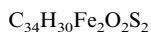
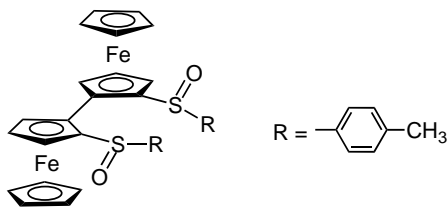


Li Xiao, Kurt Mereiter, Felix Spindler and Walter Weissensteiner*

Tetrahedron: Asymmetry 12 (2001) 1105(-)-(S_c, S_c, S_p, S_p)-2,2''-Bis-(p-tolylsulfinyl)-1,1''-biferrocene

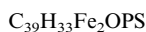
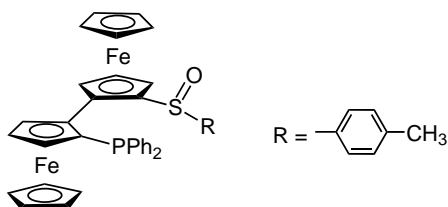
E.e. = 100%

[α]_D²⁰ = -393.0 (c = 0.50, CHCl₃)

Source of chirality: synthesis

Absolute configuration: (S_c, S_c, S_p, S_p)

Li Xiao, Kurt Mereiter, Felix Spindler and Walter Weissensteiner*

Tetrahedron: Asymmetry 12 (2001) 1105(+)-(S_c, S_p, S_p)-2-Diphenylphosphino-2''-(p-tolylsulfinyl)-1,1''-biferrocene

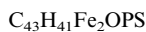
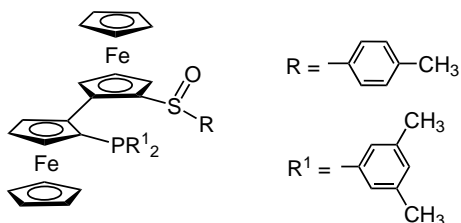
E.e. = 100%

[α]_D²⁰ = +60.6 (c = 0.50, CHCl₃)

Source of chirality: synthesis

Absolute configuration: (S_c, S_p, S_p)

Li Xiao, Kurt Mereiter, Felix Spindler and Walter Weissensteiner*

Tetrahedron: Asymmetry 12 (2001) 1105(-)-(S_c, S_p, S_p)-2-Bis-(3,5-dimethylphenyl)phosphino-2''-(p-tolylsulfinyl)-1,1''-biferrocene

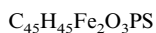
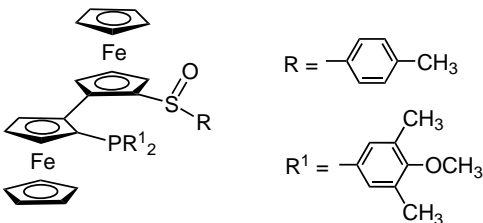
E.e. = 100%

[α]_D²⁰ = -27.0 (c = 0.52, CHCl₃)

Source of chirality: synthesis

Absolute configuration: (S_c, S_p, S_p)

Li Xiao, Kurt Mereiter, Felix Spindler and Walter Weissensteiner*

Tetrahedron: Asymmetry 12 (2001) 1105(-)-(S_c, S_p, S_p)-2-Bis-(3,5-dimethyl-4-methoxyphenyl)phosphino-2''-(p-tolylsulfinyl)-1,1''-biferrocene

E.e. = 100%

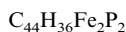
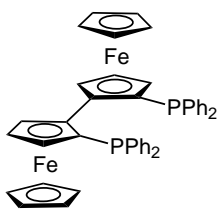
[α]_D²⁰ = -14.4 (c = 0.50, CHCl₃)

Source of chirality: synthesis

Absolute configuration: (S_c, S_p, S_p)

Li Xiao, Kurt Mereiter, Felix Spindler and Walter Weissensteiner*

Tetrahedron: Asymmetry 12 (2001) 1105



(+)-(S_p,S_p)-2,2''-Bis-diphenylphosphino-1,1''-biferrocene

E.e. = 100%

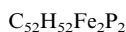
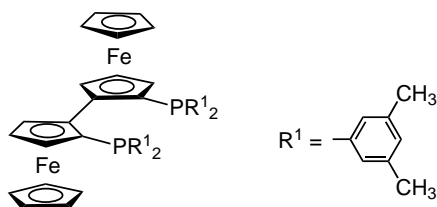
$[\alpha]_D^{20} = +150.5$ ($c = 0.22$, CHCl₃)

Source of chirality: synthesis

Absolute configuration: (S_p,S_p)

Li Xiao, Kurt Mereiter, Felix Spindler and Walter Weissensteiner*

Tetrahedron: Asymmetry 12 (2001) 1105



(+)-(S_p,S_p)-2,2''-Bis-(3,5-dimethylphenyl)phosphino-1,1''-biferrocene

E.e. = 100%

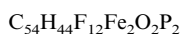
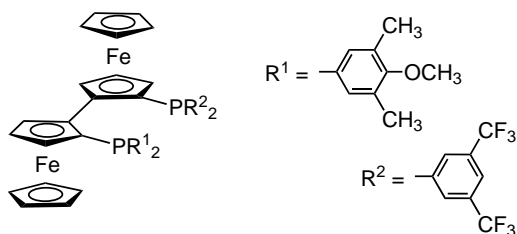
$[\alpha]_D^{20} = +125.5$ ($c = 0.40$, CHCl₃)

Source of chirality: synthesis

Absolute configuration: (S_p,S_p)

Li Xiao, Kurt Mereiter, Felix Spindler and Walter Weissensteiner*

Tetrahedron: Asymmetry 12 (2001) 1105



(+)-(S_p,S_p)-2-Bis-(3,5-dimethyl-4-methoxyphenyl)phosphino-2''-bis-(3,5-trifluoro-methylphenyl)phosphino-1,1''-biferrocene

E.e. = 100%

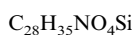
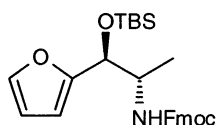
$[\alpha]_D^{20} = +1.6$ ($c = 0.43$, CHCl₃)

Source of chirality: synthesis

Absolute configuration: (S_p,S_p)

Reynier A. Tromp, Michael van der Hoeven, Alessia Amore, Johannes Brussee,* Mark Overhand, Gijs A. van der Marel and Arne van der Gen

Tetrahedron: Asymmetry 12 (2001) 1109



(1S,2S)-2-(9H-Fluoren-9-ylmethoxycarbonyl)-amino-1-(2-furyl)-1-(tert-butyl-dimethylsilyloxy)-propane

d.r. = 19:1

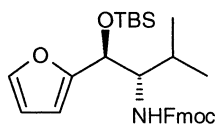
$[\alpha]_D = -28.4$ ($c = 1$, CDCl₃)

Source of chirality: enzymatic asymmetric synthesis

Absolute configuration: (1S,2S)

Reynier A. Tromp, Michael van der Hoeven, Alessia Amore, Johannes Brussee,* Mark Overhand, Gijs A. van der Marel and Arne van der Gen

Tetrahedron: Asymmetry 12 (2001) 1109



$C_{30}H_{39}NO_4Si$

(1*S*,2*S*)-2-(9*H*-Fluoren-9-ylmethoxycarbonyl)-amino-1-(2-furyl)-1-(*tert*-butyl-dimethylsilyloxy)-3-methyl-butane

d.r. = 9:1

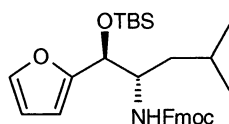
$[\alpha]_D = -41.6$ (*c* 1, $CDCl_3$)

Source of chirality: enzymatic asymmetric synthesis

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

Reynier A. Tromp, Michael van der Hoeven, Alessia Amore, Johannes Brussee,* Mark Overhand, Gijs A. van der Marel and Arne van der Gen

Tetrahedron: Asymmetry 12 (2001) 1109



$C_{31}H_{41}NO_4Si$

(1*S*,2*S*)-2-(9*H*-Fluoren-9-ylmethoxycarbonyl)-amino-1-(2-furyl)-1-(*tert*-butyl-dimethylsilyloxy)-4-methyl-pentane

d.r. = 5:1

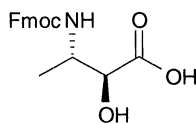
$[\alpha]_D = -34.9$ (*c* 1, $CDCl_3$)

Source of chirality: enzymatic asymmetric synthesis

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

Reynier A. Tromp, Michael van der Hoeven, Alessia Amore, Johannes Brussee,* Mark Overhand, Gijs A. van der Marel and Arne van der Gen

Tetrahedron: Asymmetry 12 (2001) 1109



$C_{19}H_{19}NO_5$

(2*S*,3*S*)-3-(9*H*-Fluoren-9-ylmethoxycarbonyl)-amino-2-hydroxy-butanoic acid

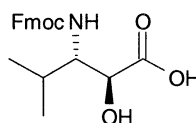
$[\alpha]_D = -11.8$ (*c* 0.1, MeOH)

Source of chirality: enzymatic asymmetric synthesis

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

Reynier A. Tromp, Michael van der Hoeven, Alessia Amore, Johannes Brussee,* Mark Overhand, Gijs A. van der Marel and Arne van der Gen

Tetrahedron: Asymmetry 12 (2001) 1109



$C_{21}H_{23}NO_5$

(2*S*,3*S*)-3-(9*H*-Fluoren-9-ylmethoxycarbonyl)-amino-2-hydroxy-4-methyl-pentanoic acid

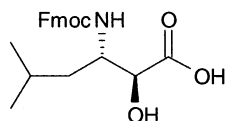
$[\alpha]_D = -5.9$ (*c* 0.1, MeOH)

Source of chirality: enzymatic asymmetric synthesis

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

Reynier A. Tromp, Michael van der Hoeven, Alessia Amore, Johannes Brussee,* Mark Overhand, Gijs A. van der Marel and Arne van der Gen

Tetrahedron: Asymmetry 12 (2001) 1109



$C_{21}H_{23}NO_5$

(2*S*,3*S*)-3-(9*H*-Fluoren-9-ylmethoxycarbonyl)-amino-2-hydroxy-5-methyl-hexanoic acid

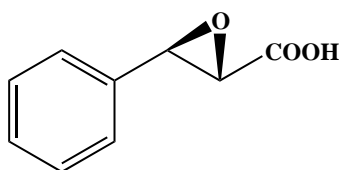
$[\alpha]_D = -19.2$ (*c* 0.1, MeOH)

Source of chirality: enzymatic asymmetric synthesis

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

Olga Bortolini, Marco Fogagnolo,* Giancarlo Fantin, Silvia Maietti and Alessandro Medici

Tetrahedron: Asymmetry 12 (2001) 1113



$C_9H_8O_3$

(+)-(2*S*,3*R*)-3-Phenyl-oxirane carboxylic acid

E.e. 36%

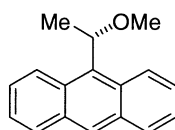
Absolute configuration: (2*S*,3*R*)

Source of chirality: asymmetric oxidation

Specific rotation: (for methyl ester) $[\alpha]_D^{20} = +60.0$ (*c* 2, $CHCl_3$)

Simon Jones* and J. C. Christian Atherton

Tetrahedron: Asymmetry 12 (2001) 1117



$C_{17}H_{16}O$

9-(1*S*)-Methoxyethylanthracene

E.e. = 87%

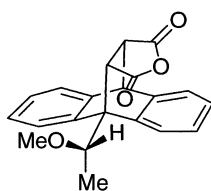
$[\alpha]_D = -37.8$ (*c* 1, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Simon Jones* and J. C. Christian Atherton

Tetrahedron: Asymmetry 12 (2001) 1117



$C_{21}H_{18}O_4$

9,10,11,15-Tetrahydro-9-[(1*S*)-methoxyethyl]-[(11*S*,15*S*)-9,10[3',4']-furanoanthracen-12,14-dione

E.e. = 87%

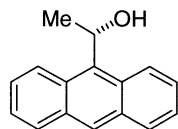
$[\alpha]_D = +36.2$ (*c* 1, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (1*S*,11*S*,15*S*)

Simon Jones* and J. C. Christian Atherton

Tetrahedron: Asymmetry 12 (2001) 1117



$C_{16}H_{14}O$

(1*S*)-Anthracen-9-yl-ethanol

E.e. = 87%

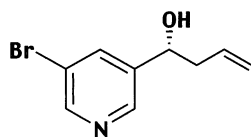
$[\alpha]_D = -19.6$ (*c* 1, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

François-Xavier Felpin, Giang Vo-Thanh, Jean Villieras and Jacques Lebreton*

Tetrahedron: Asymmetry 12 (2001) 1121



$C_9H_{10}BrNO$

1-(5-Bromopyridin-3-yl)but-3-en-1-ol

E.e. = 94%

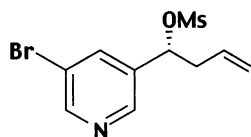
$[\alpha]_D^{20} = 16.2$ (*c* 1.47, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

François-Xavier Felpin, Giang Vo-Thanh, Jean Villieras and Jacques Lebreton*

Tetrahedron: Asymmetry 12 (2001) 1121



$C_{10}H_{13}NO_3S$

Methanesulfonic acid 1-(5-bromopyridin-3-yl)but-3-enyl ester

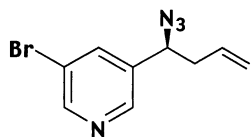
$[\alpha]_D^{20} = -50$ (*c* 1.2, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

François-Xavier Felpin, Giang Vo-Thanh, Jean Villieras and Jacques Lebreton*

Tetrahedron: Asymmetry 12 (2001) 1121



$C_9H_9BrN_4$

3-(1-Azido-but-3-enyl)-5-bromopyridine

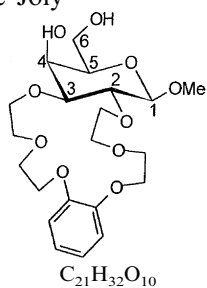
$[\alpha]_D^{20} = -81.8$ (*c* 1.29, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)

Thomas J. Wenzel,* Jolene E. Thurston, David C. Sek and Jean-Pierre Joly

Tetrahedron: Asymmetry 12 (2001) 1125



Methyl [2,3-*b*](11,12-benzo-1,4,7,10,13,16-hexaoxacyclooctadeca-11-ene)-2,3-dideoxy- β -D-galactopyranoside

E.e. = 100%

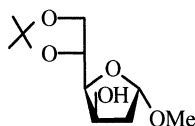
$[\alpha]_D = -3.2$ (*c* 3, $CHCl_3$)

Source of chirality: starting material

Absolute configuration: D

Amélia P. Rauter,* José Figueiredo, Maria Ismael, Tana Canda, Josep Font and Marta Figueredo

Tetrahedron: Asymmetry 12 (2001) 1131



$C_{10}H_{18}O_5$

Methyl 2-deoxy-5,6-*O*-isopropylidene- α -D-arabino-hexofuranoside

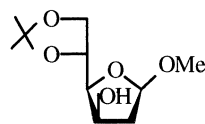
E.e. = 100%

$[\alpha]_D^{20} = +48.6$ (*c* 1.3, $CHCl_3$)

Source of chirality: stereoselective synthesis

Amélia P. Rauter,* José Figueiredo, Maria Ismael, Tana Canda, Josep Font and Marta Figueredo

Tetrahedron: Asymmetry 12 (2001) 1131



$C_{10}H_{18}O_5$

Methyl 2-deoxy-5,6-*O*-isopropylidene- β -D-arabino-hexofuranoside

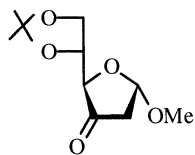
E.e. = 100%

$[\alpha]_D^{20} = +2.8$ (*c* 1, $CHCl_3$)

Source of chirality: stereoselective synthesis

Amélia P. Rauter,* José Figueiredo, Maria Ismael, Tana Canda, Josep Font and Marta Figueredo

Tetrahedron: Asymmetry 12 (2001) 1131



$C_{10}H_{16}O_5$

Methyl 2-deoxy-5,6-*O*-isopropylidene- α -D-erythro-hexofuranosid-3-ulose

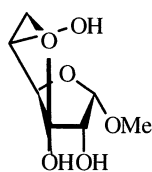
E.e. = 100%

$[\alpha]_D^{20} = +65$ (*c* 1.6, $CHCl_3$)

Source of chirality: stereoselective synthesis

Amélia P. Rauter,* José Figueiredo, Maria Ismael, Tana Canda,
Josep Font and Marta Figueredo

Tetrahedron: Asymmetry 12 (2001) 1131



Methyl 3,6-anhydro- α -D-ribo-hex-3-ulofuranoside

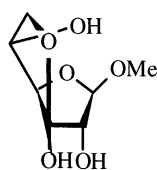
E.e. = 100%

$[\alpha]_D^{20} = +60$ (c 1, $CHCl_3$)

Source of chirality: stereoselective synthesis

Amélia P. Rauter,* José Figueiredo, Maria Ismael, Tana Canda,
Josep Font and Marta Figueredo

Tetrahedron: Asymmetry 12 (2001) 1131



Methyl 3,6-anhydro- β -D-ribo-hex-3-ulofuranoside

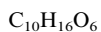
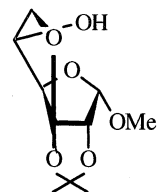
E.e. = 100%

$[\alpha]_D^{20} = +2.0$ (c 1.4, $CHCl_3$)

Source of chirality: stereoselective synthesis

Amélia P. Rauter,* José Figueiredo, Maria Ismael, Tana Canda,
Josep Font and Marta Figueredo

Tetrahedron: Asymmetry 12 (2001) 1131



Methyl 3,6-anhydro-2,3-O-isopropylidene- α -D-ribo-hex-3-ulofuranoside

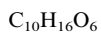
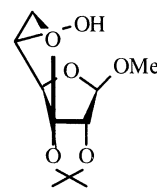
E.e. = 100%

$[\alpha]_D^{20} = +48.8$ (c 1.8, $CHCl_3$)

Source of chirality: stereoselective synthesis

Amélia P. Rauter,* José Figueiredo, Maria Ismael, Tana Canda,
Josep Font and Marta Figueredo

Tetrahedron: Asymmetry 12 (2001) 1131



Methyl 3,6-anhydro-2,3-O-isopropylidene- β -D-ribo-hex-3-ulofuranoside

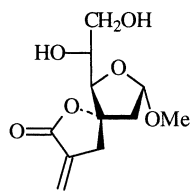
E.e. = 100%

$[\alpha]_D^{20} = +3.5$ (c 1.3, $CHCl_3$)

Source of chirality: stereoselective synthesis

Amélia P. Rauter,* José Figueiredo, Maria Ismael, Tana Canda,
Josep Font and Marta Figueredo

Tetrahedron: Asymmetry 12 (2001) 1131



$C_{11}H_{16}O_6$

(3*S*)-2,3-Dideoxy-1-*O*-methyl-3'-methylene-2'-oxospiro[α -D-erythro-hexofuranose-3,5'-tetrahydrofuran]

E.e. = 100%

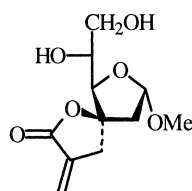
$[\alpha]_D^{20} = +45$ (*c* 1.0, $CHCl_3$)

Source of chirality: stereoselective synthesis

Absolute configuration: 3*S*

Amélia P. Rauter,* José Figueiredo, Maria Ismael, Tana Canda,
Josep Font and Marta Figueredo

Tetrahedron: Asymmetry 12 (2001) 1131



$C_{11}H_{16}O_6$

(3*R*)-2,3-Dideoxy-1-*O*-methyl-3'-methylene-2'-oxospiro[α -D-erythro-hexofuranose-3,5'-tetrahydrofuran]

E.e. = 100%

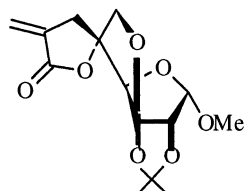
$[\alpha]_D^{20} = -5.3$ (*c* 1.9, $CHCl_3$)

Source of chirality: stereoselective synthesis

Absolute configuration: 3*R*

Amélia P. Rauter,* José Figueiredo, Maria Ismael, Tana Canda,
Josep Font and Marta Figueredo

Tetrahedron: Asymmetry 12 (2001) 1131



$C_{14}H_{18}O_7$

(5*R*)-3,6-Anhydro-2,3-*O*-isopropylidene-1-*O*-methyl-3'-methylene-2'-oxospiro[α -D-ribo-hexofuran-3-uloside-5,5'-tetrahydrofuran]

E.e. = 100%

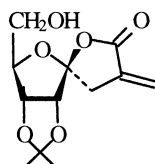
$[\alpha]_D^{20} = +88$ (*c* 1.6, $CHCl_3$)

Source of chirality: stereoselective synthesis

Absolute configuration: 5*R*

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Josep Font and Marta Figueredo

Tetrahedron: Asymmetry 12 (2001) 1131



$C_{12}H_{16}O_6$

(1*S*)-1-Deoxy-2,3-*O*-isopropylidene-3'-methylene-2'-oxospiro[D-ribofuranose-1,5'-tetrahydrofuran]

E.e. = 100%

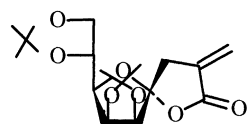
$[\alpha]_D^{20} = +81$ (*c* 1.6, $CHCl_3$)

Source of chirality: stereoselective synthesis

Absolute configuration: 1*S*

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Josep Font and Marta Figueredo

Tetrahedron: Asymmetry 12 (2001) 1131



$C_{16}H_{22}O_7$

(1*R*)-1-Deoxy-2,3;5,6-di-*O*-isopropylidene-3'-methylene-2'-oxospiro-
[*D*-mannofuranose-1,5'-tetrahydrofuran]

E.e. = 100%

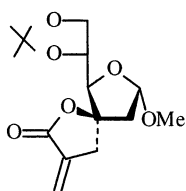
$[\alpha]_D^{20} = +120$ (*c* 2.0, $CHCl_3$)

Source of chirality: stereoselective synthesis

Absolute configuration: 1*R*

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Tetrahedron: Asymmetry 12 (2001) 1131



$C_{14}H_{20}O_6$

(3*R*)-2,3-Dideoxy-5,6-*O*-isopropylidene-1-*O*-methyl-3'-methylene-2'-oxospiro-
[α -*D*-erythro-hexofuranose-3,5'-tetrahydrofuran]

E.e. = 100%

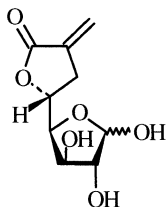
$[\alpha]_D^{20} = +8.3$ (*c* 2.4, $CHCl_3$)

Source of chirality: stereoselective synthesis

Absolute configuration: 3*R*

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$C_9H_{12}O_6$

6,7-Dideoxy-7-*C*-methylene-*D*-gluco-octofuranurono-8,5-lactone

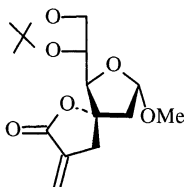
E.e. = 100%

$[\alpha]_D^{20} = +85$ (*c* 1.0, $CHCl_3$)

Source of chirality: stereoselective synthesis

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Josep Font and Marta Figueredo

Tetrahedron: Asymmetry 12 (2001) 1131



$C_{14}H_{20}O_6$

(3*S*)-2,3-Dideoxy-5,6-*O*-isopropylidene-1-*O*-methyl-3'-methylene-2'-
oxospiro[α -*D*-erythro-hexofuranose-3,5'-tetrahydrofuran]

E.e. = 100%

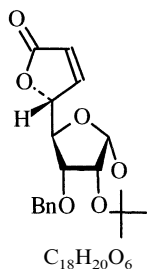
$[\alpha]_D^{20} = +18$ (*c* 1.9, $CHCl_3$)

Source of chirality: stereoselective synthesis

Absolute configuration: 3*S*

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Josep Font and Marta Figueredo

Tetrahedron: Asymmetry 12 (2001) 1131

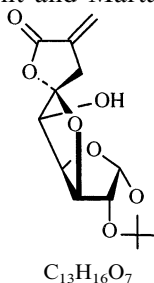


$C_{18}H_{20}O_6$
3-*O*-Benzyl-6,7-dideoxy-1,2-*O*-isopropylidene- α -D-*allo*-oct-6-enofuranurono-8,5-lactone

E.e. = 100%
 $[\alpha]_D^{20} = +47$ (*c* 0.5, CH_2Cl_2)
Source of chirality: stereoselective synthesis

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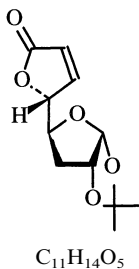


$C_{13}H_{16}O_7$
(6*S*)-3,6-Anhydro-1,2-*O*-isopropylidene-3'-methylene-2'-oxospiro[α -D-glucufuranose-6,5'-tetrahydrofuran]

E.e. = 100%
 $[\alpha]_D^{20} = +86$ (*c* 1.0, $CHCl_3$)
Source of chirality: stereoselective synthesis
Absolute configuration: 6*S*

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Josep Font and Marta Figueredo

Tetrahedron: Asymmetry 12 (2001) 1131

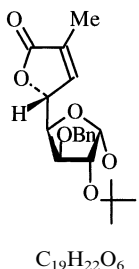


$C_{11}H_{14}O_5$
3,6,7-Trideoxy-1,2-*O*-isopropylidene- α -D-*ribo*-oct-6-enofuranurono-8,5-lactone

E.e. = 100%
 $[\alpha]_D^{20} = +6$ (*c* 1.0, CH_2Cl_2)
Source of chirality: stereoselective synthesis

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Josep Font and Marta Figueredo

Tetrahedron: Asymmetry 12 (2001) 1131

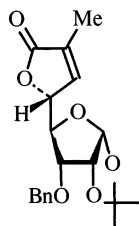


$C_{19}H_{22}O_6$
3-*O*-Benzyl-6,7-dideoxy-1,2-*O*-isopropylidene-7-methyl- α -D-*gluco*-oct-6-enofuranurono-8,5-lactone

E.e. = 100%
 $[\alpha]_D^{20} = -22$ (*c* 1.0, $CHCl_3$)
Source of chirality: stereoselective synthesis

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Josep Font and Marta Figueredo

Tetrahedron: Asymmetry 12 (2001) 1131



$C_{19}H_{22}O_6$

3-*O*-Benzyl-6,7-dideoxy-1,2-*O*-isopropylidene-7-methyl- α -D-*allo*-oct-6-enofuranurono-8,5-lactone

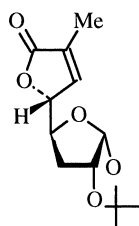
E.e. = 100%

$[\alpha]_D^{20} = +122$ (c 1.0, $CHCl_3$)

Source of chirality: stereoselective synthesis

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Josep Font and Marta Figueredo

Tetrahedron: Asymmetry 12 (2001) 1131



$C_{12}H_{16}O_5$

3,6,7-Trideoxy-1,2-*O*-isopropylidene-7-methyl- α -D-*ribo*-oct-6-enofuranurono-8,5-lactone

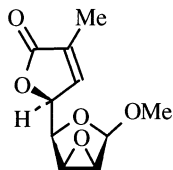
E.e. = 100%

$[\alpha]_D^{20} = +40$ (c 1.0, CH_2Cl_2)

Source of chirality: stereoselective synthesis

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$C_{10}H_{12}O_5$

Methyl 2,3-anhydro-6,7-dideoxy-7-methyl-7- β -D-*manno*-oct-6-enofuranurono-8,5-lactone

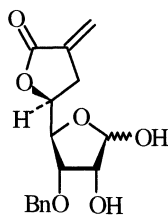
E.e. = 100%

$[\alpha]_D^{20} = -116$ (c 1.5, CH_2Cl_2)

Source of chirality: stereoselective synthesis

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Josep Font and Marta Figueredo

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$C_{16}H_{18}O_6$

3-*O*-Benzyl-6,7-dideoxy-7-*C*-methylene-L-*talo*-octofuranurono-8,5-lactone

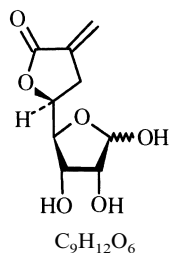
E.e. = 100%

$[\alpha]_D^{20} = +86.5$ (c 1.0, $CHCl_3$)

Source of chirality: stereoselective synthesis

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Josep Font and Marta Figueredo

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6,7-Dideoxy-7-C-methylene-L-talo-octofuranurono-8,5-lactone

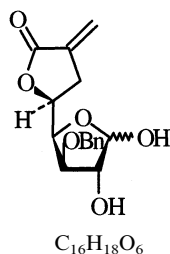
E.e. = 100%

$[\alpha]_D^{20} = +142$ (c 1.1, $CHCl_3$)

Source of chirality: stereoselective synthesis

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Josep Font and Marta Figueredo

Tetrahedron: Asymmetry 12 (2001) 1131



3-O-Benzyl-6,7-dideoxy-7-C-methylene-L-ido-octofuranurono-8,5-lactone

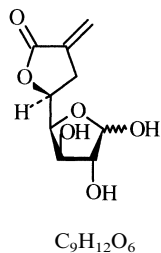
E.e. = 100%

$[\alpha]_D^{20} = +99.5$ (c 2.0, $CHCl_3$)

Source of chirality: stereoselective synthesis

Amélia P. Rauter,* José Figueiredo, Maria Ismael, Tana Canda,
Josep Font and Marta Figueredo

Tetrahedron: Asymmetry 12 (2001) 1131



6,7-Dideoxy-7-C-methylene-L-ido-octofuranurono-8,5-lactone

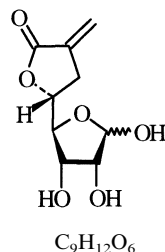
E.e. = 100%

$[\alpha]_D^{20} = +122$ (c 1.5, $CHCl_3$)

Source of chirality: stereoselective synthesis

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Josep Font and Marta Figueredo

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6,7-Dideoxy-7-C-methylene-D-allo-octofuranurono-8,5-lactone

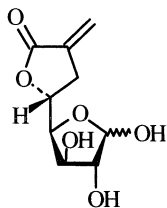
E.e. = 100%

$[\alpha]_D^{20} = +88$ (c 1.0, $CHCl_3$)

Source of chirality: stereoselective synthesis

Amélia P. Rauter,* José Figueiredo, Maria Ismael, Tana Canda,
Josep Font and Marta Figueredo

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6,7-Dideoxy-7-C-methylene-D-gluco-octofuranurono-8,5-lactone

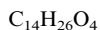
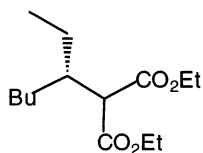
E.e. = 100%

$[\alpha]_D^{20} = +85$ ($c = 1.0$, $CHCl_3$)

Source of chirality: stereoselective synthesis

Alexandre Alexakis* and Cyril Benhaim

Tetrahedron: Asymmetry 12 (2001) 1151



2-(S)-(1-Ethyl-pentyl)-malonic acid diethyl ester

E.e. = 73% (by chiral GC (Chiraldex G-TA))

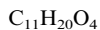
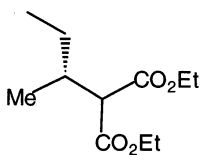
$[\alpha]^{25} = -1.5$ ($c = 1.6$, $CHCl_3$)

Source of chirality: enantioselective catalysis

Absolute configuration: *S*

Alexandre Alexakis* and Cyril Benhaim

Tetrahedron: Asymmetry 12 (2001) 1151



2-(R)-sec-Butyl-malonic acid diethyl ester

E.e. = 65% (by chiral GC (Chiraldex G-TA))

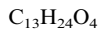
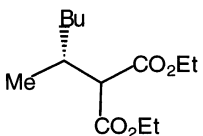
$[\alpha]^{25} = -3.5$ ($c = 2.0$, $CHCl_3$)

Source of chirality: enantioselective catalysis

Absolute configuration: *R*

Alexandre Alexakis* and Cyril Benhaim

Tetrahedron: Asymmetry 12 (2001) 1151



2-(R)-(1-Methyl-pentyl)-malonic acid diethyl ester

E.e. = 50% (by chiral GC (Chiraldex G-TA))

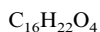
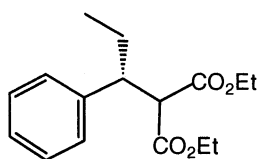
$[\alpha]^{25} = +6.15$ ($c = 2.6$, $CHCl_3$)

Source of chirality: enantioselective catalysis

Absolute configuration: *R*

Alexandre Alexakis* and Cyril Benhaim

Tetrahedron: Asymmetry 12 (2001) 1151



2-(*R*)-(1-Phenyl-propyl)-malonic acid diethyl ester

E.e. = 64% (by chiral GC (Chiraldex G-TA))

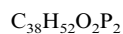
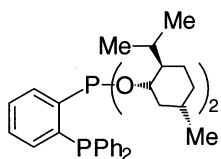
$[\alpha]_D^{25} = -13.7$ ($c = 1.4$, $CHCl_3$)

Source of chirality: enantioselective catalysis

Absolute configuration: *R*

Konstantin W. Kottsieper, Uwe Kühner and Othmar Stelzer*

Tetrahedron: Asymmetry 12 (2001) 1159



ortho-(Diphenylphosphino)phenylphosphonous acid di[(1*S*,2*R*,5*S*)-2-*iso*-propyl-5-methyl-cyclohexyl]ester

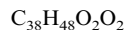
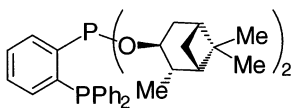
$[\alpha]_D^{20} = +61.5$ ($c = 2.0$, toluene)

Source of chirality: (+)-menthol

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

Konstantin W. Kottsieper, Uwe Kühner and Othmar Stelzer*

Tetrahedron: Asymmetry 12 (2001) 1159



ortho-(Diphenylphosphino)phenylphosphonous acid di[(1*S*,2*S*,3*S*,5*R*)-2,6,6-trimethyl-bicyclo[3.1.1]-hept-3-yl]ester

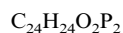
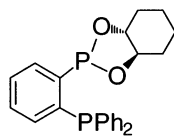
$[\alpha]_D^{20} = +43.5$ ($c = 1.0$, toluene)

Source of chirality: (+)-isopinocampheol

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

Konstantin W. Kottsieper, Uwe Kühner and Othmar Stelzer*

Tetrahedron: Asymmetry 12 (2001) 1159



ortho-(Diphenylphosphino)phenylphosphonous acid-[(1*R*,2*R*)-cyclohexane-1,2-diy]l ester

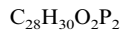
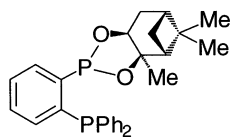
$[\alpha]_D^{20} = +8.6$ ($c = 5.0$, toluene)

Source of chirality: (1*R*,2*R*)-*trans*-1,2-cyclohexanediol

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

Konstantin W. Kottsieper, Uwe Kühner and Othmar Stelzer*

Tetrahedron: Asymmetry 12 (2001) 1159



ortho-(Diphenylphosphino)phenylphosphonous acid-(1*R*,2*R*,3*S*,5*R*)-pinane-2,3-diyloester

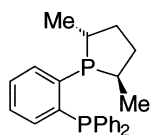
$[\alpha]_D^{20} = +26.4$ (*c* 5.0, toluene)

Source of chirality: (1*R*,2*R*,3*S*,5*R*)-2,3-pinane-2,3-diol

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

Konstantin W. Kottsieper, Uwe Kühner and Othmar Stelzer*

Tetrahedron: Asymmetry 12 (2001) 1159



ortho-(Diphenylphosphino)phenyl-(2*R*,5*R*)-2,5-dimethylphospholane

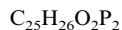
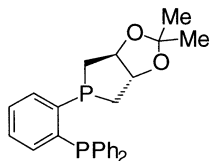
$[\alpha]_D^{20} = -171.8$ (*c* 0.815, $CHCl_3$)

Source of chirality: (2*S*,5*S*)-2,5-hexanediol cyclic sulfate

Absolute configuration: (2*R*,5*R*)

Konstantin W. Kottsieper, Uwe Kühner and Othmar Stelzer*

Tetrahedron: Asymmetry 12 (2001) 1159



ortho-(Diphenylphosphino)phenyl[(3*R*,4*R*)-3,4-*O*-isopropylidene]-phospholane-3,4-diol

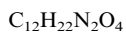
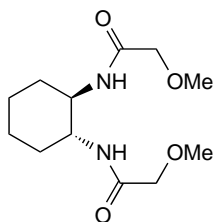
$[\alpha]_D^{20} = +61.3$ (*c* 1.435, $CHCl_3$)

Source of chirality: (*R*,*R*)-1,4-di-*O*-*p*-toluenesulfonyl-2,3-*O*-isopropylidene-*D*-threitol

Absolute configuration: (3*R*,4*R*)

Alexandre Alexakis,* Anne-Sophie Chauvin, Ricardo Stouvenel, Emmanuel Vrancken, Stéphane Mutti and Pierre Mangeney

Tetrahedron: Asymmetry 12 (2001) 1171



(*R*,*R*)-2-Methoxy-*N*-[(2-methoxyacetyl)amino]cyclohexyl]acetamide

E.e. >99%

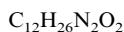
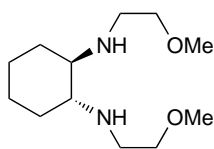
$[\alpha]_D^{20} = +34.6$ (*c* 2.6, $CHCl_3$)

Source of chirality: (*R*,*R*)-1,2-diammonium-cyclohexane mono-(+)-tartrate salt

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

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Tetrahedron: Asymmetry 12 (2001) 1171



(*R,R*)-*N,N'*-Di(methoxyethyl)cyclohexane-1,2-diamine

E.e. >99%

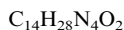
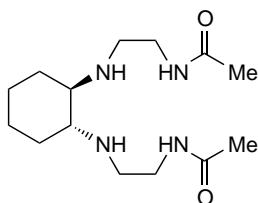
$[\alpha]^{20} = +109$ (*c* 9.75, CHCl_3)

Source of chirality: (*R,R*)-1,2-diammonium-cyclohexane mono-(+)-tartrate salt

Absolute configuration: (*R,R*)

Alexandre Alexakis,* Anne-Sophie Chauvin, Ricardo Stouvenel, Emmanuel Vrancken, Stéphane Mutti and Pierre Mangeney

Tetrahedron: Asymmetry 12 (2001) 1171



(*R,R*)-*N*-{2-[2-(2-Acetylaminoethylamino)cyclohexylamino]ethyl}acetamide

E.e. >99%

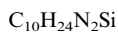
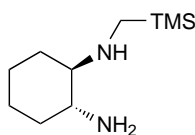
$[\alpha]^{20} = -17.6$ (*c* 2.5, CHCl_3)

Source of chirality: (*R,R*)-1,2-diammonium-cyclohexane mono-(+)-tartrate salt

Absolute configuration: (*R,R*)

Alexandre Alexakis,* Anne-Sophie Chauvin, Ricardo Stouvenel, Emmanuel Vrancken, Stéphane Mutti and Pierre Mangeney

Tetrahedron: Asymmetry 12 (2001) 1171



(*R,R*)-*N*-(Methyltrimethylsilyl)cyclohexane-1,2-diamine

E.e. >99%

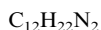
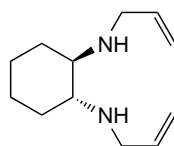
$[\alpha]^{20} = -82.7$ (*c* 1.15, CHCl_3)

Source of chirality: (*R,R*)-1,2-diammonium-cyclohexane mono-(+)-tartrate salt

Absolute configuration: (*R,R*)

Alexandre Alexakis,* Anne-Sophie Chauvin, Ricardo Stouvenel, Emmanuel Vrancken, Stéphane Mutti and Pierre Mangeney

Tetrahedron: Asymmetry 12 (2001) 1171



(*R,R*)-*N,N'*-Diallylcyclohexane-1,2-diamine

E.e. >99%

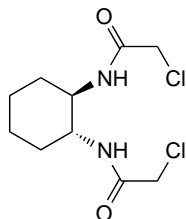
$[\alpha]^{20} = -10.2$ (*c* 1.4, CHCl_3)

Source of chirality: (*R,R*)-1,2-diammonium-cyclohexane mono-(+)-tartrate salt

Absolute configuration: (*R,R*)

Alexandre Alexakis,* Anne-Sophie Chauvin, Ricardo Stouvenel, Emmanuel Vrancken, Stéphane Mutti and Pierre Mangeney

Tetrahedron: Asymmetry 12 (2001) 1171



(*R,R*)-2-Chloro-*N*-[(2-(chloroacetyl)amino)cyclohexyl]acetamide

E.e. >99%

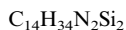
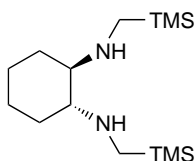
$[\alpha]^{20} = -22.7$ (*c* 1.1, $CHCl_3$)

Source of chirality: (*R,R*)-1,2-diammonium-cyclohexane mono-(+)-tartrate salt

Absolute configuration: (*R,R*)

Alexandre Alexakis,* Anne-Sophie Chauvin, Ricardo Stouvenel, Emmanuel Vrancken, Stéphane Mutti and Pierre Mangeney

Tetrahedron: Asymmetry 12 (2001) 1171



(*R,R*)-*N,N'*-Di(methyltrimethylsilyl)cyclohexane-1,2-diamine

E.e. >99%

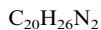
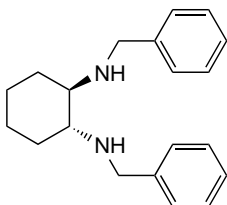
$[\alpha]^{20} = -102.3$ (*c* 3.5, $CHCl_3$)

Source of chirality: (*R,R*)-1,2-diammonium-cyclohexane mono-(+)-tartrate salt

Absolute configuration: (*R,R*)

Alexandre Alexakis,* Anne-Sophie Chauvin, Ricardo Stouvenel, Emmanuel Vrancken, Stéphane Mutti and Pierre Mangeney

Tetrahedron: Asymmetry 12 (2001) 1171



(*R,R*)-*N,N'*-Dibenzylcyclohexane-1,2-diamine

E.e. >99%

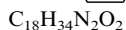
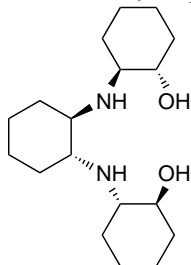
$[\alpha]^{20} = -68$ (*c* 1.3, $CHCl_3$)

Source of chirality: (*R,R*)-1,2-diammonium-cyclohexane mono-(+)-tartrate salt

Absolute configuration: (*R,R*)

Alexandre Alexakis,* Anne-Sophie Chauvin, Ricardo Stouvenel, Emmanuel Vrancken, Stéphane Mutti and Pierre Mangeney

Tetrahedron: Asymmetry 12 (2001) 1171



(*R,R*)-*N,N'*-Bis(2-hydroxycyclohexyl)-*trans*-cyclohexane-1,2-diamine

E.e. >99%

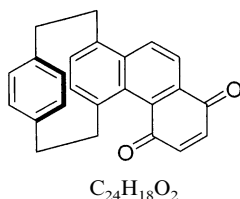
$[\alpha]^{20} = -8.3$ (*c* 1.3, $CHCl_3$)

Source of chirality: (*R,R*)-1,2-diammonium-cyclohexane mono-(+)-tartrate salt

Absolute configuration: (*R,R*)

L. Minuti,* A. Taticchi,* A. Marrocchi, L. Costantini and
E. Gacs-Baitz

Tetrahedron: Asymmetry 12 (2001) 1179



(*R*)-(-)-8,9,14,15-Tetrahydro-7,16:10,13-diethenocyclodeca[*a*]naphthalene-1,4-dione

E.e. >98%

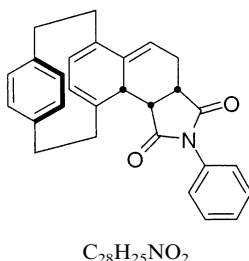
$[\alpha]_D^{25} = -229$ (*c* 0.027, $CHCl_3$)

Source of chirality: (*S*)-(+)-4-ethenyl[2.2]-paracyclophane

Absolute configuration: *R*

L. Minuti,* A. Taticchi,* A. Marrocchi, L. Costantini and
E. Gacs-Baitz

Tetrahedron: Asymmetry 12 (2001) 1179



(*S*)-(+)-Phenyl-3a,4,7,8,13,14,15a,15b-octahydro-1*H*-6,15-ethanediyldene-9,12-ethenocyclododeca[*e*]jisoindole-1,3-dione

D.e. >98%

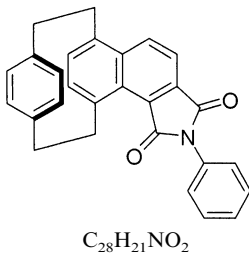
$[\alpha]_D^{25} = +275$ (*c* 1, $CHCl_3$)

Source of chirality: (*S*)-(+)-4-ethenyl[2.2]-paracyclophane

Absolute configuration: *S*

L. Minuti,* A. Taticchi,* A. Marrocchi, L. Costantini and
E. Gacs-Baitz

Tetrahedron: Asymmetry 12 (2001) 1179



(*R*)-(+)-2-Phenyl-7,8,13,14-tetrahydro-1*H*-6,15:9,12-diethenocyclododeca[*e*]jisoindole-1,3-dione

E.e. >98%

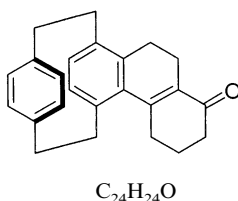
$[\alpha]_D^{25} = +418$ (*c* 0.06, $CHCl_3$)

Source of chirality: (*S*)-(+)-4-ethenyl[2.2]-paracyclophane

Absolute configuration: *R*

L. Minuti,* A. Taticchi,* A. Marrocchi, L. Costantini and
E. Gacs-Baitz

Tetrahedron: Asymmetry 12 (2001) 1179



(*R*)-(-)-2,3,5,6,8,9,14,15-Octahydro-7,16-ethanediyldene-10,13-ethenocyclododeca[*a*]naphthalen-4(1*H*)-one

E.e. >98%

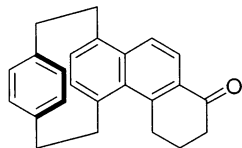
$[\alpha]_D^{25} = -26.4$ (*c* 0.06, CH_2Cl_2)

Source of chirality: (*S*)-(+)-4-ethenyl[2.2]-paracyclophane

Absolute configuration: *R*

L. Minuti,* A. Taticchi,* A. Marrocchi, L. Costantini and
E. Gacs-Baitz

Tetrahedron: Asymmetry 12 (2001) 1179



$C_{24}H_{22}O$

(*R*)-(+)-2,3,8,9,14,15-Hexahydro-7,16-ethanediylidene-10,13-ethenocyclododeca[*a*]naphthalen-4(1*H*)-one

E.e. >98%

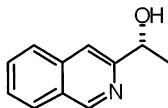
$[\alpha]_D^{25} = +201$ (*c* 0.3, $CHCl_3$)

Source of chirality: (*S*)-(+)-4-ethenyl[2.2]-paracyclophane

Absolute configuration: *R*

Giuseppe Guanti* and Renata Riva*

Tetrahedron: Asymmetry 12 (2001) 1185



$C_{11}H_{11}NO$

(*R*)-(1-Isoquinolin-3-yl)ethanol

E.e. >99.5% [by GLC]

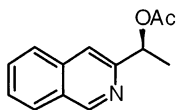
$[\alpha]_D^{25} = +45.6$ (*c* 1.00, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: (*R*)

Giuseppe Guanti* and Renata Riva*

Tetrahedron: Asymmetry 12 (2001) 1185



$C_{13}H_{13}NO_2$

(*S*)-Acetic acid 1-(isoquinolin-3-yl)ethyl ester

E.e. = 98.7% [by GLC]

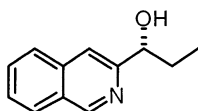
$[\alpha]_D^{25} = -106.3$ (*c* 1.04, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: (*S*)

Giuseppe Guanti* and Renata Riva*

Tetrahedron: Asymmetry 12 (2001) 1185



$C_{12}H_{13}NO$

(*R*)-(1-Isoquinolin-3-yl)propan-1-ol

E.e. = 99.2% [by GLC]

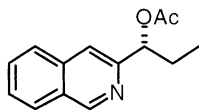
$[\alpha]_D^{25} = +49.0$ (*c* 0.98, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: (*R*)

Giuseppe Guanti* and Renata Riva*

Tetrahedron: Asymmetry 12 (2001) 1185



$C_{14}H_{15}NO_2$

(*R*)-Acetic acid 1-(isoquinolin-3-yl)propyl ester

E.e. = 99.2% [by GLC]

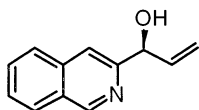
$[\alpha]_D^{25} = +95.4$ (*c* 0.98, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: (*R*)

Giuseppe Guanti* and Renata Riva*

Tetrahedron: Asymmetry 12 (2001) 1185



$C_{12}H_{11}NO$

(*S*)-(1-Isoquinolin-3-yl)prop-2-en-1-ol

E.e. >99.5% [by GLC]

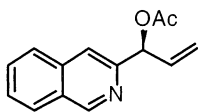
$[\alpha]_D^{25} = +19.5$ (*c* 1.11, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: (*S*)

Giuseppe Guanti* and Renata Riva*

Tetrahedron: Asymmetry 12 (2001) 1185



$C_{14}H_{13}NO_2$

(*S*)-Acetic acid 1-(isoquinolin-3-yl)allyl ester

E.e. = 99.2% [by GLC]

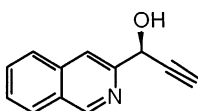
$[\alpha]_D^{25} = -51.5$ (*c* 1.56, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: (*S*)

Giuseppe Guanti* and Renata Riva*

Tetrahedron: Asymmetry 12 (2001) 1185



$C_{12}H_9NO$

(*S*)-(1-Isoquinolin-3-yl)prop-2-yn-1-ol

E.e. = 99.2% [by GLC]

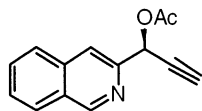
$[\alpha]_D^{25} = -61.1$ (*c* 1.20, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: (*S*)

Giuseppe Guanti* and Renata Riva*

Tetrahedron: Asymmetry 12 (2001) 1185



$C_{14}H_{11}NO_2$

(*S*)-Acetic acid 1-(isoquinolin-3-yl)prop-2-ynyl ester

E.e. >99.5% [by GLC]

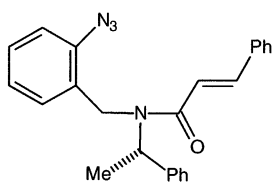
$[\alpha]_D^{25} = -29.5$ (*c* 1.51, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: (*S*)

Gianluigi Broggin, Luisa Garanti,* Giorgio Molteni and Tullio Pilati

Tetrahedron: Asymmetry 12 (2001) 1201



$C_{24}H_{22}N_4O$

N-[(*S*)-1-Phenylethyl]-*N*-[1-oxo-3-phenyl-prop-2-(*E*)-enyl]-2-azidobenzylamine

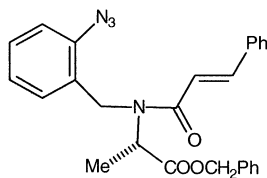
$[\alpha]_D^{25} = -19.6$ (*c* 0.20, $CHCl_3$)

Source of chirality: (*S*)-1-phenylethylamine

Absolute configuration: (1*S*)

Gianluigi Broggin, Luisa Garanti,* Giorgio Molteni and Tullio Pilati

Tetrahedron: Asymmetry 12 (2001) 1201



$C_{26}H_{24}N_4O_2$

N-[(*S*)-1-Carbobenzyloxyethyl]-*N*-[1-oxo-3-phenyl-prop-2-(*E*)-enyl]-2-azidobenzylamine

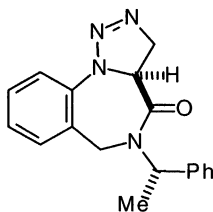
$[\alpha]_D^{25} = +7.1$ (*c* 1.82, $CHCl_3$)

Source of chirality: L-alanine benzyl ester

Absolute configuration: (1*S*)

Gianluigi Broggin, Luisa Garanti,* Giorgio Molteni and Tullio Pilati

Tetrahedron: Asymmetry 12 (2001) 1201



$C_{18}H_{18}N_4O$

5-[(*S*)-1-Phenylethyl]-3,3a-dihydro(3*aS*)-1,2,3-triazolo[1,5-*a*][1,4]-benzodiazepine-4(6*H*)one

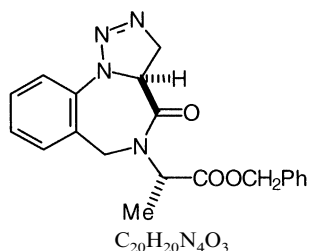
$[\alpha]_D^{25} = +73.6$ (*c* 0.24, $CHCl_3$)

Source of chirality: the azide precursor

Absolute configuration: (3*aS*)

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Tetrahedron: Asymmetry 12 (2001) 1201



$[\alpha]_D^{25} = +106.9$ (*c* 0.28, CHCl₃)

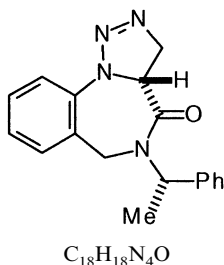
Source of chirality: the azide precursor

Absolute configuration: (3a*S*)

5-[(*S*)-1-Carbobenzyloxyethyl]-3,3a-dihydro(3a*S*)-1,2,3-triazolo[1,5-*a*][1,4]-benzodiazepine-4(6*H*)one

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Tetrahedron: Asymmetry 12 (2001) 1201



$[\alpha]_D^{25} = -330.9$ (*c* 0.28, CHCl₃)

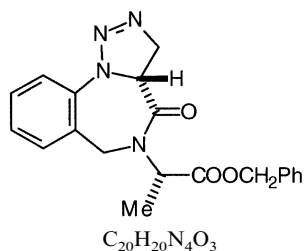
Source of chirality: the azide precursor

Absolute configuration: (3a*R*)

5-[(*S*)-1-Phenylethyl]-3,3a-dihydro(3a*R*)-1,2,3-triazolo[1,5-*a*][1,4]-benzodiazepine-4(6*H*)one

Gianluigi Broggin, Luisa Garanti,* Giorgio Molteni and Tullio Pilati

Tetrahedron: Asymmetry 12 (2001) 1201



$[\alpha]_D^{25} = -122.0$ (*c* 0.21, CHCl₃)

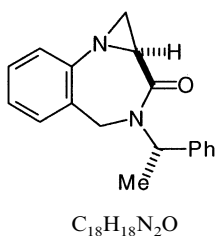
Source of chirality: the azide precursor

Absolute configuration: (3a*R*)

5-[(*S*)-1-Carbobenzyloxyethyl]-3,3a-dihydro(3a*R*)-1,2,3-triazolo[1,5-*a*][1,4]-benzodiazepine-4(6*H*)one

Gianluigi Broggin, Luisa Garanti,* Giorgio Molteni and Tullio Pilati

Tetrahedron: Asymmetry 12 (2001) 1201



$[\alpha]_D^{25} = +96.2$ (*c* 0.28, CHCl₃)

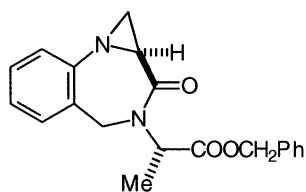
Source of chirality: the azide precursor

Absolute configuration: (1a*S*)

5-[(*S*)-1-Phenylethyl]-1,1a-dihydro(1a*S*)-2*H*-azirino[2,1-*c*][1,4]-benzodiazepine-4(6*H*)-one

Gianluigi Broggini, Luisa Garanti,* Giorgio Molteni and Tullio Pilati

Tetrahedron: Asymmetry 12 (2001) 1201



$C_{20}H_{20}N_2O_3$

5-[(*S*)-1-Carbobenzyloxyethyl]-1,1a-dihydro(1a*S*)-2*H*-azirino[2,1-*c*][1,4]-benzodiazepine-4(6*H*)-one

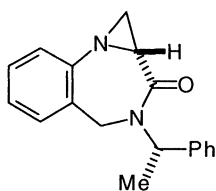
$[\alpha]_D^{25} = +67.6$ (*c* 0.19, $CHCl_3$)

Source of chirality: the azide precursor

Absolute configuration: (1a*S*)

Gianluigi Broggini, Luisa Garanti,* Giorgio Molteni and Tullio Pilati

Tetrahedron: Asymmetry 12 (2001) 1201



$C_{18}H_{18}N_2O$

5-[(*S*)-1-Phenylethyl]-1,1a-dihydro(1a*R*)-2*H*-azirino[2,1-*c*][1,4]-benzodiazepine-4(6*H*)-one

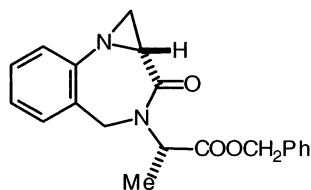
$[\alpha]_D^{25} = -256.4$ (*c* 0.36, $CHCl_3$)

Source of chirality: the azide precursor

Absolute configuration: (1a*R*)

Gianluigi Broggini, Luisa Garanti,* Giorgio Molteni and Tullio Pilati

Tetrahedron: Asymmetry 12 (2001) 1201



$C_{20}H_{20}N_2O_3$

5-[(*S*)-1-Carbobenzyloxyethyl]-1,1a-dihydro(1a*R*)-2*H*-azirino[2,1-*c*][1,4]-benzodiazepine-4(6*H*)-one

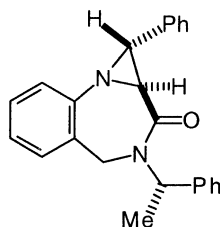
$[\alpha]_D^{25} = \pm 83.8$ (*c* 0.28, $CHCl_3$)

Source of chirality: the azide precursor

Absolute configuration: (1a*R*)

Gianluigi Broggini, Luisa Garanti,* Giorgio Molteni and Tullio Pilati

Tetrahedron: Asymmetry 12 (2001) 1201



$C_{24}H_{22}N_2O$

5-[(*S*)-1-Phenylethyl]-1,1a-dihydro(1a*S*)-2-(*S*)-phenyl-2*H*-azirino[2,1-*c*][1,4]-benzodiazepine-4(6*H*)-one

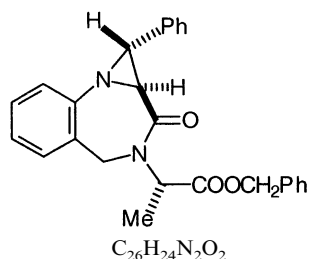
$[\alpha]_D^{25} = -79.2$ (*c* 0.26, $CHCl_3$)

Source of chirality: the azide precursor

Absolute configuration: (1a*S*,2*S*)

Gianluigi Broggin, Luisa Garanti,* Giorgio Molteni and Tullio Pilati

Tetrahedron: Asymmetry 12 (2001) 1201



5-[(*S*)-1-Carbobenzyloxyethyl]-1,1a-dihydro(1a*S*)-2-(*S*)-phenyl-2*H*-azirino[2,1-*c*][1,4]benzodiazepine-4(6*H*)-one

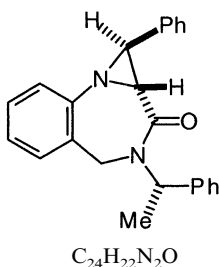
$[\alpha]_D^{25} = -47.7$ (*c* 0.40, $CHCl_3$)

Source of chirality: the azide precursor

Absolute configuration: (1a*S*,2*S*)

Gianluigi Broggin, Luisa Garanti,* Giorgio Molteni and Tullio Pilati

Tetrahedron: Asymmetry 12 (2001) 1201



5-[(*S*)-1-Phenylethyl]-1,1a-dihydro(1a*S*)-2-(*R*)-phenyl-2*H*-azirino[2,1-*c*][1,4]benzodiazepine-4(6*H*)-one

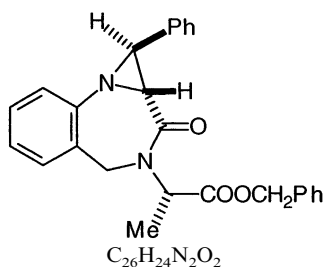
$[\alpha]_D^{25} = +46.7$ (*c* 0.15, $CHCl_3$)

Source of chirality: the azide precursor

Absolute configuration: (1a*S*,2*R*)

Gianluigi Broggin, Luisa Garanti,* Giorgio Molteni and Tullio Pilati

Tetrahedron: Asymmetry 12 (2001) 1201



5-[(*S*)-1-Carbobenzyloxyethyl]-1,1a-dihydro(1a*S*)-2-(*R*)-phenyl-2*H*-azirino[2,1-*c*][1,4]benzodiazepine-4(6*H*)-one

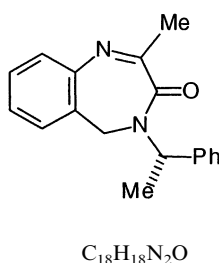
$[\alpha]_D^{25} = +83.7$ (*c* 0.27, $CHCl_3$)

Source of chirality: the azide precursor

Absolute configuration: (1a*S*,2*R*)

Gianluigi Broggin, Luisa Garanti,* Giorgio Molteni and Tullio Pilati

Tetrahedron: Asymmetry 12 (2001) 1201



4-[(*S*)-1-Phenylethyl]-1,2-dihydro-2-methyl-benzodiazepine-3(5*H*)-one

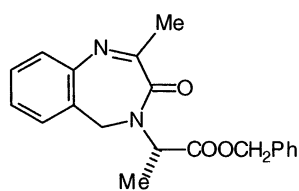
$[\alpha]_D^{25} = +120.0$ (*c* 0.20, $CHCl_3$)

Source of chirality: the azide precursor

Absolute configuration: 4-(1*S*)

Gianluigi Broggin, Luisa Garanti,* Giorgio Molteni and Tullio Pilati

Tetrahedron: Asymmetry 12 (2001) 1201



$C_{20}H_{20}N_2O_3$

4-[(*S*)-1-Carbobenzyloxylethyl]-1,2-dihydro-2-methyl-benzodiazepine-3(5*H*)-one

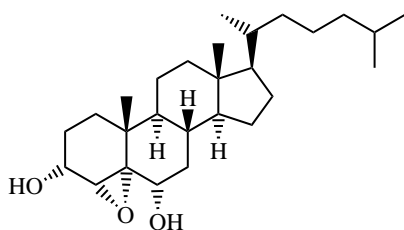
$[\alpha]_D^{25} = +204.8$ (*c* 0.27, $CHCl_3$)

Source of chirality: the azide precursor

Absolute configuration: 4-(1*S*)

Kejun Zhao, Yongfeng Wang* and David C. Billington

Tetrahedron: Asymmetry 12 (2001) 1211



$C_{26}H_{45}O_3$

4 α ,5-Epoxy-5 α -cholestane-3 α ,6 α -diol

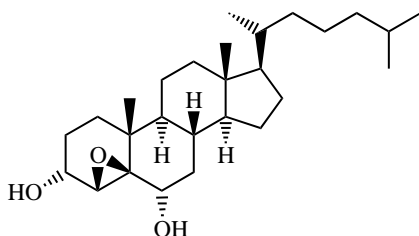
$[\alpha]_D^{20} = +64$ (*c* 4.0, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Kejun Zhao, Yongfeng Wang* and David C. Billington

Tetrahedron: Asymmetry 12 (2001) 1211



$C_{26}H_{45}O_3$

4 β ,5-Epoxy-5 β -cholestane-3 α ,6 α -diol

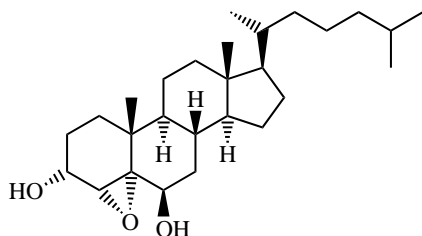
$[\alpha]_D^{20} = +25$ (*c* 3.0, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Kejun Zhao, Yongfeng Wang* and David C. Billington

Tetrahedron: Asymmetry 12 (2001) 1211



$C_{26}H_{45}O_3$

4 α ,5-Epoxy-5 α -cholestane-3 α ,6 β -diol

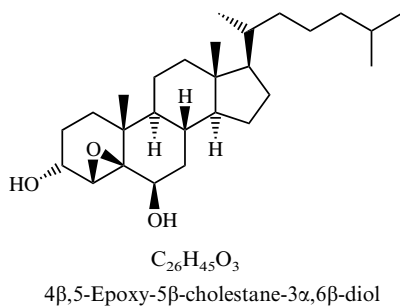
$[\alpha]_D^{20} = +57$ (*c* 10.0, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Kejun Zhao, Yongfeng Wang* and David C. Billington

Tetrahedron: Asymmetry 12 (2001) 1211



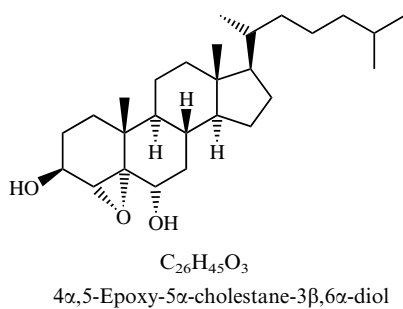
$[\alpha]_D^{20} = +10$ (c 1.0, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Kejun Zhao, Yongfeng Wang* and David C. Billington

Tetrahedron: Asymmetry 12 (2001) 1211



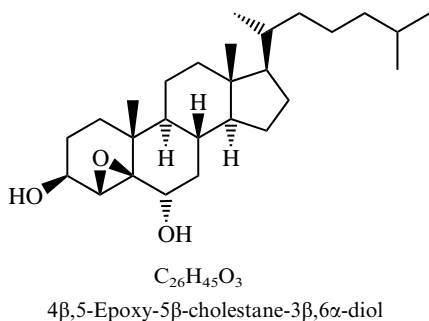
$[\alpha]_D^{20} = +49$ (c 1.0, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Kejun Zhao, Yongfeng Wang* and David C. Billington

Tetrahedron: Asymmetry 12 (2001) 1211



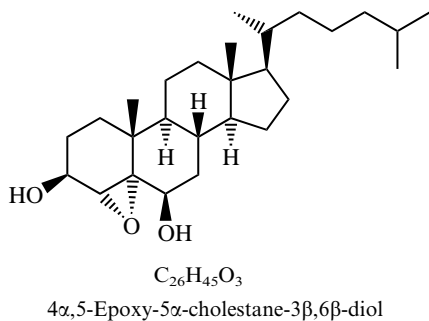
$[\alpha]_D^{20} = -3$ (c 10.0, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Kejun Zhao, Yongfeng Wang* and David C. Billington

Tetrahedron: Asymmetry 12 (2001) 1211



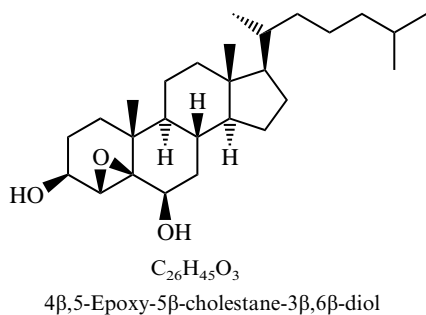
$[\alpha]_D^{15} = +23$ (c 10.0, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Kejun Zhao, Yongfeng Wang* and David C. Billington

Tetrahedron: Asymmetry 12 (2001) 1211



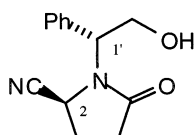
$[\alpha]_D^{25} = -7$ (*c* 10.0, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Isabelle Baussanne, Angèle Chiaroni and Jacques Royer*

Tetrahedron: Asymmetry 12 (2001) 1219



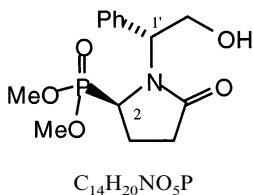
$[\alpha]_D -46$ (*c* 2.4, CH_2Cl_2)

Source of chirality: asymmetric synthesis and separation

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

Isabelle Baussanne, Angèle Chiaroni and Jacques Royer*

Tetrahedron: Asymmetry 12 (2001) 1219



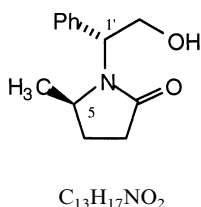
$[\alpha]_D -40$ (*c* 1, $CHCl_3$)

Source of chirality: asymmetric synthesis and separation

Absolute configuration: (2*S*,1'*R*)
(X-ray crystallography)

Isabelle Baussanne, Angèle Chiaroni and Jacques Royer*

Tetrahedron: Asymmetry 12 (2001) 1219



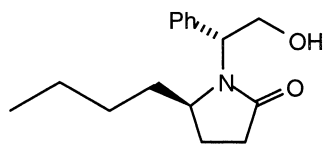
$[\alpha]_D +86$ (*c* 1.4, CH_2Cl_2)

Source of chirality: asymmetric synthesis and separation

Absolute configuration: (5*R*,1'*R*)
(chemical correlation)

Isabelle Baussanne, Angèle Chiaroni and Jacques Royer*

Tetrahedron: Asymmetry 12 (2001) 1219



$C_{16}H_{23}NO_2$

(5*R*)-Butyl-1-(2-hydroxy-(1'*R*)-phenylethyl)-pyrrolidin-2-one

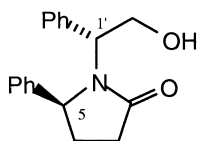
$[\alpha]_D +32$ (*c* 2.0, CH_2Cl_2)

Source of chirality: asymmetric synthesis and separation

Absolute configuration: (5*R*,1'*R*)

Isabelle Baussanne, Angèle Chiaroni and Jacques Royer*

Tetrahedron: Asymmetry 12 (2001) 1219



$C_{18}H_{19}NO_2$

1-(2-Hydroxy-(1'*R*)-phenylethyl)-(5*R*)-phenyl-pyrrolidin-2-one

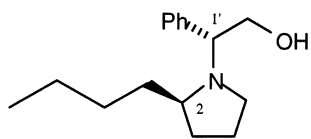
$[\alpha]_D +11$ (*c* 0.7, CH_2Cl_2)

Source of chirality: asymmetric synthesis and separation

Absolute configuration: (5*R*,1'*R*)

Isabelle Baussanne, Angèle Chiaroni and Jacques Royer*

Tetrahedron: Asymmetry 12 (2001) 1219



$C_{16}H_{25}NO$

((2*S*)-Butyl-1-pyrrolidin-1-yl)-(1'*R*)-phenyl-ethan-2-ol

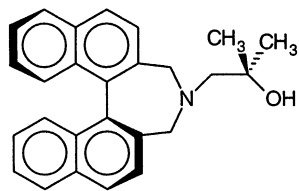
$[\alpha]_D +129$ (*c* 2.5, CH_2Cl_2)

Source of chirality: asymmetric synthesis and separation

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

Tommaso Mecca, Stefano Superchi, Egidio Giorgio and Carlo Rosini*

Tetrahedron: Asymmetry 12 (2001) 1225



$C_{26}H_{25}NO$

(*S*)-(+)-2,2'-[2-(2,2-Dimethyl-2-hydroxyethyl)-2-azapropane-1,3-diyl]-1,1'-binaphthalene

E.e. >99%

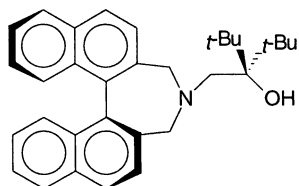
$[\alpha]_D^{25} = +226.7$ (*c* = 1.0; THF)

Source of chirality: (*S*)-(-)-1,1'-bi-2-naphthol

Absolute configuration: *S*

Tommaso Mecca, Stefano Superchi, Egidio Giorgio and Carlo Rosini*

Tetrahedron: Asymmetry 12 (2001) 1225



$C_{32}H_{37}NO$

(*S*)-(+)-2,2'-[2-(2,2-Di-*t*-butyl-2-hydroxyethyl)-2-azapropane-1,3-diyl]-1,1'-binaphthalene

E.e. >99%

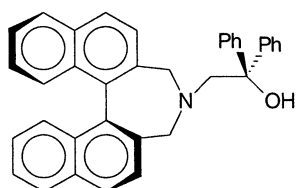
$[\alpha]_D^{25} = +104.5$ ($c = 1.0$; THF)

Source of chirality: (*S*)-(-)-1,1'-bi-2-naphthol

Absolute configuration: *S*

Tommaso Mecca, Stefano Superchi, Egidio Giorgio and Carlo Rosini*

Tetrahedron: Asymmetry 12 (2001) 1225



$C_{36}H_{29}NO$

(*S*)-(+)-2,2'-[2-(2,2-Diphenyl-2-hydroxyethyl)-2-azapropane-1,3-diyl]-1,1'-binaphthalene

E.e. >99%

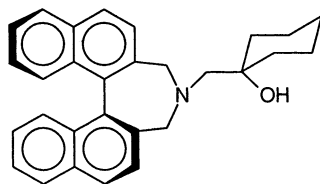
$[\alpha]_D^{25} = +85.0$ ($c = 1.0$; THF)

Source of chirality: (*S*)-(-)-1,1'-bi-2-naphthol

Absolute configuration: *S*

Tommaso Mecca, Stefano Superchi, Egidio Giorgio and Carlo Rosini*

Tetrahedron: Asymmetry 12 (2001) 1225



$C_{30}H_{33}NO$

(*S*)-(+)-2,2'-[2-(1-Hydroxycyclohexylmethyl)-2-azapropane-1,3-diyl]-1,1'-binaphthalene

E.e. >99%

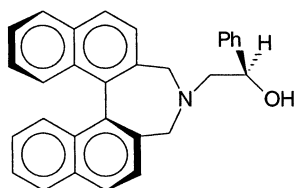
$[\alpha]_D^{25} = +223.8$ ($c = 1.0$; $CHCl_3$)

Source of chirality: (*S*)-(-)-1,1'-bi-2-naphthol

Absolute configuration: *S*

Tommaso Mecca, Stefano Superchi, Egidio Giorgio and Carlo Rosini*

Tetrahedron: Asymmetry 12 (2001) 1225



$C_{30}H_{25}NO$

(*aS,R*)-(+)-2,2'-[2-(2-Phenyl-2-hydroxyethyl)-2-azapropane-1,3-diyl]-1,1'-binaphthalene

E.e. >99%

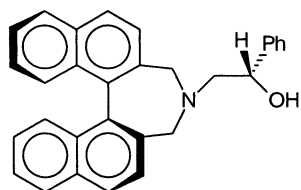
$[\alpha]_D^{25} = +170.0$ ($c = 1.0$; THF)

Source of chirality: (*S*)-(-)-1,1'-bi-2-naphthol

Absolute configuration: *aS,R*

Tommaso Mecca, Stefano Superchi, Egidio Giorgio and Carlo Rosini*

Tetrahedron: Asymmetry 12 (2001) 1225



$C_{30}H_{25}NO$

(*aS,S*)-(+)-2,2'-[2-(2-Phenyl-2-hydroxyethyl)-2-azapropane-1,3-diyl]-1,1'-binaphthalene

E.e. >99%

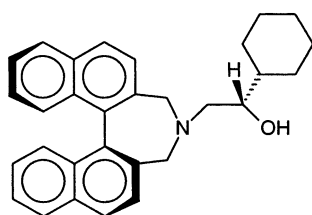
$[\alpha]_D^{21} = +140.7$ ($c = 1.0$; THF)

Source of chirality: (*S*)-(-)-1,1'-bi-2-naphthol

Absolute configuration: *aS,S*

Tommaso Mecca, Stefano Superchi, Egidio Giorgio and Carlo Rosini*

Tetrahedron: Asymmetry 12 (2001) 1225



$C_{30}H_{31}NO$

(*aS,S*)-(+)-2,2'-[2-(2-Cyclohexyl-2-hydroxyethyl)-2-azapropane-1,3-diyl]-1,1'-binaphthalene

E.e. >99%

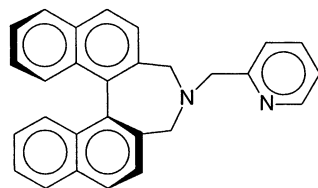
$[\alpha]_D^{21} = +220.5$ ($c = 1.0$; THF)

Source of chirality: (*S*)-(-)-1,1'-bi-2-naphthol

Absolute configuration: *aS,S*

Tommaso Mecca, Stefano Superchi, Egidio Giorgio and Carlo Rosini*

Tetrahedron: Asymmetry 12 (2001) 1225



$C_{28}H_{22}N_2$

(*S*)-(+)-2,2'-[2-(Methyl-2-pyridyl)-2-azapropane-1,3-diyl]-1,1'-binaphthalene

E.e. >99%

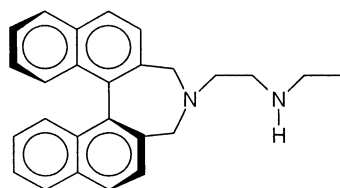
$[\alpha]_D^{21} = +294.9$ ($c = 1.0$; $CHCl_3$)

Source of chirality: (*S*)-(-)-1,1'-bi-2-naphthol

Absolute configuration: *S*

Tommaso Mecca, Stefano Superchi, Egidio Giorgio and Carlo Rosini*

Tetrahedron: Asymmetry 12 (2001) 1225



$C_{26}H_{26}N_2$

(*S*)-(+)-2,2'-[2-(*N*-Ethyl-2-aminoethyl)-2-azapropane-1,3-diyl]-1,1'-binaphthalene

E.e. >99%

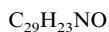
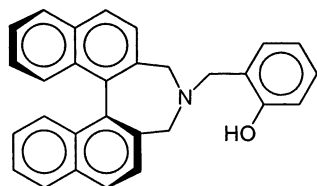
$[\alpha]_D^{21} = +213.2$ ($c = 1.0$; THF)

Source of chirality: (*S*)-(-)-1,1'-bi-2-naphthol

Absolute configuration: *S*

Tommaso Mecca, Stefano Superchi, Egidio Giorgio and Carlo Rosini*

Tetrahedron: Asymmetry 12 (2001) 1225



(S)-(+)-2,2'-[2-(Methyl-2-hydroxyphenyl)-2-azapropane-1,3-diyl]-1,1'-binaphthalene

E.e. >99%

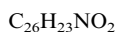
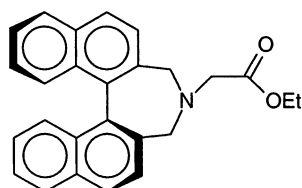
$[\alpha]_D^{21} = +213.8$ ($c = 1.0$; THF)

Source of chirality: (S)-(-)-1,1'-bi-2-naphthol

Absolute configuration: S

Tommaso Mecca, Stefano Superchi, Egidio Giorgio and Carlo Rosini*

Tetrahedron: Asymmetry 12 (2001) 1225



(S)-(+)-2,2'-[2-(Ethoxycarbonyl)ethyl]-2-azapropane-1,3-diyl]-1,1'-binaphthalene

E.e. >99%

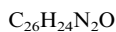
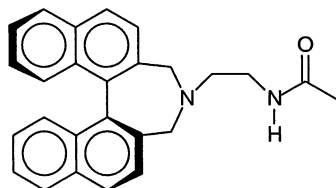
$[\alpha]_D^{21} = +278.0$ ($c = 1.1$; $CHCl_3$)

Source of chirality: (S)-(-)-1,1'-bi-2-naphthol

Absolute configuration: S

Tommaso Mecca, Stefano Superchi, Egidio Giorgio and Carlo Rosini*

Tetrahedron: Asymmetry 12 (2001) 1225



(S)-(+)-2,2'-[2-(N-Acetyl-2-aminoethyl)-2-azapropane-1,3-diyl]-1,1'-binaphthalene

E.e. >99%

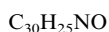
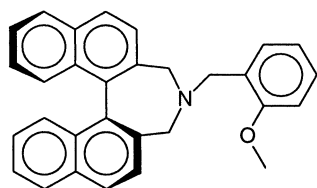
$[\alpha]_D^{21} = +231.7$ ($c = 1.0$; $CHCl_3$)

Source of chirality: (S)-(-)-1,1'-bi-2-naphthol

Absolute configuration: S

Tommaso Mecca, Stefano Superchi, Egidio Giorgio and Carlo Rosini*

Tetrahedron: Asymmetry 12 (2001) 1225



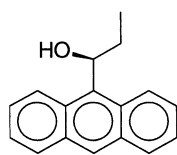
(S)-(+)-2,2'-[2-(Methyl-2-methoxyphenyl)-2-azapropane-1,3-diyl]-1,1'-binaphthalene

E.e. >99%

$[\alpha]_D^{21} = +229.0$ ($c = 1.0$; THF)

Source of chirality: (S)-(-)-1,1'-bi-2-naphthol

Absolute configuration: S



(S)-(-)-1-(9-Anthryl)-1-propanol

E.e. = 77%

$[\alpha]_D^{21} = -19.2$ ($c=0.53$, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: S