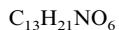
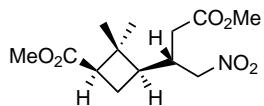


Albertina G. Moglioni,* Beatriz N. Brousse, Angel Álvarez-Larena,
Graciela Y. Moltrasio and Rosa M. Ortúñoz*

Tetrahedron: Asymmetry 13 (2002) 451



Methyl (-)-3-[2'',2'-dimethyl-3'-methoxycarbonylcyclobutyl]-4-nitrobutanoate

E.e. = 95%

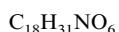
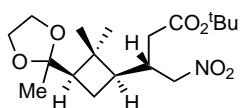
$[\alpha]_D = -8.75$ (*c* 1.60, CHCl₃)

Source of chirality: (-)-S-verbenone

Absolute configuration: 3*S*,1'*R*,3'*R*

Albertina G. Moglioni,* Beatriz N. Brousse, Angel Álvarez-Larena,
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Tetrahedron: Asymmetry 13 (2002) 451



t-Butyl (-)-3-[2',2'-dimethyl-3'-(2-methyl-1,3-dioxolan-2-yl)cyclobutyl]-4-nitrobutanoate

E.e. = 95%

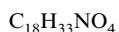
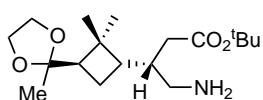
$[\alpha]_D = -10.6$ (*c* 1.23, MeOH)

Source of chirality: (-)-(S)-verbenone

Absolute configuration: 3*S*,1'*R*,3'*R*

Albertina G. Moglioni,* Beatriz N. Brousse, Angel Álvarez-Larena,
Graciela Y. Moltrasio and Rosa M. Ortúñoz*

Tetrahedron: Asymmetry 13 (2002) 451



t-Butyl (-)-3-[2',2'-dimethyl-3'-(2-methyl-1,3-dioxolan-2-yl)cyclobutyl]-4-aminobutanoate

E.e. = 95%

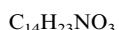
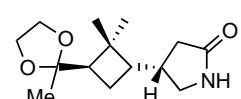
$[\alpha]_{285} = -3.3$ (*c* 0.90, MeOH)

Source of chirality: (-)-(S)-verbenone

Absolute configuration: 3*S*,1'*R*,3'*R*

Albertina G. Moglioni,* Beatriz N. Brousse, Angel Álvarez-Larena,
Graciela Y. Moltrasio and Rosa M. Ortúñoz*

Tetrahedron: Asymmetry 13 (2002) 451



(-)-4-[2',2'-Dimethyl-3'-(2-methyl-1,3-dioxolan-2-yl)cyclobutyl]-pyrrolidin-2-one

E.e. = 95%

$[\alpha]_D = -15.4$ (*c* 0.65, CHCl₃)

Source of chirality: (-)-S-verbenone

Absolute configuration: 4*S*,1'*R*,3'*R*



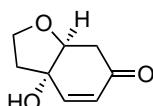
C₁₂H₁₉NO₃
(-)-4-(2',2'-Dimethyl-3'-methoxycarbonylcyclobutyl)-pyrrolidin-2-one

E.e. = 95%

[α]_D²⁰ = -17.0 (*c* 1.00, CHCl₃)

Source of chirality: (-)-(S)-verbenone

Absolute configuration: 4*S*,1'*R*,3'*R*



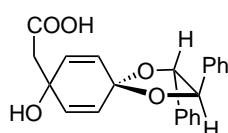
C₈H₁₀O₃
(3a*S*,7a*S*)-3a-Hydroxy-3,3a,7,7a-tetrahydrobenzofuran-6(2*H*)-one

E.e. = 85%

[α]_D²⁰ = +48.6 (*c* 0.3, MeOH)

Source of chirality: (R,R)-1,2-diphenyl ethanediol

Absolute configuration: 3a*S*,7a*S*



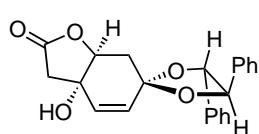
C₂₂H₂₀O₅
2-[(2*R*,3*R*)-2,3-diphenyl-8-hydroxy-1,4-dioxaspiro[4.5]deca-6,9-dien-8-yl]acetic acid

E.e. = 100%

[α]_D²⁰ = +14.8 (*c* 1.2, CHCl₃)

Source of chirality: (R,R)-1,2-diphenyl ethanediol

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



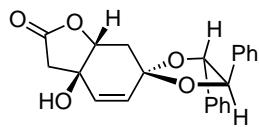
C₂₂H₂₀O₅
(3a*S*,7a*S*,4'*R*,5'*R*)-4',5'-Diphenyl-3a-hydroxy-3,3a,7,7a-tetrahydrospiro[benzofuro-6(2*H*),2'-[1,3]dioxolan]-2-one

D.e. >95%

[α]_D²⁰ = +15.6 (*c* 1.0, CHCl₃)

Source of chirality: (R,R)-1,2-diphenyl ethanediol

Absolute configuration: 3a*S*,7a*S*,4'*R*,5'*R*



C₂₂H₂₀O₅

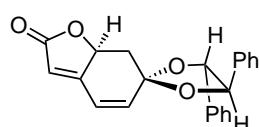
(3aR,7aR,4'R,5'R)-4',5'-Diphenyl-3a-hydroxy-3a,7,7a-tetrahydrospiro[benzofuro-6(2H),2'-[1,3]dioxolan]-2-one

D.e. = 85%

[α]_D²⁰ = +18.0 (*c* 1.0, CHCl₃)

Source of chirality: (R,R)-1,2-diphenyl ethanediol

Absolute configuration: 3aR,7aR,4'R,5'R



C₂₂H₁₈O₄

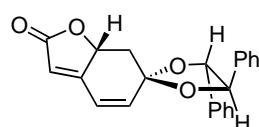
(7aS,4'R,5'R)-4',5'-Diphenyl-7,7a-dihydrospiro[benzofuro-6(2H),2'-[1,3]dioxolan]-2-one

D.e. >95%

[α]_D²⁰ = -96.6 (*c* 4.7, CHCl₃)

Source of chirality: (R,R)-1,2-diphenyl ethanediol

Absolute configuration: 7aS,4'R,5'R



C₂₂H₁₈O₄

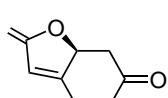
(7aR,4'R,5'R)-4',5'-Diphenyl-7,7a-dihydrospiro[benzofuro-6(2H),2'-[1,3]dioxolan]-2-one

D.e. = 85%

[α]_D²⁰ = +222.8 (*c* 4.3, CHCl₃)

Source of chirality: (R,R)-1,2-diphenyl ethanediol

Absolute configuration: 7aR,4'R,5'R



C₈H₆O₃

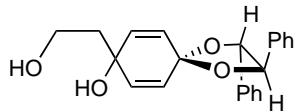
(S)-6-Oxo-7,7a-dihydrobenzofuran-2(6H)-one

E.e. >95%

[α]_D²⁰ = -207.4 (*c* 1.2, acetone)

Source of chirality: (R,R)-1,2-diphenyl ethanediol

Absolute configuration: S



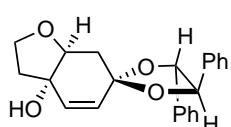
C₂₂H₂₂O₄
(2*R*,3*R*)-8-(2-Hydroxyethyl)-2,3-diphenyl-1,4-dioxaspiro[4,5]deca-6,9-dien-8-ol

E.e. = 100%

[α]_D²⁰ = +14.2 (*c* 2.5, CHCl₃)

Source of chirality: (*R,R*)-1,2-diphenyl ethanediol

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



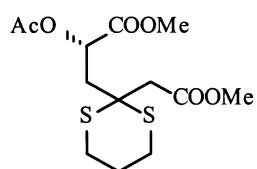
C₂₂H₂₂O₄
(3a*S*,7a*S*,4'*R*,5'*R*)-4',5'-Diphenyl-3,3a,7,7a-tetrahydrospiro[benzofuro-6(2*H*),2'-[1,3]dioxolan]-3a-ol

E.e. >95%

[α]_D²⁰ = +2.4 (*c* 1.7, CHCl₃)

Source of chirality: (*R,R*)-1,2-diphenyl ethanediol

Absolute configuration: 3a*S*,7a*S*,4'*R*,5'*R*

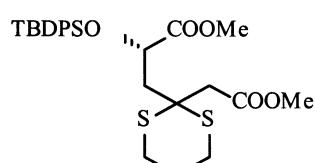


(2*S*)-Dimethyl-2-acetoxy-4,4-(propylenedithio)adipate

[α]_D = -158 (*c* 0.5, CH₂Cl₂)

Source of chirality: L-malic acid

Absolute configuration: 2*S*

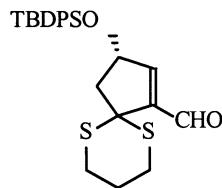


(2*S*)-Dimethyl-2-(tert-butyldiphenylsilyloxy)-4,4-(propylenedithio)adipate

[α]_D = -226 (*c* 0.6, CH₂Cl₂)

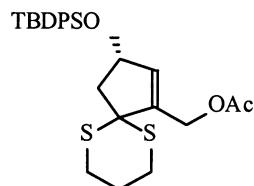
Source of chirality: L-malic acid

Absolute configuration: 2*S*

(9S)-9-(*tert*-Butyldiphenylsilyloxy)-7-formyl-1,5-dithiaspiro[5.4]dec-7-ene $[\alpha]_D = -112$ (*c* 1.0, CH₂Cl₂)

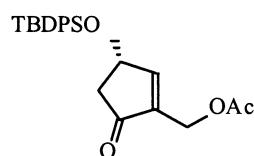
Source of chirality: L-malic acid

Absolute configuration: 9S

(9S)-7-(Acetoxymethyl)-9-(*tert*-butyldiphenylsilyloxy)-1,5-dithiaspiro[5.4]dec-7-ene $[\alpha]_D = -92$ (*c* 1.1, CH₂Cl₂)

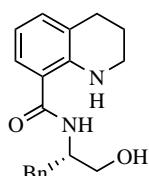
Source of chirality: L-malic acid

Absolute configuration: 9S

(4S)-2-(Acetoxymethyl)-4-(*tert*-butyldiphenylsilyloxy)-2-cyclopenten-1-one $[\alpha]_D = -67$ (*c* 0.8, CH₂Cl₂)

Source of chirality: L-malic acid

Absolute configuration: 4S

C₁₉H₂₂N₂O₂

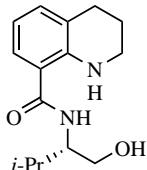
N-[(1S)-1-Benzyl-2-hydroxyethyl]-1,2,3,4-tetrahydroquinolin-8-yl-carboxamide

E.e. = 100%

 $[\alpha]_D^{25} = +30.9$ (*c* 1.0, CHCl₃)

Source of chirality: chiral pool

Absolute configuration: S

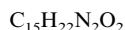


E.e. = 100%

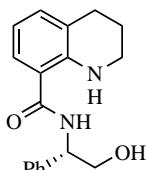
$[\alpha]_D^{25} = -59.0$ (*c* 1.0, CHCl₃)

Source of chirality: chiral pool

Absolute configuration: *S*



N-[(1*S*)-1-Isopropyl-2-hydroxyethyl]-[1,2,3,4-tetrahydroquinolin-8-yl]carboxamide



E.e. = 100%

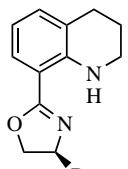
$[\alpha]_D^{25} = +97.0$ (*c* 1.0, CHCl₃)

Source of chirality: chiral pool

Absolute configuration: *S*



N-[(1*S*)-1-Phenyl-2-hydroxyethyl]-[1,2,3,4-tetrahydroquinolin-8-yl]carboxamide



E.e. = 100%

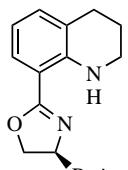
$[\alpha]_D^{25} = +43.5$ (*c* 2.0, CHCl₃)

Source of chirality: chiral pool

Absolute configuration: *S*



(4*S*)-4,5-Dihydro-4-benzyl-2-(1,2,3,4-tetrahydroquinolin-8-yl)oxazole



E.e. = 100%

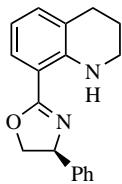
$[\alpha]_D^{25} = +27.7$ (*c* 2.35, CHCl₃)

Source of chirality: chiral pool

Absolute configuration: *S*



(4*S*)-4,5-Dihydro-4-isopropyl-2-(1,2,3,4-tetrahydroquinolin-8-yl)oxazole



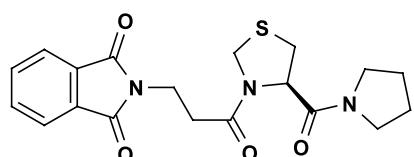
C₁₈H₁₈N₂O
(4*S*)-4,5-Dihydro-4-phenyl-2-(1,2,3,4-tetrahydroquinolin-8-yl)oxazole

E.e. = 100%

[α]_D²⁵ = +46.8 (*c* 1.73, CHCl₃)

Source of chirality: chiral pool

Absolute configuration: *S*

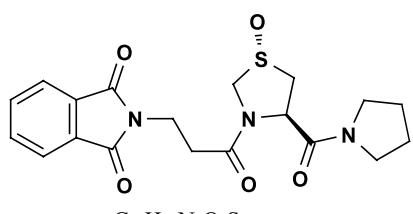


C₁₉H₂₁N₃O₄S
(-)2{3-oxo-3-[(4*R*)-4-(1-Pyrrolidinylcarbonyl)-1,3-thiazolidin-3-yl]propyl}-1*H*-isoindole-1,3(2*H*)-dione

[α]_D²⁰ = -91.4 (*c* = 1, EtOH)

Source of chirality: (*R*)-thioproline

Absolute configuration: *R*



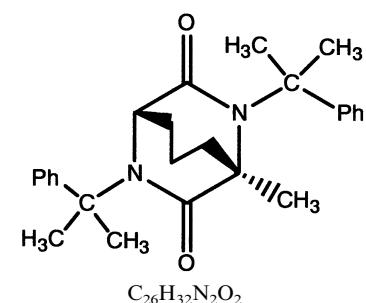
C₁₉H₂₁N₃O₅S
(-)2{3-[(1*R*,4*R*)-1-Oxido-4-(1-pyrrolidinylcarbonyl)-1,3-thiazolidin-3-yl]propyl}-1*H*-isoindole-1,3(2*H*)-dione

D.e. >99% (by chiral HPLC on Inertsil ODS2, 5 μm, 250×4.0 mm column)

[α]_D²⁰ = -84.5 (*c* = 1, EtOH)

Source of chirality: (*R*)-thioproline

Absolute configuration: 1*R*,4*R*
(assigned by chemical correlation)

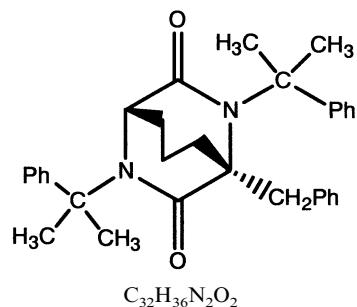
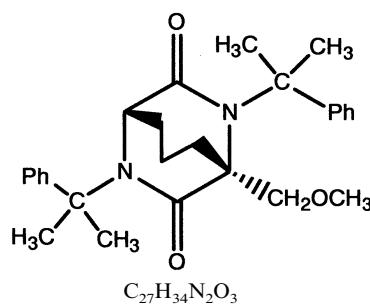
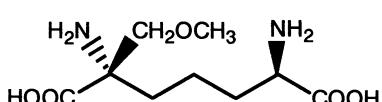
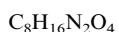
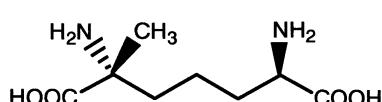


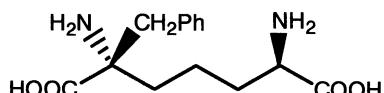
C₂₆H₃₂N₂O₂
(1*S*,4*S*)-2,5-Bis-[N-(1'-phenylisopropyl)]-3,6-dioxo-1-methyl-bicyclo[3.2.2]nonane

[α]_D +132.2 (*c* 0.5, CHCl₃)

Source of chirality: (*S*)-phenethylamine

Absolute configuration: 1*S*,4*S*

(1*R*,4*S*)-2,5-Bis-[*N*-(1'-phenylisopropyl)]-1-benzyl-3,6-dioxo-bicyclo[3.2.2]nonane $[\alpha]_D +69$ (*c* 1.37, CHCl₃)Source of chirality: (*S*)-phenethylamineAbsolute configuration: 1*R*,4*S*(1*R*,4*S*)-2,5-Bis-[*N*-(1'-phenylisopropyl)]-3,6-dioxo-1-methoxymethyl-bicyclo[3.2.2]nonane $[\alpha]_D +165.7$ (*c* 2.47, CHCl₃)Source of chirality: (*S*)-phenethylamineAbsolute configuration: 1*R*,4*S*(2*S*,6*R*)-2,6-Diamino-2-methoxymethylpimelic acid $[\alpha]_D -19.4$ (*c* 0.68, 1N HCl)Source of chirality: (*S*)-phenethylamineAbsolute configuration: 2*S*,6*R*(2*R*,6*R*)-2,6-Diamino-2-methylpimelic acid $[\alpha]_D -28.2$ (*c* 0.75, 1N HCl)Source of chirality: (*S*)-phenethylamineAbsolute configuration: 2*R*,6*R*

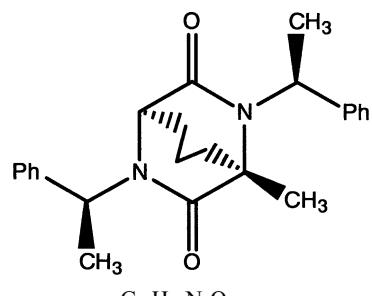


$C_{14}H_{20}N_2O_4$
(2S,6R)-2,6-Diamino-2-benzylpimelic acid

$[\alpha]_D -11.7$ (*c* 0.6, 1N HCl)

Source of chirality: (S)-phenethylamine

Absolute configuration: 2S,6R

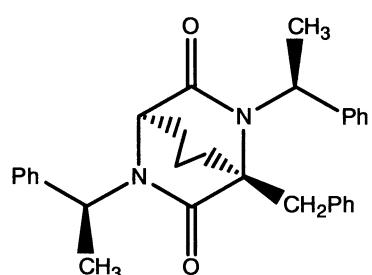


$C_{24}H_{28}N_2O_2$
(1R,4R,1'S)-2,5-Bis-[N-(1'-phenethyl)]-2,5-diaza-3,6-dioxo-1-methyl-bicyclo[3.2.2]nonane

$[\alpha]_D -154.5$ (*c* 0.71, CHCl₃)

Source of chirality: (S)-phenethylamine

Absolute configuration: 1R,4R,1'S

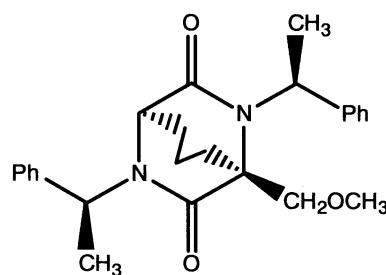


$C_{30}H_{32}N_2O_2$
(1R,4R,1'S)-2,5-Bis-[N-(1'-phenethyl)]-1-benzyl-2,5-diaza-3,6-dioxo-bicyclo[3.2.2]nonane

$[\alpha]_D -194.7$ (*c* 0.59, CHCl₃)

Source of chirality: (S)-phenethylamine

Absolute configuration: 1R,4R,1'S

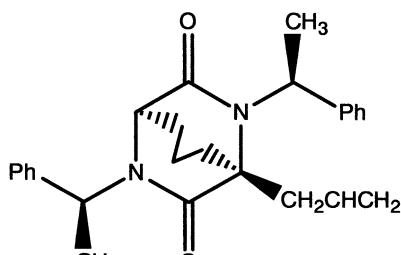


$C_{25}H_{30}N_2O_3$
(1R,4R,1'S)-2,5-Bis-[N-(1'-phenethyl)]-2,5-diaza-3,6-dioxo-1-methoxymethyl-bicyclo[3.2.2]nonane

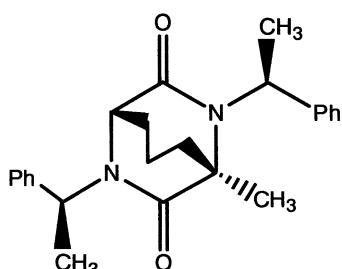
$[\alpha]_D -191.3$ (*c* 1.15, CHCl₃)

Source of chirality: (S)-phenethylamine

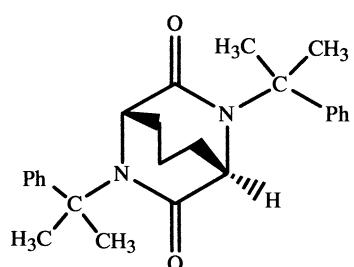
Absolute configuration: 1R,4R,1'S

(1*R*,4*R*,1'*S*)-2,5-Bis-[*N*-(1'-phenethyl)]-1-allyl-2,5-diaza-3,6-dioxo-bicyclo[3.2.2]nonane $[\alpha]_D -182.7$ (*c* 0.71, CHCl₃)

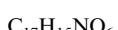
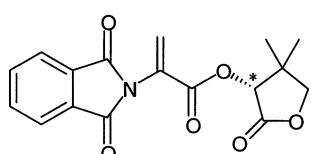
Source of chirality: (S)-phenethylamine

Absolute configuration: 1*R*,4*R*,1'*S*(1*S*,4*S*,1'*S*)-2,5-Bis-[*N*-(1'-phenethyl)]-2,5-diaza-3,6-dioxo-1-methyl-bicyclo[3.2.2]nonane $[\alpha]_D -39$ (*c* 0.51, CHCl₃)

Source of chirality: (S)-phenethylamine

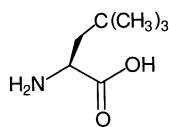
Absolute configuration: 1*S*,4*S*,1'*S*(1*S*,4*S*)-2,5-Bis-[*N*-(1'-phenylisopropyl)]-2,5-diaza-3,6-dioxo-bicyclo[3.2.2]nonane $[\alpha]_D +166.7$ (*c* 0.66, CHCl₃)

Source of chirality: (S)-phenethylamine

Absolute configuration: 1*S*,4*S*N-Phthaloyl dehydroalanine-(*R*)-pantolactonyl ester

E.e. = 100%

 $[\alpha]_D^{20} = -20$ (*c* 1.00, CHCl₃)Source of chirality: (*R*)-pantolactoneAbsolute configuration: (*R*)



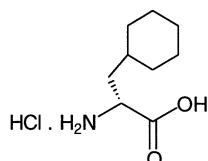
C₇H₁₅NO₂
(S)-γ-Methyleucine

E.e. = 40%

[α]_D²⁰ = -5.0 (c 1.00, H₂O)

Source of chirality: asymmetric synthesis

Absolute configuration: (S)



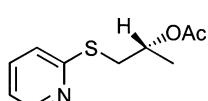
C₉H₁₈ClNO₂
(R)-Cyclohexylalanine hydrochloride

E.e. = 36%

[α]_D²⁰ = -3.8 (c 0.53, H₂O)

Source of chirality: asymmetric synthesis

Absolute configuration: (R)



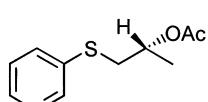
C₁₀H₁₃NO₂S
(2R)-1-(2-Pyridylthio)-propan-2-yl acetate

E.e. = 96%

[α]_D = -42.2 (c 0.62, CH₂Cl₂)

Source of chirality: enzymatic resolution

Absolute configuration: 2R



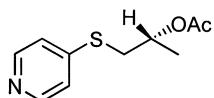
C₁₀H₁₃NO₂S
(2R)-1-(3-Pyridylthio)-propan-2-yl acetate

E.e. = 95%

[α]_D = -1.24 (c 0.50, CH₂Cl₂)

Source of chirality: enzymatic resolution

Absolute configuration: 2R



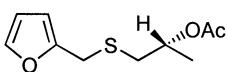
C₁₀H₁₃NO₂S
(2R)-1-(4-Pyridylthio)-propan-2-yl acetate

E.e. = 96%

[α]_D = +8.2 (*c* 0.36, CH₂Cl₂)

Source of chirality: enzymatic resolution

Absolute configuration: 2*R*



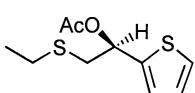
C₁₀H₁₄O₃S
(2R)-1-(Furan-2-ylmethylthio)propan-2-yl acetate

E.e. = 92%

[α]_D = +20.4 (*c* 0.76, CH₂Cl₂)

Source of chirality: enzymatic resolution

Absolute configuration: 2*R*

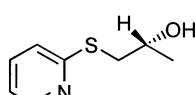


E.e. = 82%

[α]_D = +56.4 (*c* 0.56, CH₂Cl₂)

Source of chirality: enzymatic resolution

Absolute configuration: 1*R*

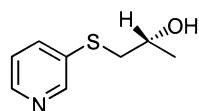


E.e. = 96%

[α]_D = -37.4 (*c* 0.40, CH₂Cl₂)

Source of chirality: enzymatic resolution

Absolute configuration: 2*R*



C₈H₁₁NOS

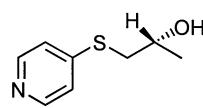
(2R)-1-(3-Pyridylthio)propan-2-ol

E.e.=95%

[α]_D=−49.2 (*c* 0.44, CH₂Cl₂)

Source of chirality: enzymatic resolution

Absolute configuration: 2*R*



C₈H₁₁NOS

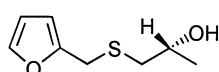
(2R)-1-(4-Pyridylthio)propan-2-ol

E.e.=96%

[α]_D=−26.2 (*c* 0.22, CH₂Cl₂)

Source of chirality: enzymatic resolution

Absolute configuration: 2*R*



C₈H₁₁NOS

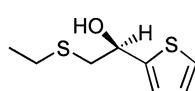
(2R)-(Furan-2-ylmethylthio)propan-2-ol

E.e.=92%

[α]_D=−67.9 (*c* 0.47, CH₂Cl₂)

Source of chirality: enzymatic resolution

Absolute configuration: 2*R*



C₈H₁₂OS₂

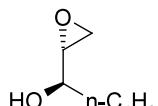
(1*R*)-2-Ethylthio-1-thiophen-2-yl-ethanol

E.e.=82%

[α]_D=+25.1 (*c* 0.43, CH₂Cl₂)

Source of chirality: enzymatic resolution

Absolute configuration: 1*R*



C₇H₁₄O₂

(2*R*,3*R*)-1,2-Epoxyheptan-3-ol

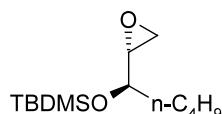
D.e. >99%

E.e.=93%

[α]_D²⁰=-3.2 (*c* 0.85, CHCl₃)

Source of chirality: chemoenzymatic synthesis

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



C₁₃H₂₈O₂Si

(2*R*,3*R*)-3-*tert*-Butyldimethylsilyloxy-1,2-epoxyheptane

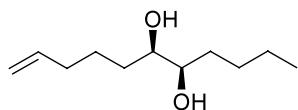
D.e. >99%

E.e.=93%

[α]_D²⁰=+5.8 (*c* 1.50, CHCl₃)

Source of chirality: chemoenzymatic synthesis

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



C₁₁H₂₂O₂

(5*R*,6*R*)-10-Undecene-5,6-diol

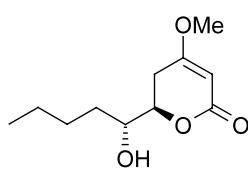
D.e. >99%

E.e.=93%

[α]_D²⁰=+24.3 (*c* 2.70, CHCl₃)

Source of chirality: chemoenzymatic synthesis

Absolute configuration: 5*R*,6*R*



C₁₁H₁₈O₄

(6*R*,1'i'R)-(+)-5,6-Dihydro-6-(1'-hydroxypentyl)-4-methoxy-pyran-2-one

D.e. >99%

E.e.=93%

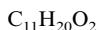
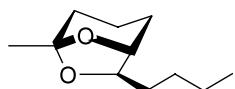
[α]_D²⁰=+92.5 (*c* 1.3, MeOH)

Source of chirality: chemoenzymatic synthesis

Absolute configuration: 6*R*,1'i'R

Sandra F. Mayer, Andreas Steinreiber, Marian Goriup,
Robert Saf and Kurt Faber*

Tetrahedron: Asymmetry 13 (2002) 523



(1*R*,7*R*)-(+)-*exo*-7-Butyl-5-methyl-6,8-dioxabicyclo[3.2.1]octane

D.e. >99%

E.e.=93%

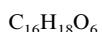
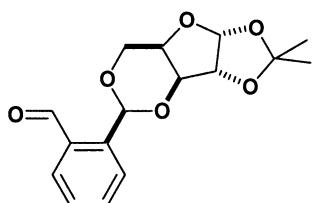
[α]_D²⁰=+51.8 (*c* 0.65, CHCl₃)

Source of chirality: chemoenzymatic synthesis

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

Serge Pilard, David Riboul, Virginie Glaçon, Nicolas Moitessier,
Yves Chapleur, Denis Postel and Christophe Len*

Tetrahedron: Asymmetry 13 (2002) 529



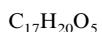
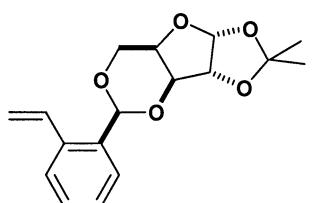
3,5-*O*-(2-Formylbenzylidene)-1,2-*O*-isopropylidene- α -D-xylofuranose

[α]_D²²=+13.0 (*c* 1.0, CHCl₃)

Source of chirality: D-xylose

Serge Pilard, David Riboul, Virginie Glaçon, Nicolas Moitessier,
Yves Chapleur, Denis Postel and Christophe Len*

Tetrahedron: Asymmetry 13 (2002) 529



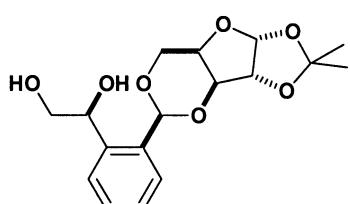
3,5-*O*-(2-Ethenylbenzylidene)-1,2-*O*-isopropylidene- α -D-xylofuranose

[α]_D²⁴=-16.0 (*c* 1.0, CHCl₃)

Source of chirality: D-xylose

Serge Pilard, David Riboul, Virginie Glaçon, Nicolas Moitessier,
Yves Chapleur, Denis Postel and Christophe Len*

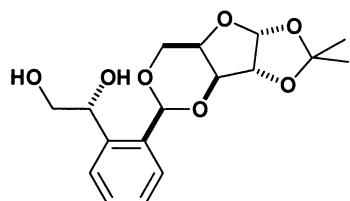
Tetrahedron: Asymmetry 13 (2002) 529



3,5-*O*-[2-((S)-1,2-Dihydroxyethyl)benzylidene]-1,2-*O*-isopropylidene- α -D-xylofuranose

[α]_D²⁰=+29.7 (*c* 1.0, CHCl₃)

Source of chirality: D-xylose and stereoselective synthesis using AD-mix α

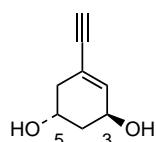


C₁₇H₂₂O₇

3,5-O-[2-((S)-1,2-Dihydroxyethyl)benzylidene]-1,2-O-isopropylidene-alpha-D-xylofuranose

[α]_D²¹ = -18.9 (c 0.5, CHCl₃)

Source of chirality: D-xylose and stereoselective synthesis using AD-mix α



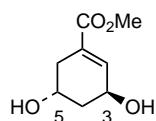
C₈H₁₀O₂

(3S,5R)-1-Ethynyl-3,5-dihydroxycyclohex-1-ene

[α]_D²⁰ = -111.1 (c 0.80, MeOH)

Source of chirality: (-)-quinic acid

Absolute configuration: 3S,5R



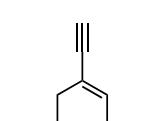
C₈H₁₂O₄

Methyl (3S,5R)-3,5-dihydroxycyclohex-1-enecarboxylate

[α]_D²⁰ = -106 (c 0.38, MeOH)

Source of chirality: (-)-quinic acid

Absolute configuration: 3S,5R



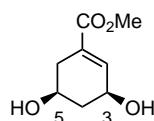
C₈H₁₀O₂

(3S,5S)-1-Ethynyl-3,5-dihydroxycyclohex-1-ene

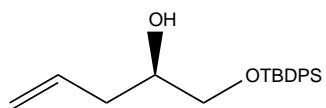
[α]_D²⁰ = +49.3 (c 0.50, MeOH)

Source of chirality: (-)-quinic acid

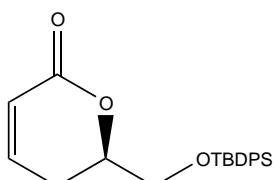
Absolute configuration: 3S,5S

 $C_8H_{12}O_4$ Methyl (3*S*,5*S*)-3,5-dihydroxycyclohex-1-enecarboxylate $[\alpha]_D^{20} = +29$ (*c* 0.81, MeOH)

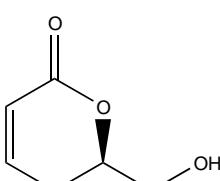
Source of chirality: (−)-quinic acid

Absolute configuration: 3*S*,5*S* $C_{21}H_{28}O_2Si$ (2*R*)-1-(*tert*-Butyldiphenylsilyloxy)-4-penten-2-ol $[\alpha]_D^{23} = +172.7$ (*c* 1.0, CHCl₃)

Source of chirality: (S)-glycidol

Absolute configuration: 2*R* $C_{22}H_{26}O_3Si$ (6*R*)-6-(*tert*-Butyldiphenylsilyloxy)methylene-5,6-dihydro-2*H*-pyran-2-one $[\alpha]_D^{23} = +34.2$ (*c* 1.5, CHCl₃)

Source of chirality: (S)-glycidol

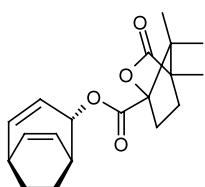
Absolute configuration: 6*R* $C_6H_8O_3$ (6*R*)-6-(Hydroxymethyl)-5,6-dihydro-2*H*-pyran-2-one $[\alpha]_D^{22} = +172.7$ (*c* 1.0, CHCl₃)

Source of chirality: (S)-glycidol

Absolute configuration: 6*R*

 $C_{12}H_{18}O_2$ (6*R*)-6-Hept-1-enyl-5,6-dihydro-2*H*-pyran-2-one, (*R*)-argentilactone

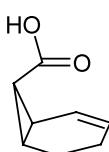
E.e. >97%

 $[\alpha]_D^{25} = -20.5$ (*c* 0.5, EtOH)Source of chirality: (*S*)-glycidolAbsolute configuration: 6*R* $C_{19}H_{24}O_4$ (1*S*,2*S*,5*R*)-Bicyclo[3.2.2]nona-3,6-dien-2-yl-(1*S*)-3-oxo-4,7,7-trimethyl-2-oxobicyclo[2.2.1]heptene-1-carboxylate

E.e. >99%

 $[\alpha]_D^{21} = +125.9$ (*c* 0.49, CHCl₃)

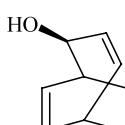
Source of chirality: asymmetric synthesis

Absolute configuration: 1*S*,2*S*,5*R*; assigned by X-ray diffraction $C_8H_{10}O_2$ (1*R*,2*S*,7*R*)-Bicyclo[4.1.0]hept-2-ene-7-carboxylic acid

E.e. = 94%

 $[\alpha]_D^{21} = +359.8$ (*c* 0.57, CHCl₃)

Source of chirality: asymmetric synthesis

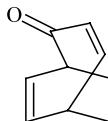
Absolute configuration: 1*R*,2*S*,5*R* $C_9H_{12}O$ (1*S*,2*S*,5*R*)-Bicyclo[3.2.2]nona-3,6-dien-2-ol

E.e. = 94%

 $[\alpha]_D^{21} = +39.0$ (*c* 0.96, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: 1*S*,2*S*,5*R*



C₉H₁₀O

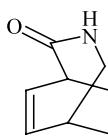
(1*S*,5*R*)-Bicyclo[3.2.2]nona-2,6-dien-2-one

E.e. = 94%

[α]_D²¹ = -99.8 (*c* 0.50, CHCl₃)

Source of chirality: asymmetric synthesis

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



C₈H₁₁NO

(1*S*,5*R*)-3-Aza-bicyclo[3.2.2]non-6-en-2-one

E.e. = 94%

[α]_D²¹ = -234.5 (*c* 0.81, CHCl₃)

Source of chirality: asymmetric synthesis

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