguel Maestro,
José Mahía and José M. Villalgordo*

Tetrahedron: Asymmetry 12 (2001) 1851



[1-(2-Furan-2-yl-quinolin-4-yl)-2-hydroxy-ethyl]-carbamic acid *tert*-butyl ester

Ee = 100%

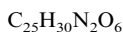
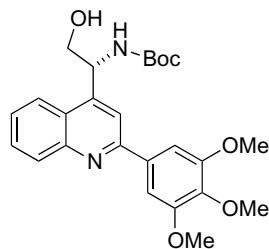
$[\alpha]_D^{20} = -63.4$ (c 0.84, MeOH)

Source of chirality: stereoselective synthesis

Absolute configuration: 1*R*

Gemma Cabarrocas, Montserrat Ventura, Miguel Maestro,
José Mahía and José M. Villalgordo*

Tetrahedron: Asymmetry 12 (2001) 1851



{2-Hydroxy-1-[2-(3,4,5-trimethoxy-phenyl)-quinolin-4-yl]-ethyl}-carbamic acid *tert*-butyl ester

Ee = 100%

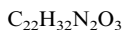
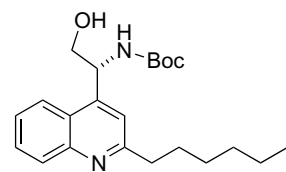
$[\alpha]_D^{20} = -80.6$ (c 0.94, MeOH)

Source of chirality: stereoselective synthesis

Absolute configuration: 1*R*

Gemma Cabarrocas, Montserrat Ventura, Miguel Maestro,
José Mahía and José M. Villalgordo*

Tetrahedron: Asymmetry 12 (2001) 1851



[1-(2-Hexyl-quinolin-4-yl)-2-hydroxy-ethyl]-carbamic acid *tert*-butyl ester

Ee = 100%

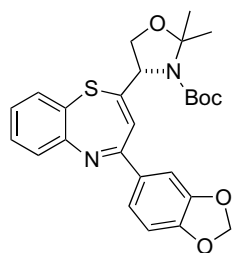
$[\alpha]_D^{20} = -33.4$ (c 0.99, MeOH)

Source of chirality: stereoselective synthesis

Absolute configuration: 1*R*

Gemma Cabarrocas, Montserrat Ventura, Miguel Maestro,
José Mahía and José M. Villalgordo*

Tetrahedron: Asymmetry 12 (2001) 1851



4-(4-Benzo[1,3]dioxol-5-yl-benzo[b][1,4]thiazepin-2-yl)-2,2-dimethyl-oxazolidine-3-carboxylic acid *tert*-butyl ester

Ee = 100%

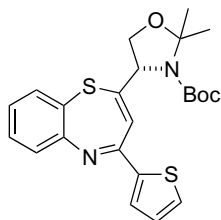
$[\alpha]_D^{20} = -21.5$ (c 0.72, MeOH)

Source of chirality: stereoselective synthesis

Absolute configuration: 4*S*

Gemma Cabarrocas, Montserrat Ventura, Miguel Maestro,
José Mahía and José M. Villalgordo*

Tetrahedron: Asymmetry 12 (2001) 1851



$C_{23}H_{26}N_2O_3S_2$

2,2-Dimethyl-4-(4-thiophen-2-yl-benzo[*b*][1,4]thiazepin-2-yl)-oxazolidine-3-carboxylic acid *tert*-butyl ester

Ee = 100%

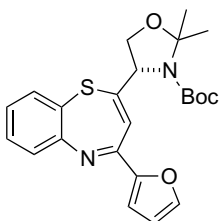
$[\alpha]_D^{20} = -83.0$ (*c* 0.97, MeOH)

Source of chirality: stereoselective synthesis

Absolute configuration: 4*S*

Gemma Cabarrocas, Montserrat Ventura, Miguel Maestro,
José Mahía and José M. Villalgordo*

Tetrahedron: Asymmetry 12 (2001) 1851



$C_{23}H_{26}N_2O_4S$

4-(4-Furan-2-yl-benzo[*b*][1,4]thiazepin-2-yl)-2,2-dimethyl-oxazolidine-3-carboxylic acid *tert*-butyl ester

Ee = 100%

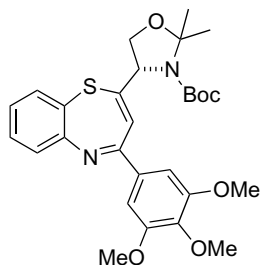
$[\alpha]_D^{20} = -90.4$ (*c* 1.34, MeOH)

Source of chirality: stereoselective synthesis

Absolute configuration: 4*S*

Gemma Cabarrocas, Montserrat Ventura, Miguel Maestro,
José Mahía and José M. Villalgordo*

Tetrahedron: Asymmetry 12 (2001) 1851



$C_{28}H_{34}N_2O_6S$

2,2-Dimethyl-4-[4-(3,4,5-trimethoxy-phenyl)-benzo[*b*][1,4]thiazepin-2-yl]-oxazolidine-3-carboxylic acid *tert*-butyl ester

Ee = 100%

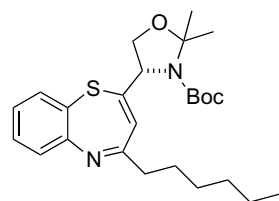
$[\alpha]_D^{20} = -157.2$ (*c* 1.03, MeOH)

Source of chirality: stereoselective synthesis

Absolute configuration: 4*S*

Gemma Cabarrocas, Montserrat Ventura, Miguel Maestro,
José Mahía and José M. Villalgordo*

Tetrahedron: Asymmetry 12 (2001) 1851



$C_{25}H_{36}N_2O_3S$

4-(4-Hexyl-benzo[*b*][1,4]thiazepin-2-yl)-2,2-dimethyl-oxazolidine-3-carboxylic acid *tert*-butyl ester

Ee = 100%

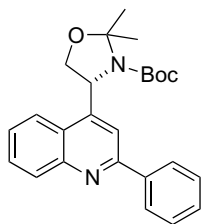
$[\alpha]_D^{20} = -79.1$ (*c* 1.11, MeOH)

Source of chirality: stereoselective synthesis

Absolute configuration: 4*S*

Gemma Cabarrocas, Montserrat Ventura, Miguel Maestro,
José Mahía and José M. Villalgordo*

Tetrahedron: Asymmetry 12 (2001) 1851



$C_{25}H_{28}N_2O_3$

2,2-Dimethyl-4-(2-phenyl-quinolin-4-yl)-oxazolidine-3-carboxylic acid *tert*-butyl ester

Ee = 100%

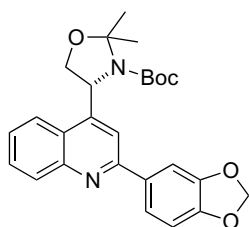
$[\alpha]_D^{20} = -182.0$ (*c* 0.81, MeOH)

Source of chirality: stereoselective synthesis

Absolute configuration: 4*R*

Gemma Cabarrocas, Montserrat Ventura, Miguel Maestro,
José Mahía and José M. Villalgordo*

Tetrahedron: Asymmetry 12 (2001) 1851



$C_{26}H_{28}N_2O_5$

4-(2-Benzo[1,3]dioxol-5-yl-quinolin-4-yl)-2,2-dimethyl-oxazolidine-3-carboxylic acid *tert*-butyl ester

Ee = 100%

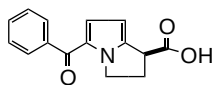
$[\alpha]_D^{20} = -139.7$ (*c* 1.03, MeOH)

Source of chirality: stereoselective synthesis

Absolute configuration: 4*R*

Young Hee Kim, Chan Seong Cheong,* So Ha Lee and
Kwan Soo Kim

Tetrahedron: Asymmetry 12 (2001) 1865



$C_{14}H_{13}NO_3$

(*S*)-(-)-5-Benzoyl-1,2-dihydro-3*H*-pyrrolo[1,2-*a*]pyrrole-1-carboxylic acid

E.e. = 99%

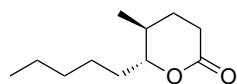
$[\alpha]_D^{25} = -154$ (*c* 1.05, CH₃OH)

Source of chirality: enzymatic resolution of
racemic mixture

Absolute configuration: (*S*)

Elisabetta Brenna,* Claudia Dei Negri, Claudio Fuganti and
Stefano Serra

Tetrahedron: Asymmetry 12 (2001) 1871



$C_{11}H_{20}O_2$

(+)-*trans*-Aerangis lactone (5*S*,6*R*)-5-methyl-6-pentyl-pyran-2-one

E.e. >99%

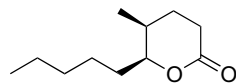
$[\alpha]_D^{20} = +45$ (*c* 0.3, CH₂Cl₂)

Source of chirality: enzymatic synthesis

Absolute configuration: (4*S*,5*R*)

Elisabetta Brenna,* Claudia Dei Negri, Claudio Fuganti and Stefano Serra

Tetrahedron: Asymmetry 12 (2001) 1871



(-)-*cis*-Aerangis lactone (5*S*,6*S*)-5-methyl-6-pentyl-pyran-2-one

E.e. >99%, d.e. = 70%

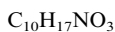
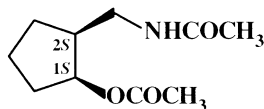
$[\alpha]_{\text{D}}^{20} = -35$ (*c* 0.9, CH_2Cl_2)

Source of chirality: enzymatic synthesis

Absolute configuration: (4*S*,5*S*)

Judit Kámán, Enikő Forró and Ferenc Fülöp*

Tetrahedron: Asymmetry 12 (2001) 1881



(1*S*,2*S*)-*N*,*O*-Diacetyl-2-aminomethylcyclopentanol

E.e. = 98% by GC on CP-Chirasil-Dex CB column

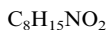
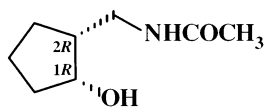
$[\alpha]_{\text{D}}^{25} = +55.9$ (*c* 0.8, MeOH)

Source of chirality: Novozym 435-catalysed
O-deacylation

Absolute configuration: 1*S*,2*S*

Judit Kámán, Enikő Forró and Ferenc Fülöp*

Tetrahedron: Asymmetry 12 (2001) 1881



(1*R*,2*R*)-*N*-Acetyl-2-aminomethylcyclopentanol

E.e. = 96% by GC on CP-Chirasil-Dex CB column
after derivatisation

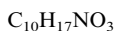
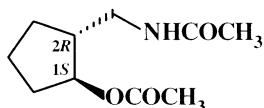
$[\alpha]_{\text{D}}^{25} = -5.1$ (*c* 0.8, MeOH)

Source of chirality: Novozym 435-catalysed
O-deacylation

Absolute configuration: 1*R*,2*R*

Judit Kámán, Enikő Forró and Ferenc Fülöp*

Tetrahedron: Asymmetry 12 (2001) 1881



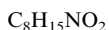
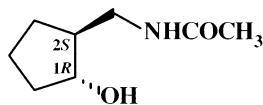
(1*S*,2*R*)-*N*,*O*-Diacetyl-2-aminomethylcyclopentanol

E.e. = 97% by GC on CP-Chirasil-Dex CB column

$[\alpha]_{\text{D}}^{25} = +29.6$ (*c* 1, MeOH)

Source of chirality: Novozym 435-catalysed
O-deacylation

Absolute configuration: 1*S*,2*R*



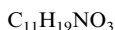
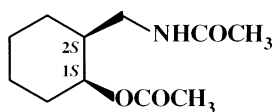
(1*R*,2*S*)-*N*-Acetyl-2-aminomethylcyclopentanol

E.e. = 92% by GC on CP-Chirasil-Dex CB column after derivatisation

$[\alpha]_D^{25} = -34.5$ (*c* 0.95, MeOH)

Source of chirality: Novozym 435-catalysed *O*-deacylation

Absolute configuration: 1*R*,2*S*



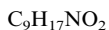
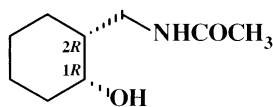
(1*S*,2*S*)-*N*,*O*-Diacetyl-2-aminomethylcyclohexanol

E.e. = 92% by GC on CP-Chirasil-Dex CB column

$[\alpha]_D^{25} = +49.5$ (*c* 0.8, MeOH)

Source of chirality: Novozym 435-catalysed *O*-deacylation

Absolute configuration: 1*S*,2*S*



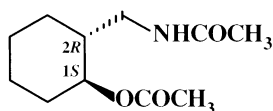
(1*R*,2*R*)-*N*-Acetyl-2-aminomethylcyclohexanol

E.e. = 92% by GC on CP-Chirasil-Dex CB column after derivatisation

$[\alpha]_D^{25} = -9.8$ (*c* 0.8, MeOH)

Source of chirality: Novozym 435-catalysed *O*-deacylation

Absolute configuration: 1*R*,2*R*



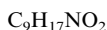
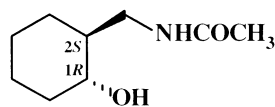
(1*S*,2*R*)-*N*,*O*-Diacetyl-2-aminomethylcyclohexanol

E.e. = 98% by GC on CP-Chirasil-Dex CB column

$[\alpha]_D^{25} = +39.9$ (*c* 0.8, MeOH)

Source of chirality: Novozym 435-catalysed *O*-deacylation

Absolute configuration: 1*S*,2*R*



(1*R*,2*S*)-*N*-Acetyl-2-aminomethylcyclohexanol

E.e. = 99% by GC on CP-Chirasil-Dex CB column after derivatisation

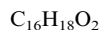
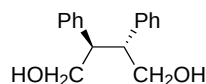
$[\alpha]_D^{25} = -9.1$ (*c* 0.8, MeOH)

Source of chirality: Novozym 435-catalysed *O*-deacylation

Absolute configuration: 1*R*,2*S*

Mariappan Periasamy,* Vutukuri Dharma Rao and Muthu Seenivasaperumal

Tetrahedron: Asymmetry 12 (2001) 1887



2,3-Diphenyl-1,4-butanediol

E.e. >98%

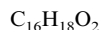
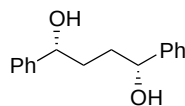
$[\alpha]_D^{25} = +48.0$ (*c* 0.324, CHCl₃)

Source of chirality: resolution

Absolute configuration: (2*R*,3*R*)

Mariappan Periasamy,* Vutukuri Dharma Rao and Muthu Seenivasaperumal

Tetrahedron: Asymmetry 12 (2001) 1887



1,4-Diphenylbutane-1,4-diol

E.e. >98%

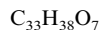
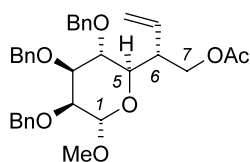
$[\alpha]_D^{25} = +58.0$ (*c* 0.42, CHCl₃)

Source of chirality: resolution

Absolute configuration: (1*R*,4*R*)

Sławomir Jarosz,* Stanisław Skóra, Katarzyna Szewczyk and Zbigniew Ciunik

Tetrahedron: Asymmetry 12 (2001) 1895



Methyl 7-*O*-acetyl-2,3,4-tri-*O*-benzyl-6-deoxy-6-*C*-vinyl- α -D-*manno*-D-*glycero*-heptoside

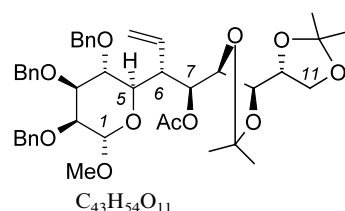
$[\alpha]_D = +13.0$ (*c* 1.5, CHCl₃)

Source of chirality: chiral pool

Absolute configuration: (1*S*,2*S*,3*S*,4*R*,5*R*,6*R*)

Sławomir Jarosz,* Stanisław Skóra, Katarzyna Szewczyk and Zbigniew Ciunik

Tetrahedron: Asymmetry 12 (2001) 1895



$C_{43}H_{54}O_{11}$

Methyl 7-O-acetyl-2,3,4-tri-O-benzyl-6-deoxy-8,9:10,11-di-O-isopropylidene-6-C-vinyl- α -D-manno-D-gulo-D-glycero-undecoside

$[\alpha]_D = -6.95$ (c 0.6, $CHCl_3$)

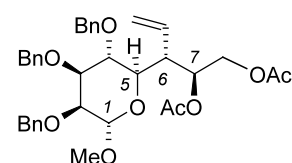
Source of chirality: chiral pool

Absolute configuration:

(1*S*,2*S*,3*S*,4*R*,5*R*,6*R*,7*S*,8*R*,9*R*,10*R*)

Sławomir Jarosz,* Stanisław Skóra, Katarzyna Szewczyk and Zbigniew Ciunik

Tetrahedron: Asymmetry 12 (2001) 1895



$C_{36}H_{42}O_9$

Methyl 7,8-di-O-acetyl-2,3,4-tri-O-benzyl-6-deoxy-6-C-vinyl- α -D-manno-D-erythro-octoside

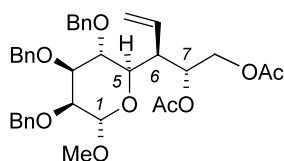
$[\alpha]_D = +5.5$ (c 1.5, $CHCl_3$)

Source of chirality: chiral pool

Absolute configuration: (1*S*,2*S*,3*S*,4*R*,5*R*,6*R*,7*S*)

Sławomir Jarosz,* Stanisław Skóra, Katarzyna Szewczyk and Zbigniew Ciunik

Tetrahedron: Asymmetry 12 (2001) 1895



$C_{36}H_{42}O_9$

Methyl 7,8-di-O-acetyl-2,3,4-tri-O-benzyl-6-deoxy-6-C-vinyl- α -D-manno-L-erythro-octoside

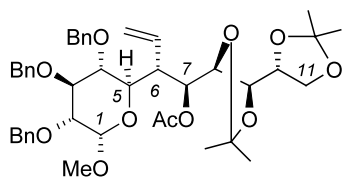
$[\alpha]_D = -10.7$ (c 1.5, $CHCl_3$)

Source of chirality: chiral pool

Absolute configuration: (1*S*,2*S*,3*S*,4*R*,5*R*,6*S*,7*R*)

Sławomir Jarosz,* Stanisław Skóra, Katarzyna Szewczyk and Zbigniew Ciunik

Tetrahedron: Asymmetry 12 (2001) 1895



$C_{43}H_{54}O_{11}$

Methyl 7-O-acetyl-2,3,4-tri-O-benzyl-6-deoxy-8,9:10,11-di-O-isopropylidene-6-C-vinyl- α -D-glucosyl-D-gulo-D-glycero-undecoside

$[\alpha]_D = +1.7$ (c 1.50, $CHCl_3$)

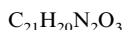
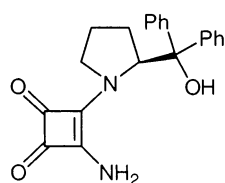
Source of chirality: chiral pool

Absolute configuration:

(1*S*,2*R*,3*S*,4*R*,5*R*,6*R*,7*S*,8*R*,9*R*,10*R*)

Ji Zhang, Hai-Bing Zhou, Shou-Mao Lü, Mei-Ming Luo,
Ru-Gang Xie,* Michael C. K. Choi, Zhong-Yuan Zhou,
Albert S. C. Chan and Teng-Kuei Yang

Tetrahedron: Asymmetry 12 (2001) 1907

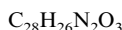
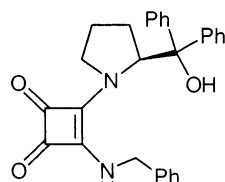


3-Amino-4-[(2'*S*)-2'-(diphenylhydroxymethyl)pyrrolidino]-3-cyclobutene-1,2-dione

$[\alpha]_D^{20} = -95.4$ ($c = 0.5$, CH_2Cl_2)
Source of chirality: (*S*)-proline
Absolute configuration: (2'*S*)

Ji Zhang, Hai-Bing Zhou, Shou-Mao Lü, Mei-Ming Luo,
Ru-Gang Xie,* Michael C. K. Choi, Zhong-Yuan Zhou,
Albert S. C. Chan and Teng-Kuei Yang

Tetrahedron: Asymmetry 12 (2001) 1907

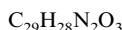
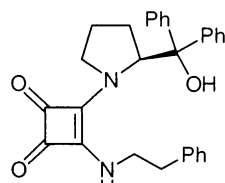


3-Benzylamino-4-[(2'*S*)-2'-(diphenylhydroxymethyl)pyrrolidino]-3-cyclobutene-1,2-dione

$[\alpha]_D^{20} = -210$ ($c = 1.15$, CH_2Cl_2)
Source of chirality: (*S*)-proline
Absolute configuration: (2'*S*)

Ji Zhang, Hai-Bing Zhou, Shou-Mao Lü, Mei-Ming Luo,
Ru-Gang Xie,* Michael C. K. Choi, Zhong-Yuan Zhou,
Albert S. C. Chan and Teng-Kuei Yang

Tetrahedron: Asymmetry 12 (2001) 1907

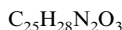
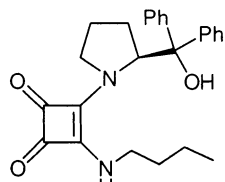


3-Phenylethylamino-4-[(2'*S*)-2'-(diphenylhydroxymethyl)pyrrolidino]-3-cyclobutene-1,2-dione

$[\alpha]_D^{20} = -229$ ($c = 0.35$, CH_2Cl_2)
Source of chirality: (*S*)-proline
Absolute configuration: (2'*S*)

Ji Zhang, Hai-Bing Zhou, Shou-Mao Lü, Mei-Ming Luo,
Ru-Gang Xie,* Michael C. K. Choi, Zhong-Yuan Zhou,
Albert S. C. Chan and Teng-Kuei Yang

Tetrahedron: Asymmetry 12 (2001) 1907

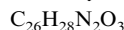
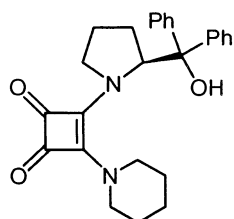


3-Butylamino-4-[(2'*S*)-2'-(diphenylhydroxymethyl)pyrrolidino]-3-cyclobutene-1,2-dione

$[\alpha]_D^{20} = -159.7$ ($c = 0.72$, ethyl acetate)
Source of chirality: (*S*)-proline
Absolute configuration: (2'*S*)

Ji Zhang, Hai-Bing Zhou, Shou-Mao Lü, Mei-Ming Luo,
Ru-Gang Xie,* Michael C. K. Choi, Zhong-Yuan Zhou,
Albert S. C. Chan and Teng-Kuei Yang

Tetrahedron: Asymmetry 12 (2001) 1907



3-Pyridinyl-4-[(2'*S*)-2'-(diphenylhydroxymethyl)pyrrolidino]-3-cyclobutene-1,2-dione

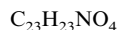
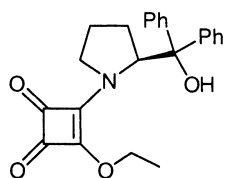
$[\alpha]_D^{20} = +44.0$ ($c = 0.96$, $CHCl_3$)

Source of chirality: (*S*)-proline

Absolute configuration: (2'*S*)

Ji Zhang, Hai-Bing Zhou, Shou-Mao Lü, Mei-Ming Luo,
Ru-Gang Xie,* Michael C. K. Choi, Zhong-Yuan Zhou,
Albert S. C. Chan and Teng-Kuei Yang

Tetrahedron: Asymmetry 12 (2001) 1907



3-Ethoxy-4-[(2'*S*)-2'-(diphenylhydroxymethyl)pyrrolidino]-3-cyclobutene-1,2-dione

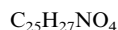
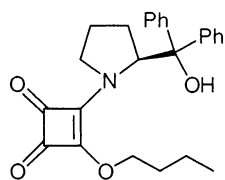
$[\alpha]_D^{20} = -175.3$ ($c = 0.8$, CH_2Cl_2)

Source of chirality: (*S*)-proline

Absolute configuration: (2'*S*)

Ji Zhang, Hai-Bing Zhou, Shou-Mao Lü, Mei-Ming Luo,
Ru-Gang Xie,* Michael C. K. Choi, Zhong-Yuan Zhou,
Albert S. C. Chan and Teng-Kuei Yang

Tetrahedron: Asymmetry 12 (2001) 1907



3-*n*-Butoxy-4-[(2'*S*)-2'-(diphenylhydroxymethyl)pyrrolidino]-3-cyclobutene-1,2-dione

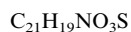
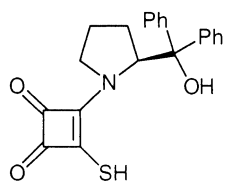
$[\alpha]_D^{20} = -184$ ($c = 0.5$, CH_2Cl_2)

Source of chirality: (*S*)-proline

Absolute configuration: (2'*S*)

Ji Zhang, Hai-Bing Zhou, Shou-Mao Lü, Mei-Ming Luo,
Ru-Gang Xie,* Michael C. K. Choi, Zhong-Yuan Zhou,
Albert S. C. Chan and Teng-Kuei Yang

Tetrahedron: Asymmetry 12 (2001) 1907



3-Mercapto-4-[(2'*S*)-2'-(diphenylhydroxymethyl)pyrrolidino]-3-cyclobutene-1,2-dione

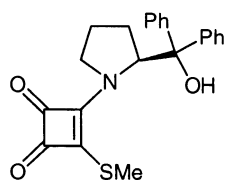
$[\alpha]_D^{20} = -82$ ($c = 0.7$, ethanol)

Source of chirality: (*S*)-proline

Absolute configuration: (2'*S*)

Ji Zhang, Hai-Bing Zhou, Shou-Mao Lü, Mei-Ming Luo,
Ru-Gang Xie,* Michael C. K. Choi, Zhong-Yuan Zhou,
Albert S. C. Chan and Teng-Kuei Yang

Tetrahedron: Asymmetry 12 (2001) 1907



$C_{22}H_{21}NO_3S$

3-Methylthio-4-[(2'*S*)-2'-(diphenylhydroxymethyl)pyrrolidino]-3-cyclobutene-1,2-dione

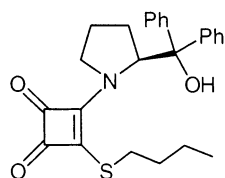
$[\alpha]_D^{20} = -148.8$ ($c = 0.42$, CH_2Cl_2)

Source of chirality: (*S*)-proline

Absolute configuration: (2'*S*)

Ji Zhang, Hai-Bing Zhou, Shou-Mao Lü, Mei-Ming Luo,
Ru-Gang Xie,* Michael C. K. Choi, Zhong-Yuan Zhou,
Albert S. C. Chan and Teng-Kuei Yang

Tetrahedron: Asymmetry 12 (2001) 1907



$C_{25}H_{27}NO_3S$

3-*n*-Butylthio-4-[(2'*S*)-2'-(diphenylhydroxymethyl)pyrrolidino]-3-cyclobutene-1,2-dione

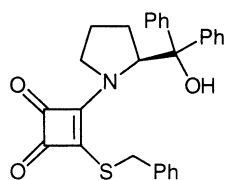
$[\alpha]_D^{20} = -108.8$ ($c = 0.74$, CH_2Cl_2)

Source of chirality: (*S*)-proline

Absolute configuration: (2'*S*)

Ji Zhang, Hai-Bing Zhou, Shou-Mao Lü, Mei-Ming Luo,
Ru-Gang Xie,* Michael C. K. Choi, Zhong-Yuan Zhou,
Albert S. C. Chan and Teng-Kuei Yang

Tetrahedron: Asymmetry 12 (2001) 1907



$C_{28}H_{25}NO_3S$

3-Benzylthio-4-[(2'*S*)-2'-(diphenylhydroxymethyl)pyrrolidino]-3-cyclobutene-1,2-dione

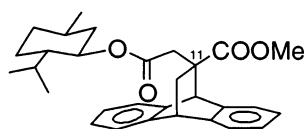
$[\alpha]_D^{20} = -74.4$ ($c = 0.45$, CH_2Cl_2)

Source of chirality: (*S*)-proline

Absolute configuration: (2'*S*)

Palangpon Kongsaree, Puttanan Meepowpan and
Yodhathai Thebtaranonth*

Tetrahedron: Asymmetry 12 (2001) 1913



$C_{30}H_{36}O_4$

(11*S*)-11-Carbomethoxy-11-[(*-*)-menthoxyacetyl]-9,10-dihydro-9,10-ethanoanthracene

E.e. >99%

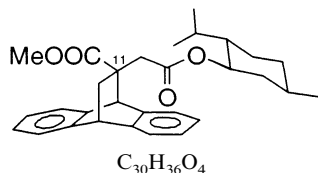
$[\alpha]_D^{30} = -109.0$ (c 1.29, $CHCl_3$)

Source of chirality: (*-*)-(1*R*,2*S*,5*R*)-menthol,
chemical resolution

Absolute configuration: (11*S*)

Palangpon Kongsaree, Puttinan Meepowpan and
Yodhathai Thebtaranonth*

Tetrahedron: Asymmetry 12 (2001) 1913



(11*R*)-11-Carbomethoxy-11-[(−)-menthoxyacetyl]-9,10-dihydro-9,10-ethanoanthracene

E.e. >99%

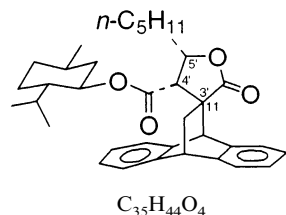
$[\alpha]_D^{30} = -51.4$ (*c* 1.20, $CHCl_3$)

Source of chirality: (−)-(1*R*,2*S*,5*R*)-menthol,
chemical resolution

Absolute configuration: (11*R*)

Palangpon Kongsaree, Puttinan Meepowpan and
Yodhathai Thebtaranonth*

Tetrahedron: Asymmetry 12 (2001) 1913



(4'*R*,5'*R*,11*R*)-Tetrahydro-4'-carbomethoxy-5'-*n*-pentyl-2'-furanone-3'-spiro-11-9,10-dihydro-9,10-ethanoanthracene

E.e. >99%

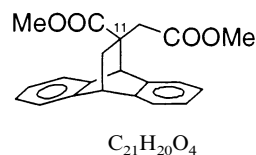
$[\alpha]_D^{31} = -179.5$ (*c* 0.40, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (4'*R*,5'*R*,11*R*)

Palangpon Kongsaree, Puttinan Meepowpan and
Yodhathai Thebtaranonth*

Tetrahedron: Asymmetry 12 (2001) 1913



(11*R*)-11-Carbomethoxy-11-methoxyacetyl-9,10-dihydro-9,10-ethanoanthracene

E.e. >99%

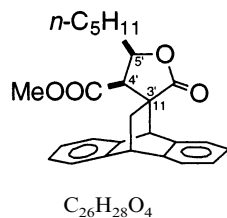
$[\alpha]_D^{29} = -39.0$ (*c* 1.18, $CHCl_3$)

Source of chirality: synthesis and resolution

Absolute configuration: (11*R*)

Palangpon Kongsaree, Puttinan Meepowpan and
Yodhathai Thebtaranonth*

Tetrahedron: Asymmetry 12 (2001) 1913



(4'*R*,5'*R*,11*R*)-Tetrahydro-4'-carbomethoxy-5'-*n*-pentyl-2'-furanone-3'-spiro-11-9,10-dihydro-9,10-ethanoanthracene

E.e. >99%

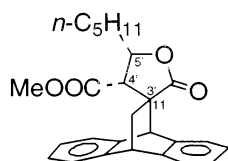
$[\alpha]_D^{31} = +94.2$ (*c* 0.89, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (4'*R*,5'*R*,11*R*)

Palangpon Kongsaree, Puttinan Meepowpan and
Yodhathai Thebtaranonth*

Tetrahedron: Asymmetry 12 (2001) 1913



(4'S,5'S,11R)-Tetrahydro-4'-carbomethoxy-5'-n-pentyl-2'-furanone-3'-spiro-11-9,10-dihydro-9,10-ethanoanthracene

E.e. >99%

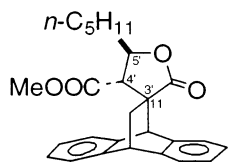
$[\alpha]_{\text{D}}^{28} = -136.7$ (c 1.16, CHCl_3)

Source of chirality: asymmetric synthesis

Absolute configuration: (4'S,5'S,11R)

Palangpon Kongsaree, Puttinan Meepowpan and
Yodhathai Thebtaranonth*

Tetrahedron: Asymmetry 12 (2001) 1913



(4'S,5'R,11R)-Tetrahydro-4'-carbomethoxy-5'-n-pentyl-2'-furanone-3'-spiro-11-9,10-dihydro-9,10-ethanoanthracene

E.e. >99%

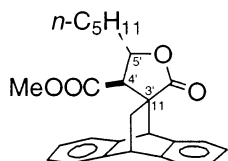
$[\alpha]_{\text{D}}^{30} = +61.2$ (c 0.92, CHCl_3)

Source of chirality: asymmetric synthesis

Absolute configuration: (4'S,5'R,11R)

Palangpon Kongsaree, Puttinan Meepowpan and
Yodhathai Thebtaranonth*

Tetrahedron: Asymmetry 12 (2001) 1913



(4'R,5'S,11R)-Tetrahydro-4'-carbomethoxy-5'-n-pentyl-2'-furanone-3'-spiro-11-9,10-dihydro-9,10-ethanoanthracene

E.e. >99%

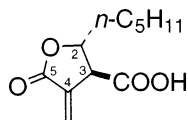
$[\alpha]_{\text{D}}^{30} = +4.6$ (c 1.12, CHCl_3)

Source of chirality: asymmetric synthesis

Absolute configuration: (4'R,5'S,11R)

Palangpon Kongsaree, Puttinan Meepowpan and
Yodhathai Thebtaranonth*

Tetrahedron: Asymmetry 12 (2001) 1913



(2R,3S)-Tetrahydro-4-methylene-5-oxo-2-n-pentyl-3-furancarboxylic acid

E.e. >99%

$[\alpha]_{\text{D}}^{30} = +16.6$ (c 0.33, CHCl_3)

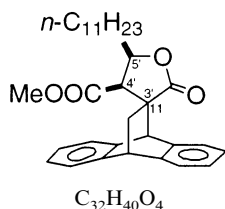
$[\alpha]_{\text{D}}^{32} = +7.4$ (c 0.33, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (2R,3S)

Palangpon Kongsaree, Puttinan Meepowpan and
Yodhathai Thebtaranonth*

Tetrahedron: Asymmetry 12 (2001) 1913



(4'*R*,5'*R*,11*R*)-Tetrahydro-4'-carbomethoxy-5'-*n*-pentyl-2'-furanone-3'-spiro-11-9,10-dihydro-9,10-ethanoanthracene

E.e. >99%

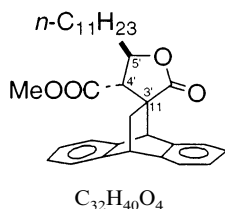
$[\alpha]_{\text{D}}^{25} = +78.5$ (*c* 0.79, CHCl_3)

Source of chirality: asymmetric synthesis

Absolute configuration: (4'*R*,5'*R*,11*R*)

Palangpon Kongsaree, Puttinan Meepowpan and
Yodhathai Thebtaranonth*

Tetrahedron: Asymmetry 12 (2001) 1913



(4'*S*,5'*R*,11*R*)-Tetrahydro-4'-carbomethoxy-5'-*n*-pentyl-2'-furanone-3'-spiro-11-9,10-dihydro-9,10-ethanoanthracene

E.e. >99%

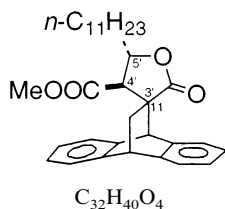
$[\alpha]_{\text{D}}^{30} = +53.8$ (*c* 0.71, CHCl_3)

Source of chirality: asymmetric synthesis

Absolute configuration: (4'*S*,5'*R*,11*R*)

Palangpon Kongsaree, Puttinan Meepowpan and
Yodhathai Thebtaranonth*

Tetrahedron: Asymmetry 12 (2001) 1913



(4'*R*,5'*S*,11*R*)-Tetrahydro-4'-carbomethoxy-5'-*n*-pentyl-2'-furanone-3'-spiro-11-9,10-dihydro-9,10-ethanoanthracene

E.e. >99%

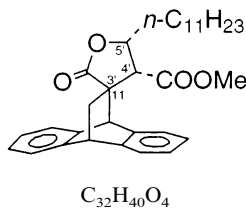
$[\alpha]_{\text{D}}^{30} = +1.8$ (*c* 0.66, CHCl_3)

Source of chirality: asymmetric synthesis

Absolute configuration: (4'*R*,5'*S*,11*R*)

Palangpon Kongsaree, Puttinan Meepowpan and
Yodhathai Thebtaranonth*

Tetrahedron: Asymmetry 12 (2001) 1913



(4'*R*,5'*R*,11*S*)-Tetrahydro-4'-carbomethoxy-5'-*n*-pentyl-2'-furanone-3'-spiro-11-9,10-dihydro-9,10-ethanoanthracene

E.e. >99%

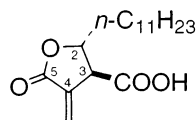
$[\alpha]_{\text{D}}^{30} = +117.1$ (*c* 0.61, CHCl_3)

Source of chirality: asymmetric synthesis

Absolute configuration: (4'*R*,5'*R*,11*S*)

Palangpon Kongsaree, Puttinan Meepowpan and
Yodhathai Thebtaranonth*

Tetrahedron: Asymmetry 12 (2001) 1913



(2*R*,3*S*)-Tetrahydro-4-methylene-5-oxo-2-*n*-pentyl-3-furancarboxylic acid

E.e. >99%

$[\alpha]_D^{32} = +13.0$ (*c* 0.66, $CHCl_3$)

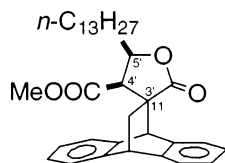
$[\alpha]_D^{32} = +7.5$ (*c* 0.43, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (2*R*,3*S*)

Palangpon Kongsaree, Puttinan Meepowpan and
Yodhathai Thebtaranonth*

Tetrahedron: Asymmetry 12 (2001) 1913



(4'*R*,5'*R*,11*R*)-Tetrahydro-4'-carbomethoxy-5'-*n*-pentyl-2'-furanone-3'-spiro-11-9,10-dihydro-9,10-ethanoanthracene

E.e. >99%

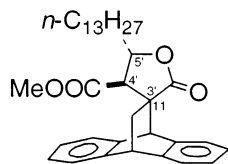
$[\alpha]_D^{28} = +73.1$ (*c* 1.20, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (4'*R*,5'*R*,11*R*)

Palangpon Kongsaree, Puttinan Meepowpan and
Yodhathai Thebtaranonth*

Tetrahedron: Asymmetry 12 (2001) 1913



(4'*R*,5'*S*,11*R*)-Tetrahydro-4'-carbomethoxy-5'-*n*-pentyl-2'-furanone-3'-spiro-11-9,10-dihydro-9,10-ethanoanthracene

E.e. >99%

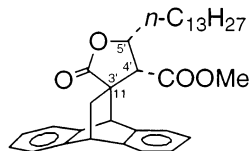
$[\alpha]_D^{30} = +0.8$ (*c* 0.77, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (4'*R*,5'*S*,11*R*)

Palangpon Kongsaree, Puttinan Meepowpan and
Yodhathai Thebtaranonth*

Tetrahedron: Asymmetry 12 (2001) 1913



(4'*R*,5'*R*,11*S*)-Tetrahydro-4'-carbomethoxy-5'-*n*-pentyl-2'-furanone-3'-spiro-11-9,10-dihydro-9,10-ethanoanthracene

E.e. >99%

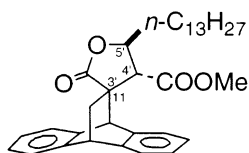
$[\alpha]_D^{30} = +107.3$ (*c* 1.06, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (4'*R*,5'*R*,11*S*)

Palangpon Kongsaree, Puttinan Meepowpan and
Yodhathai Thebtaranonth*

Tetrahedron: Asymmetry 12 (2001) 1913



(4'*R*,5'*S*,11*S*)-Tetrahydro-4'-carbomethoxy-5'-*n*-pentyl-2'-furanone-3'-spiro-11-9,10-dihydro-9,10-ethanoanthracene

E.e. >99%

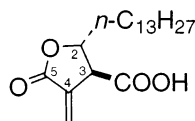
$[\alpha]_D^{29} = -49.3$ (*c* 1.06, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (4'*R*,5'*S*,11*S*)

Palangpon Kongsaree, Puttinan Meepowpan and
Yodhathai Thebtaranonth*

Tetrahedron: Asymmetry 12 (2001) 1913



(2*R*,3*S*)-Tetrahydro-4-methylene-5-oxo-2-*n*-pentyl-3-furancarboxylic acid

E.e. >99%

$[\alpha]_D^{32} = +11.2$ (*c* 0.50, $CHCl_3$)

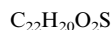
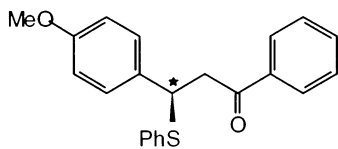
$[\alpha]_D^{31} = +10.0$ (*c* 0.24, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (2*R*,3*S*)

Jacek Skarzewski,* Mariola Zielińska-Błajet and Iлона Turowska-Tyrk

Tetrahedron: Asymmetry 12 (2001) 1923



(*R*)-(+)-3-(4-Methoxyphenyl)-1-phenyl-3-phenylsulfanylpropan-1-one

E.e. = 93%, determined by 1H NMR with $Eu(hfc)_3$

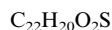
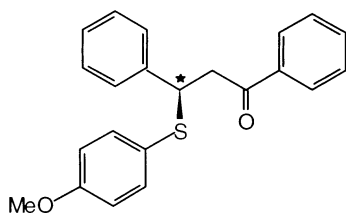
$[\alpha]_D = +148$ (*c* 0.98, CH_2Cl_2)

Source of chirality: enantioselective Michael addition of thiophenol catalyzed by (+)-cinchonine

Absolute configuration: *R* (determined by comparison of the optical rotation of an analogous compound)

Jacek Skarzewski,* Mariola Zielińska-Błajet and Iлона Turowska-Tyrk

Tetrahedron: Asymmetry 12 (2001) 1923



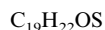
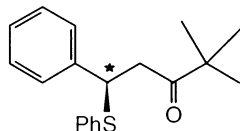
(*R*)-(+)-3-(4-Methoxyphenylsulfanyl)-1,3-diphenylpropan-1-one

E.e. = 94%, determined by 1H NMR with $Eu(hfc)_3$

$[\alpha]_D = +109$ (*c* 1.02, CH_2Cl_2)

Source of chirality: enantioselective Michael addition of thiophenol catalyzed by (+)-cinchonine

Absolute configuration: *R* (determined by comparison of the optical rotation of an analogous compound)

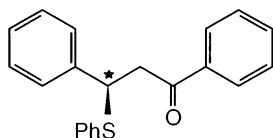


(R)-(+)-4,4-Dimethyl-1-phenyl-1-phenylsulfanylpentan-3-one

E.e. >95%, determined by ^1H NMR with $\text{Eu}(\text{hfc})_3$
[α]_D = +175 (c 1.04, CH_2Cl_2)

Source of chirality: enantioselective Michael addition of thiophenol catalyzed by (+)-cinchonine

Absolute configuration: *R* (determined by comparison of the optical rotation of an analogous compound)

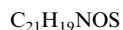
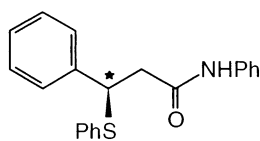


(R)-(+)-1,3-Diphenyl-3-phenylsulfanylpropan-1-one

E.e. >95%, determined by ^1H NMR with $\text{Eu}(\text{hfc})_3$
[α]_D = +136 (c 1.02, CH_2Cl_2)

Source of chirality: enantioselective Michael addition of thiophenol catalyzed by (+)-cinchonine

Absolute configuration: *R* (determined by chemical correlation to the respective anilide and X-ray analysis)

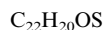
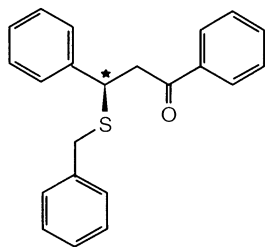


(R)-(+)-3-Phenyl-3-phenylsulfanylpropionic acid anilide

E.e. >95%, determined by ^1H NMR with $\text{Eu}(\text{hfc})_3$
[α]_D = +122 (c 1.0, CH_2Cl_2)

Source of chirality: enantioselective Michael addition of thiophenol to chalcone catalyzed by (+)-cinchonine followed by Beckmann rearrangement of the corresponding oxime

Absolute configuration: *R* (determined by X-ray analysis)



(R)-(+)-3-Benzylsulfanyl-1,3-diphenylpropan-1-one

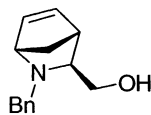
E.e. = 92%, determined by ^1H NMR with $\text{Eu}(\text{hfc})_3$
[α]_D = +138 (c 1.04, CH_2Cl_2)

Source of chirality: enantioselective Michael addition of benzyl mercaptan catalyzed by (+)-cinchonine

Absolute configuration: *R* (determined by comparison of the optical rotation of an analogous compound)

Sławomir Szymański, Christian Chapuis* and Janusz Jurczak*

Tetrahedron: Asymmetry 12 (2001) 1939



$C_{14}H_{17}NO$

(1*S*)-2-Benzyl-2-aza-bicyclo[2.2.1]hept-5-en-3(*S*)-yl-methanol

E.e. = 99%

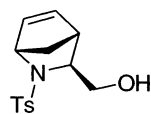
$[\alpha]_D = -6.8$ (*c* 1.2, $CHCl_3$)

Source of chirality: diastereoselective synthesis

Absolute configuration: (1*S*,3*S*)

Sławomir Szymański, Christian Chapuis* and Janusz Jurczak*

Tetrahedron: Asymmetry 12 (2001) 1939



$C_{14}H_{17}NO_3S$

(1*S*)-2-(Toluene-4-sulfonyl)-2-aza-bicyclo[2.2.1]hept-5-en-3(*S*)-yl-methanol

E.e. = 99%

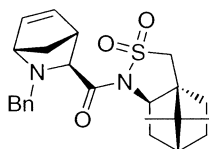
$[\alpha]_D = -4.8$ (*c* 1.02, $CHCl_3$)

Source of chirality: diastereoselective synthesis

Absolute configuration: (1*S*,3*S*)

Sławomir Szymański, Christian Chapuis* and Janusz Jurczak*

Tetrahedron: Asymmetry 12 (2001) 1939



$C_{24}H_{27}N_2O_3S$

(1*S*)-2-Benzyl-2-aza-bicyclo-[2.2.1]hept-5-en-3(*S*)-carbonyl-*N'*-(2'*R*)-bornane-(10',2')-sultam

E.e. = 99%

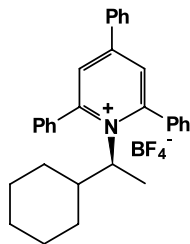
$[\alpha]_D = -155.5$ (*c* 0.31, $CHCl_3$)

Source of chirality: diastereoselective synthesis

Absolute configuration: (1*S*,3*S*,2'*R*)

Sadri A. Said and Anne Fiksdahl*

Tetrahedron: Asymmetry 12 (2001) 1947



$C_{31}H_{32}BF_4N$

1-((*S*)-1-Cyclohexylethyl)-2,4,6-triphenylpyridinium tetrafluoroborate

E.e. >99%

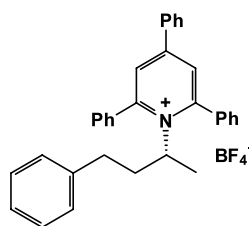
$[\alpha]_D = +61.7$ (*c* 2, $CHCl_3$)

Source of chirality: (*S*)-cyclohexylamine

Absolute configuration: (1*S*)

Sadri A. Said and Anne Fiksdahl*

Tetrahedron: Asymmetry 12 (2001) 1947



$C_{33}H_{30}BF_4N$

1-((*R*)-1-Methyl-3-phenylpropyl)-2,4,6-triphenylpyridinium tetrafluoroborate

E.e. = 96%

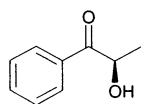
$[\alpha]_D = -53.7$ (*c* 2, $CHCl_3$)

Source of chirality: (*R*)-1-methyl-3-phenylpropylamine (96% e.e.)

Absolute configuration: (1*R*)

Ayhan S. Demir,* Haluk Hamamci, Ozge Sesenoglu, Feray Aydogan, Doga Capanoglu and Rahsan Neslihanoglu

Tetrahedron: Asymmetry 12 (2001) 1953



$C_9H_{10}O_2$

(*R*)-2-Hydroxy-1-phenylpropan-1-one

E.e. >99%

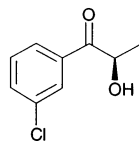
$[\alpha]_D^{22} = +85.3$ (*c* 2.0, $CHCl_3$)

Source of chirality: fungus-mediated hydrolysis

Absolute configuration: (*R*)

Ayhan S. Demir,* Haluk Hamamci, Ozge Sesenoglu, Feray Aydogan, Doga Capanoglu and Rahsan Neslihanoglu

Tetrahedron: Asymmetry 12 (2001) 1953



$C_9H_9ClO_2$

(*R*)-1-(3-Chlorophenyl)-2-hydroxypropan-1-one

E.e. >99%

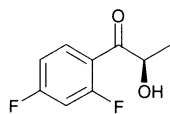
$[\alpha]_D^{20} = +73.3$ (*c* 1.0, CH_2Cl_2)

Source of chirality: fungus-mediated hydrolysis

Absolute configuration: (*R*)

Ayhan S. Demir,* Haluk Hamamci, Ozge Sesenoglu, Feray Aydogan, Doga Capanoglu and Rahsan Neslihanoglu

Tetrahedron: Asymmetry 12 (2001) 1953



$C_9H_8F_2O_2$

(*R*)-1-(2,4-Difluorophenyl)-2-hydroxypropan-1-one

E.e. = 97%

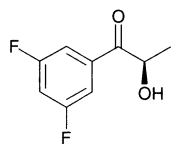
$[\alpha]_D^{20} = +66.7$ (*c* 1.0, $CHCl_3$)

Source of chirality: fungus-mediated hydrolysis

Absolute configuration: (*R*)

Ayhan S. Demir,* Haluk Hamamci, Ozge Sesenoglu, Feray Aydogan,
Doga Capanoglu and Rahsan Neslihanoglu

Tetrahedron: Asymmetry 12 (2001) 1953



$C_9H_8F_2O_2$

(*R*)-1-(3,5-Difluorophenyl)-2-hydroxypropan-1-one

E.e. >99%

$[\alpha]_D^{20} = +70.2$ (*c* 1.1, $CHCl_3$)

Source of chirality: fungus-mediated hydrolysis

Absolute configuration: (*R*)