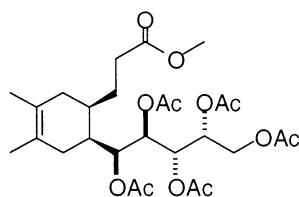


M. V. Gil, E. Román,\* J. A. Serrano, M. B. Hursthouse and M. E. Light\*

*Tetrahedron: Asymmetry* 12 (2001) 1673



$C_{27}H_{40}O_{12}$

1,2,3,4,5-Penta-*O*-acetyl-1-*C*-[(4*S*,5*S*)-1,2-dimethyl-4-(2-methoxycarbonyl)ethyl]cyclohex-1-en-5-yl]-*D*-galacto-pentitol

E.e. = 100%

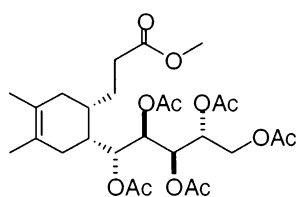
$[\alpha]_D^{25} = +69.5$  (*c* 0.51,  $CHCl_3$ )

Source of chirality: asymmetric synthesis from *D*-galactose

Absolute configuration: 4*S*,5*S*,*D*-galacto

M. V. Gil, E. Román,\* J. A. Serrano, M. B. Hursthouse and M. E. Light\*

*Tetrahedron: Asymmetry* 12 (2001) 1673



$C_{27}H_{40}O_{12}$

1,2,3,4,5-Penta-*O*-acetyl-1-*C*-[(4*R*,5*R*)-1,2-dimethyl-4-(2-methoxycarbonyl)ethyl]cyclohex-1-en-5-yl]-*D*-manno-pentitol

E.e. = 100%

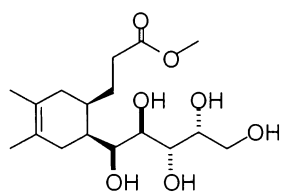
$[\alpha]_D^{25} = +8.4$  (*c* 0.72,  $CHCl_3$ )

Source of chirality: asymmetric synthesis from *D*-mannose

Absolute configuration: 4*R*,5*R*,*D*-manno

M. V. Gil, E. Román,\* J. A. Serrano, M. B. Hursthouse and M. E. Light\*

*Tetrahedron: Asymmetry* 12 (2001) 1673



$C_{17}H_{30}O_7$

1-*C*-[(4*S*,5*S*)-1,2-Dimethyl-4-(2-methoxycarbonyl)ethyl]cyclohex-1-en-5-yl]-*D*-galacto-pentitol

E.e. = 100%

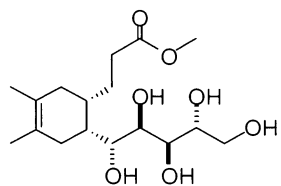
$[\alpha]_D^{25} = +23.8$  (*c* 0.53, MeOH)

Source of chirality: asymmetric synthesis from *D*-galactose

Absolute configuration: 4*S*,5*S*,*D*-galacto

M. V. Gil, E. Román,\* J. A. Serrano, M. B. Hursthouse and M. E. Light\*

*Tetrahedron: Asymmetry* 12 (2001) 1673



$C_{17}H_{30}O_7$

1-*C*-[(4*R*,5*R*)-1,2-Dimethyl-4-(2-methoxycarbonyl)ethyl]cyclohex-1-en-5-yl]-*D*-manno-pentitol

E.e. = 100%

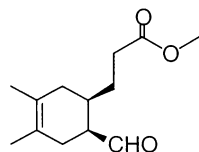
$[\alpha]_D^{25} = +17.8$  (*c* 0.50, MeOH)

Source of chirality: asymmetric synthesis from *D*-mannose

Absolute configuration: 4*R*,5*R*,*D*-manno

M. V. Gil, E. Román,\* J. A. Serrano, M. B. Hursthouse and M. E. Light\*

*Tetrahedron: Asymmetry 12 (2001) 1673*



$C_{13}H_{20}O_3$

(4*S*,5*S*)-5-Formyl-1,2-dimethyl-4-(2-methoxycarbonylethyl)cyclohex-1-ene

E.e. = 100%

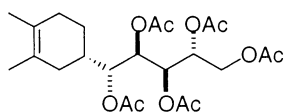
$[\alpha]_D^{25} = -3.01$  (*c* 2.0,  $CHCl_3$ )

Source of chirality: asymmetric synthesis from D-galactose

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

M. V. Gil, E. Román,\* J. A. Serrano, M. B. Hursthouse and M. E. Light\*

*Tetrahedron: Asymmetry 12 (2001) 1673*



$C_{23}H_{34}O_{10}$

1,2,3,4,5-Penta-*O*-acetyl-1-*C*-[(5*S*)-1,2-dimethylcyclohex-1-en-5-yl]-*D*-manno-pentitol

E.e. = 100%

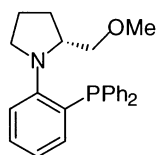
$[\alpha]_D^{25} = +3.6$  (*c* 1.02,  $CHCl_3$ )

Source of chirality: asymmetric synthesis from D-mannose

Absolute configuration: 5*S*,*D*-manno

Takashi Mino,\* Yoh-ichi Tanaka, Koji Akita, Kouhei Anada, Masami Sakamoto and Tsutomu Fujita

*Tetrahedron: Asymmetry 12 (2001) 1677*



$C_{24}H_{26}NOP$

(*R*)-1-[2'-(Diphenylphosphinyl)phenyl]-2-(methoxymethyl)pyrrolidine

E.e. >95%

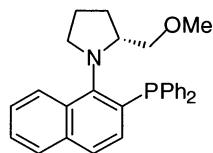
$[\alpha]_D^{20} = +8.2$  (*c* 1.0,  $CHCl_3$ )

Source of chirality: (*R*)-2-methoxymethylpyrrolidine

Absolute configuration: *R*

Takashi Mino,\* Yoh-ichi Tanaka, Koji Akita, Kouhei Anada, Masami Sakamoto and Tsutomu Fujita

*Tetrahedron: Asymmetry 12 (2001) 1677*



$C_{28}H_{28}NOP$

(*R*)-1-[2'-(Diphenylphosphino)-1'-naphthalenyl]-2-(methoxymethyl)pyrrolidine

E.e. >95%

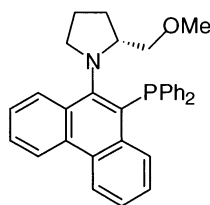
$[\alpha]_D^{20} = -12.3$  (*c* 1.0,  $CHCl_3$ )

Source of chirality: (*R*)-2-methoxymethylpyrrolidine

Absolute configuration: *R*

Takashi Mino,\* Yoh-ichi Tanaka, Koji Akita, Kouhei Anada,  
Masami Sakamoto and Tsutomu Fujita

*Tetrahedron: Asymmetry* 12 (2001) 1677



$C_{32}H_{30}NOP$

(*R*)-1-[10'-(Diphenylphosphino)-9'-phenanthrenyl]-2-(methoxymethyl)pyrrolidine

E.e. >95%

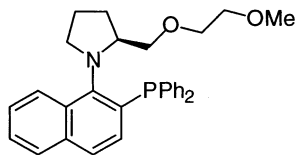
$[\alpha]_D^{20} = -88$  (*c* 0.25,  $CHCl_3$ )

Source of chirality: (*R*)-2-methoxymethylpyrrolidine

Absolute configuration: *R*

Takashi Mino,\* Yoh-ichi Tanaka, Koji Akita, Kouhei Anada,  
Masami Sakamoto and Tsutomu Fujita

*Tetrahedron: Asymmetry* 12 (2001) 1677



$C_{30}H_{32}NO_2P$

(*S*)-1-[2'-(Diphenylphosphino)-1'-naphthalenyl]-2-[(2''-methoxyethoxy)methyl]pyrrolidine

E.e. >95%

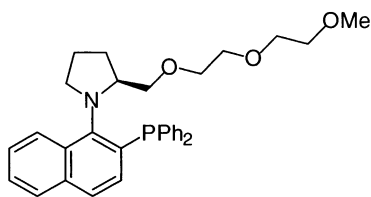
$[\alpha]_D^{20} = +125$  (*c* 1.0,  $CHCl_3$ )

Source of chirality: (*S*)-2-pyrrolidinemethanol

Absolute configuration: *S*

Takashi Mino,\* Yoh-ichi Tanaka, Koji Akita, Kouhei Anada,  
Masami Sakamoto and Tsutomu Fujita

*Tetrahedron: Asymmetry* 12 (2001) 1677



$C_{32}H_{36}NO_3P$

(*S*)-1-[2'-(Diphenylphosphino)-1'-naphthalenyl]-2-[(2''-methoxyethoxyethoxy)methyl]pyrrolidine

E.e. >95%

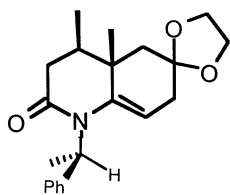
$[\alpha]_D^{20} = +108$  (*c* 0.102,  $CHCl_3$ )

Source of chirality: (*S*)-2-pyrrolidinemethanol

Absolute configuration: *S*

Gilbert Revial, Ivan Jabin, Michaël Redolfi and Michel Pfau\*

*Tetrahedron: Asymmetry* 12 (2001) 1683



$C_{21}H_{27}NO_3$

4',4a'-Dimethyl-1'-[(1*R*)-1-phenylethyl]-1',3',4',4a',5',7'-hexahydrospiro[1,3-dioxolane-2,6'-(2'*H*)-quinolein]-2'-one

E.e. = 100%

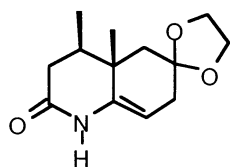
$[\alpha]_D^{20} = -53$  (*c* 1.4, EtOH)

Source of chirality: asymmetric synthesis

Absolute configuration: 4'*R*,4a'*S*

Gilbert Revial, Ivan Jabin, Michaël Redolfi and Michel Pfau\*

*Tetrahedron: Asymmetry* 12 (2001) 1683



$C_{13}H_{19}NO_3$

4',4a'-Dimethyl-1',3',4',5',7'-hexahydrospiro[1,3-dioxolane-2,6'(2'*H*)-quinolein]-2'-one

E.e. = 100%

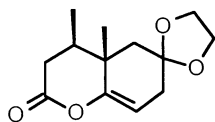
$[\alpha]_D^{20} -91$  (*c* 2.7, EtOH)

Source of chirality: asymmetric synthesis

Absolute configuration: 4'*R*,4a'*S*

Gilbert Revial, Ivan Jabin, Michaël Redolfi and Michel Pfau\*

*Tetrahedron: Asymmetry* 12 (2001) 1683



$C_{13}H_{18}O_4$

4,4a-Dimethyl-3,4,4a,5-tetrahydrospiro{2*H*-1-benzopyran-6(7*H*),2'-[1',3']dioxolan}-2-one

E.e. = 100%

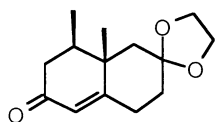
$[\alpha]_D^{20} -68$  (*c* 1.5, EtOH)

Source of chirality: asymmetric synthesis

Absolute configuration: 3*R*,4a*S*

Gilbert Revial, Ivan Jabin, Michaël Redolfi and Michel Pfau\*

*Tetrahedron: Asymmetry* 12 (2001) 1683



$C_{14}H_{20}O_3$

8,8a'-Dimethyl-1',3',4',7',8',8a'-hexahydrospiro[1,3-dioxolane-2,2'(6'*H*)naphthalen]-6'-one

E.e. = 100%

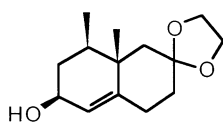
$[\alpha]_D^{20} +180$  (*c* 1.2, EtOH)

Source of chirality: asymmetric synthesis

Absolute configuration: 8'*R*,8a'*S*

Gilbert Revial, Ivan Jabin, Michaël Redolfi and Michel Pfau\*

*Tetrahedron: Asymmetry* 12 (2001) 1683



$C_{14}H_{22}O_3$

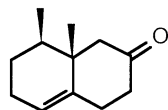
8,8a'-Dimethyl-3',4',6',7',8',8a'-hexahydrospiro[1,3-dioxolane-2,2'(1'*H*)naphthalen]-6'-yl acetate

E.e. = 100%

$[\alpha]_D^{20} +50$  (*c* 1.3, acetone)

Source of chirality: asymmetric synthesis

Absolute configuration: 6'*S*,8'*R*,8a'*S*

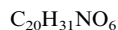
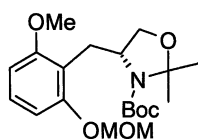


8,8a-Dimethyl-3,4,6,7,8,8a-hexahydronaphthalen-2(1H)-one

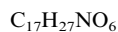
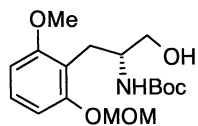
E.e. = 100%

[α]<sub>D</sub><sup>20</sup> +113 (c 1.4, EtOH)

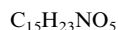
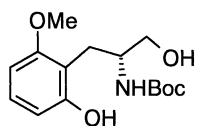
Source of chirality: asymmetric synthesis

Absolute configuration: 8*R*,8*aS*tert-Butyl (4*R*)-4-[2-methoxy-6-(methoxymethoxy)benzyl]-2,2-dimethyl-1,3-oxazolidine-3-carboxylate[α]<sub>D</sub><sup>20</sup> = +19.7 (c 1.0, CHCl<sub>3</sub>)

Source of chirality: L-serine

Absolute configuration: 4*R*tert-Butyl (1*R*)-2-hydroxy-1-[2-methoxy-6-(methoxymethoxy)benzyl]ethylcarbamate[α]<sub>D</sub><sup>20</sup> = +13.9 (c 1.0, CHCl<sub>3</sub>)

Source of chirality: L-serine

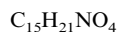
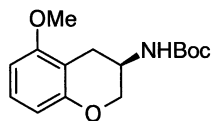
Absolute configuration: 1*R*tert-Butyl (1*R*)-2-hydroxy-1-(2-hydroxy-6-methoxybenzyl)ethylcarbamate[α]<sub>D</sub><sup>20</sup> = +11.2 (c 1.0, CHCl<sub>3</sub>)

Source of chirality: L-serine

Absolute configuration: 1*R*

Stéphanie Usse, Grégoire Pave, Gérard Guillaumet and Marie-Claude Viaud-Massuard\*

*Tetrahedron: Asymmetry 12 (2001) 1689*



*tert*-Butyl (3*R*)-5-methoxy-3,4-dihydro-2*H*-chromen-3-yl-carbamate

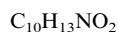
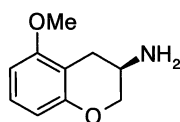
$[\alpha]_D^{20} = +25.8$  (*c* 1.0,  $CHCl_3$ )

Source of chirality: L-serine

Absolute configuration: 3*R*

Stéphanie Usse, Grégoire Pave, Gérard Guillaumet and Marie-Claude Viaud-Massuard\*

*Tetrahedron: Asymmetry 12 (2001) 1689*



(3*R*)-3-Amino-5-methoxy-3,4-dihydro-2*H*-1-benzopyran

E.e.  $\geq 99.5\%$

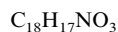
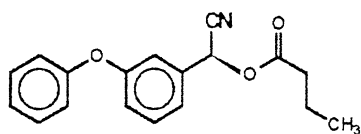
$[\alpha]_D^{20} = -13.7$  (*c* 1.0,  $CHCl_3$ )

Source of chirality: L-serine

Absolute configuration: 3*R*

Nitin W. Fadnavis,\* Ravi Luke Babu, Gurralla Sheelu and Ashlesha Deshpande

*Tetrahedron: Asymmetry 12 (2001) 1695*



(*S*)-Cyano(3-phenoxyphenyl)methyl butyrate

E.e. = 98.4% (by chiral HPLC)

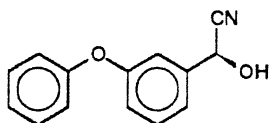
$[\alpha]_D^{25} = 4.9$  (*c* 1, chloroform)

Source of chirality: enzymatic resolution

Absolute configuration: *S*

Nitin W. Fadnavis,\* Ravi Luke Babu, Gurralla Sheelu and Ashlesha Deshpande

*Tetrahedron: Asymmetry 12 (2001) 1695*



(*S*)-2-Hydroxy-2-(3-phenoxyphenyl)acetonitrile

E.e. >99% (by chiral HPLC)

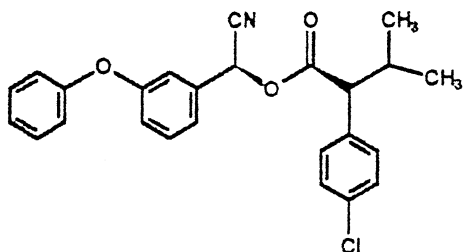
$[\alpha]_D^{25} = -24.3$  (*c* 1.2, chloroform)

Source of chirality: enzymatic resolution

Absolute configuration: *S*

Nitin W. Fadnavis,\* Ravi Luke Babu, Gurralla Sheelu and Ashlesha Deshpande

*Tetrahedron: Asymmetry* 12 (2001) 1695



$C_{25}H_{22}ClNO_3$

(*S*)-Cyano(3-phenoxyphenyl)methyl-2-(4-chlorophenyl)-3-methyl-(2*S*)-butanoate

D.e. = 96% (by chiral HPLC)

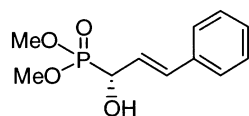
$[\alpha]_D^{25} = -10.8$  (*c* 6.5, chloroform)

Source of chirality: enzymatic resolution

Absolute configuration: *S,S*

Bradley J. Rowe and Christopher D. Spilling\*

*Tetrahedron: Asymmetry* 12 (2001) 1701



$C_{11}H_{15}O_4P$

Dimethyl (1-hydroxy-3-phenyl-2*E*-propenyl) phosphonate

E.e.  $\geq 99\%$  [by HPLC]

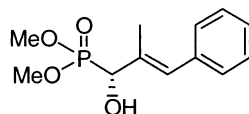
$[\alpha]_D +38.5$  (*c* 1.0, EtOH)

Source of chirality: asymmetric catalysis and enzymatic resolution

Absolute configuration: *R*

Bradley J. Rowe and Christopher D. Spilling\*

*Tetrahedron: Asymmetry* 12 (2001) 1701



$C_{12}H_{17}O_4P$

Dimethyl (1-hydroxy-2-methyl-3-phenyl-2*E*-propenyl) phosphonate

E.e.  $\geq 99\%$  [by HPLC]

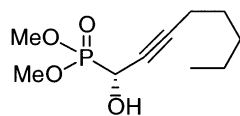
$[\alpha]_D +4.0$  (*c* 0.5, EtOH)

Source of chirality: asymmetric catalysis and enzymatic resolution

Absolute configuration: *R*

Bradley J. Rowe and Christopher D. Spilling\*

*Tetrahedron: Asymmetry* 12 (2001) 1701



$C_{10}H_{19}O_4P$

Dimethyl (1-hydroxy-2-octynyl) phosphonate

E.e. = 92% [by HPLC]

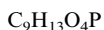
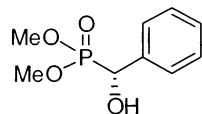
$[\alpha]_D +25.9$  (*c* 1.0, EtOH)

Source of chirality: asymmetric catalysis and enzymatic resolution

Absolute configuration: *R*

Bradley J. Rowe and Christopher D. Spilling\*

*Tetrahedron: Asymmetry 12 (2001) 1701*



Dimethyl (phenylhydroxymethyl) phosphonate

E.e.  $\geq 99\%$  [by HPLC]

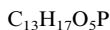
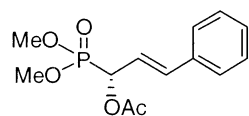
$[\alpha]_D +39.4$  (c 1.0, EtOH)

Source of chirality: asymmetric catalysis and enzymatic resolution

Absolute configuration: *R*

Bradley J. Rowe and Christopher D. Spilling\*

*Tetrahedron: Asymmetry 12 (2001) 1701*



Dimethyl (1-acetoxy-3-phenyl-2*E*-propenyl) phosphonate

E.e. = 90% [by HPLC]

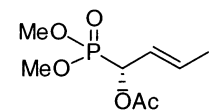
$[\alpha]_D +58.2$  (c 1.0, EtOH)

Source of chirality: asymmetric catalysis and enzymatic resolution

Absolute configuration: *R*

Bradley J. Rowe and Christopher D. Spilling\*

*Tetrahedron: Asymmetry 12 (2001) 1701*



Dimethyl (1-acetoxy-2*E*-butenyl) phosphonate

E.e. = 97% [by HPLC]

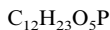
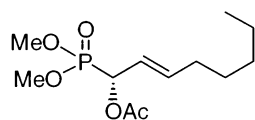
$[\alpha]_D +29.3$  (c 1.0, EtOH)

Source of chirality: asymmetric catalysis and enzymatic resolution

Absolute configuration: *R*

Bradley J. Rowe and Christopher D. Spilling\*

*Tetrahedron: Asymmetry 12 (2001) 1701*



Dimethyl (1-acetoxy-2*E*-octenyl) phosphonate

E.e. = 95% [by HPLC]

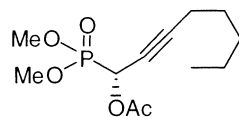
$[\alpha]_D +23.4$  (c 2.0, EtOH)

Source of chirality: asymmetric catalysis and enzymatic resolution

Absolute configuration: *R*

Bradley J. Rowe and Christopher D. Spilling\*

*Tetrahedron: Asymmetry 12 (2001) 1701*



$C_{12}H_{21}O_5P$

Dimethyl (1-acetoxy-2-octynyl) phosphonate

E.e. = 90% [by HPLC]

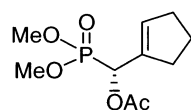
$[\alpha]_D^{25} +42.1$  (c 1.0, EtOH)

Source of chirality: asymmetric catalysis and enzymatic resolution

Absolute configuration: *R*

Bradley J. Rowe and Christopher D. Spilling\*

*Tetrahedron: Asymmetry 12 (2001) 1701*



$C_{10}H_{17}O_5P$

Dimethyl [(1-cyclopentyl)acetoxyethyl] phosphonate

E.e. = 79% [by HPLC]

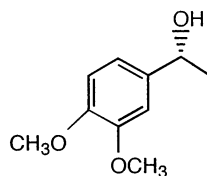
$[\alpha]_D^{25} +16.0$  (c 1.0, EtOH)

Source of chirality: asymmetric catalysis and enzymatic resolution

Absolute configuration: *R*

Herminia I. Pérez,\* Héctor Luna, Norberto Manjarrez and Aida Solís

*Tetrahedron: Asymmetry 12 (2001) 1709*



$C_{10}H_{14}O_3$

Methyl-(3,4-dimethoxyphenyl)methanol

E.e. >99%

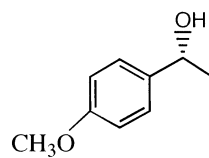
$[\alpha]_D^{25} = -28.2$  (c 0.83,  $CHCl_3$ )

Source of chirality: resolution by microbial oxidation

Absolute configuration: *R*

Herminia I. Pérez,\* Héctor Luna, Norberto Manjarrez and Aida Solís

*Tetrahedron: Asymmetry 12 (2001) 1709*



$C_9H_{12}O_2$

Methyl-(4-methoxyphenyl)methanol

E.e. >99%

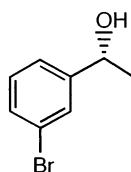
$[\alpha]_D^{25} = +49.6$  (c 0.87,  $CHCl_3$ )

Source of chirality: resolution by microbial oxidation

Absolute configuration: *R*

Herminia I. Pérez,\* Héctor Luna, Norberto Manjarrez and Aida Solís

*Tetrahedron: Asymmetry* 12 (2001) 1709



$C_8H_9BrO$

Methyl-(3-bromophenyl)methanol

E.e. >99%

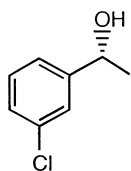
$[\alpha]_D^{25} = +27.8$  ( $c$  1.03, EtOH)

Source of chirality: resolution by microbial oxidation

Absolute configuration: *R*

Herminia I. Pérez,\* Héctor Luna, Norberto Manjarrez and Aida Solís

*Tetrahedron: Asymmetry* 12 (2001) 1709



$C_8H_9ClO$

Methyl-(3-chlorophenyl)methanol

E.e. >99%

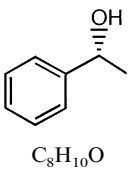
$[\alpha]_D^{25} = +43.1$  ( $c$  0.92,  $CHCl_3$ )

Source of chirality: resolution by microbial oxidation

Absolute configuration: *R*

Herminia I. Pérez,\* Héctor Luna, Norberto Manjarrez and Aida Solís

*Tetrahedron: Asymmetry* 12 (2001) 1709



$C_8H_{10}O$

Methylphenylmethanol

E.e. >99%

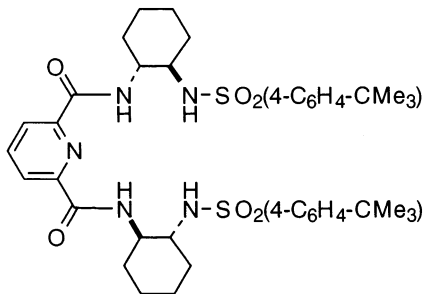
$[\alpha]_D^{25} = +54.2$  ( $c$  1.2,  $CHCl_3$ )

Source of chirality: resolution by microbial oxidation

Absolute configuration: *R*

Karno Ng, Ratnasamy Somanathan\* and Patrick J. Walsh\*

*Tetrahedron: Asymmetry* 12 (2001) 1719



$C_{39}H_{53}N_5O_6S_2$

Pyridine-2,6-dicarboxylic acid bis-([2-(4-*tert*-butyl-benzenesulfonylamino)-cyclohexyl]-amide)

E.e. = 100% [by derivatization of the *trans*-1,2-diaminocyclohexane with toluoyl chloride to give the diamide. The e.e. of the diamide was determined using chiral stationary phase HPLC (Pirkle L-leucine column and a UV-vis detector operating at 254 nm)]

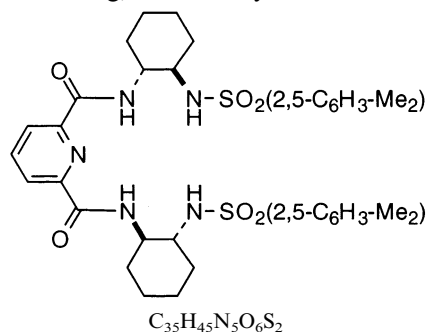
$[\alpha]_D = +8.3$  ( $c$  = 0.14 g/mL,  $CHCl_3$ )

Source of chirality: tartaric acid

Absolute configuration: (*R,R*)

Karno Ng, Ratnasamy Somanathan\* and Patrick J. Walsh\*

*Tetrahedron: Asymmetry* 12 (2001) 1719



Pyridine-2,6-dicarboxylic acid bis-([2-(2,5-dimethyl-benzenesulfonylamino)-cyclohexyl]-amide}

E.e. = 100% [by derivatization of the *trans*-1,2-diaminocyclohexane with toluoyl chloride to give the diamide. The e.e. of the diamide was determined using chiral stationary phase HPLC (Pirkle L-leucine column and a UV-vis detector operating at 254 nm)]

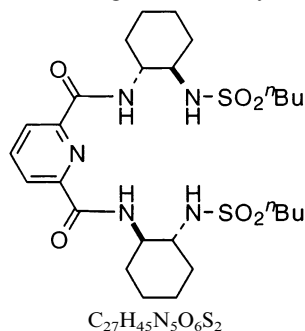
$[\alpha]_D = -130.8$  ( $c = 0.0395$  g/ml,  $CHCl_3$ )

Source of chirality: tartaric acid

Absolute configuration: (*R,R*)

Karno Ng, Ratnasamy Somanathan\* and Patrick J. Walsh\*

*Tetrahedron: Asymmetry* 12 (2001) 1719



Pyridine-2,6-dicarboxylic acid bis-[2-(butane-1-sulfonylamino)-cyclohexyl]-amide}

E.e. = 100% [by derivatization of the *trans*-1,2-diaminocyclohexane with toluoyl chloride to give the diamide. The e.e. of the diamide was determined using chiral stationary phase HPLC (Pirkle L-leucine column and a UV-vis detector operating at 254 nm)]

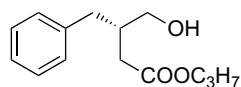
$[\alpha]_D = -1.1$  ( $c = 0.028$  g/mL,  $CHCl_3$ )

Source of chirality: tartaric acid

Absolute configuration: (*R,R*)

Yolanda Caro, Christian F. Masaguer and Enrique Raviña\*

*Tetrahedron: Asymmetry* 12 (2001) 1723



$C_{14}H_{20}O_3$

Propyl (*S*)-3-benzyl-4-hydroxybutanoate

E.e. = 94%

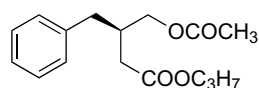
$[\alpha]_D^{24} = +7.8$  ( $c$  1.0,  $CH_3OH$ )

Source of chirality: lipase-catalyzed resolution

Absolute configuration: (*S*)

Yolanda Caro, Christian F. Masaguer and Enrique Raviña\*

*Tetrahedron: Asymmetry* 12 (2001) 1723



$C_{16}H_{22}O_4$

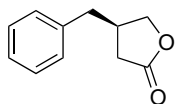
Propyl (*R*)-4-acetoxy-3-benzylbutanoate

E.e. = 69%

$[\alpha]_D^{24} = +5.5$  ( $c$  1.0,  $CH_3OH$ )

Source of chirality: lipase-catalyzed resolution

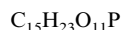
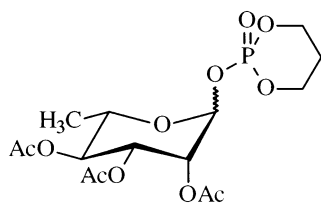
Absolute configuration: (*R*)

Propyl (*R*)-β-benzyl-γ-butyrolactone

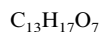
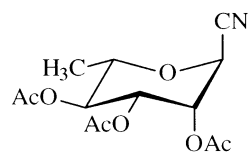
E.e. = 96%

 $[\alpha]_{\text{D}}^{24} = +7.5$  (*c* 1.0,  $\text{CHCl}_3$ )

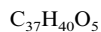
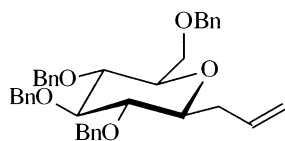
Source of chirality: lipase-catalyzed resolution

Absolute configuration: (*R*)2',3',4',-Tri-*O*-acetyl-α,β-L-rhamnopyranosyl-[1,3,2]-dioxaphosphinane-2-oxide $[\alpha]_{\text{Dmix}} = -35.7$  (*c* 2.9,  $\text{CHCl}_3$ )

Source of chirality: L-rhamnose

2',3',4',-Tri-*O*-acetyl-α-L-rhamnopyranosyl cyanide $[\alpha]_{\text{D}} = +19.7$  (*c* 1.5,  $\text{CHCl}_3$ )

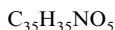
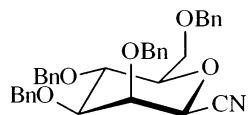
Source of chirality: L-rhamnose

3-(2',3',4',6'-Tetra-*O*-benzyl-β-D-glucopyranosyl)-1-propene $[\alpha]_{\text{D}} = +20.7$  (*c* 0.9,  $\text{CHCl}_3$ )

Source of chirality: D-glucose

Gurdial Singh\* and Hariprasad Vankayalapati

*Tetrahedron: Asymmetry* 12 (2001) 1727



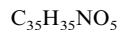
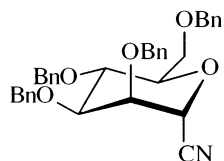
2,3,4,6-(Tetra-*O*-benzyl- $\beta$ -D-mannopyranosyl)-cyanide

$[\alpha]_{\text{D}} = -12.5$  ( $c$  3.7,  $\text{CHCl}_3$ )

Source of chirality: D-mannose

Gurdial Singh\* and Hariprasad Vankayalapati

*Tetrahedron: Asymmetry* 12 (2001) 1727



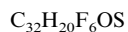
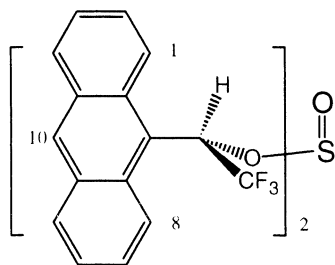
2,3,4,6-(Tetra-*O*-benzyl- $\alpha$ -D-mannopyranosyl)-cyanide

$[\alpha]_{\text{D}} = +30.6$  ( $c$  6.7,  $\text{CHCl}_3$ )

Source of chirality: D-mannose

Marta Sánchez, Itziar Maestre, Carlos Jaime and Albert Virgili\*

*Tetrahedron: Asymmetry* 12 (2001) 1737

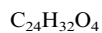
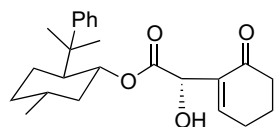


Di[(*S*)-1-(9-anthryl)-2,2,2-trifluoroethyl]sulphite

$[\alpha]_{\text{D}}^{25} = -26$  ( $c$  1.5,  $\text{CH}_2\text{Cl}_2$ )

Tomasz Bauer\* and Joanna Tarasiuk

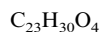
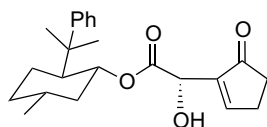
*Tetrahedron: Asymmetry* 12 (2001) 1741



(*S*)-Hydroxy-(6-oxo-cyclohex-1-enyl)-acetic acid (1*R*,2*S*,5*R*)-5-methyl-2-(1-methyl-1-phenylethyl)-cyclohexyl ester

$[\alpha]_{\text{D}} = +55.7$  ( $c$  0.74,  $\text{CHCl}_3$ )

Source of chirality: asymmetric synthesis



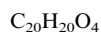
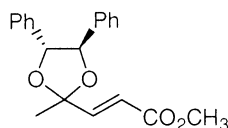
(S)-Hydroxy-(5-oxo-cyclopent-1-enyl)-acetic acid (1R,2S,5R)-5-methyl-2-(1-methyl-1-phenylethyl)-cyclohexyl ester

$[\alpha]_{\text{D}} = +30.0$  (c 0.96,  $\text{CHCl}_3$ )

Source of chirality: asymmetric synthesis

Ramon Alibés, Félix Busquè, Pedro de March,\* Marta Figueredo, Josep Font, Maria Esmeralda Gambino and Brian A. Keay

Tetrahedron: Asymmetry 12 (2001) 1747



Methyl (E)-4,4-[(1R,2R)-1,2-diphenylethylenedioxy]-2-pentenoate

E.e. = 100%

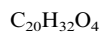
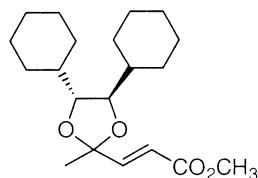
$[\alpha]_{\text{D}}^{20} = +37.0$  (c 3.3, ethanol)

Source of chirality: asymmetric synthesis

Absolute configuration: (1R,2R)

Ramon Alibés, Félix Busquè, Pedro de March,\* Marta Figueredo, Josep Font, Maria Esmeralda Gambino and Brian A. Keay

Tetrahedron: Asymmetry 12 (2001) 1747



Methyl (E)-4,4-[(1R,2R)-1,2-dicyclohexylethylenedioxy]-2-pentenoate

E.e. = 100%

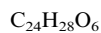
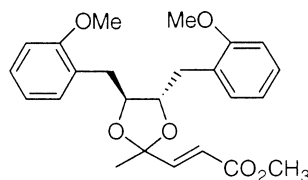
$[\alpha]_{\text{D}}^{20} = -17.0$  (c 4.0, ethanol)

Source of chirality: asymmetric synthesis

Absolute configuration: (1R,2R)

Ramon Alibés, Félix Busquè, Pedro de March,\* Marta Figueredo, Josep Font, Maria Esmeralda Gambino and Brian A. Keay

Tetrahedron: Asymmetry 12 (2001) 1747



Methyl (E)-4,4-[(2S,3S)-1,4-bis(2-methoxyphenyl)-2,3-butylenedioxy]-2-pentenoate

E.e. = 100%

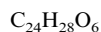
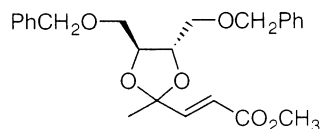
$[\alpha]_{\text{D}}^{20} = +6.4$  (c 3.8, ethanol)

Source of chirality: asymmetric synthesis

Absolute configuration: (2S,3S)

Ramon Alibés, Félix Busquè, Pedro de March,\* Marta Figueredo, Josep Font, Maria Esmeralda Gambino and Brian A. Keay

*Tetrahedron: Asymmetry* 12 (2001) 1747



Methyl (*E*)-4,4-[(2*S*,3*S*)-1,4-bis(benzyloxy)-2,3-butylenedioxy]-2-pentenoate

E.e. = 100%

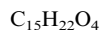
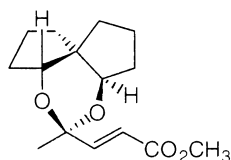
$[\alpha]_D^{20} = +3.8$  (*c* 6.0, ethanol)

Source of chirality: asymmetric synthesis

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

Ramon Alibés, Félix Busquè, Pedro de March,\* Marta Figueredo, Josep Font, Maria Esmeralda Gambino and Brian A. Keay

*Tetrahedron: Asymmetry* 12 (2001) 1747



Methyl (*E*)-4,4-[(1*R*,5*R*,6*R*)-spiro[4.4]nonylene-1,6-dioxy]-2-pentenoate

E.e. = 100%

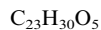
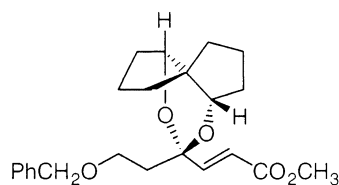
$[\alpha]_D^{20} = +21.6$  (*c* 2.5, ethanol)

Source of chirality: asymmetric synthesis

Absolute configuration: (1*R*,5*R*,6*R*)

Ramon Alibés, Félix Busquè, Pedro de March,\* Marta Figueredo, Josep Font, Maria Esmeralda Gambino and Brian A. Keay

*Tetrahedron: Asymmetry* 12 (2001) 1747



Methyl (*E*)-6-benzyloxy-4,4-[(1*S*,5*S*,6*S*)-spiro[4.4]nonylene-1,6-dioxy]-2-hexenoate

E.e. = 100%

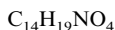
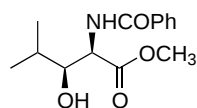
$[\alpha]_D^{20} = -28.8$  (*c* 2.5, ethanol)

Source of chirality: asymmetric synthesis

Absolute configuration: (1*S*,5*S*,6*S*)

Kazuishi Makino, Naoki Okamoto, Osamu Hara and Yasumasa Hamada\*

*Tetrahedron: Asymmetry* 12 (2001) 1757



Methyl (2*R*,3*S*)-2-benzoylamino-3-hydroxy-4-methylpentanoate

E.e. = 99%

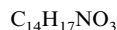
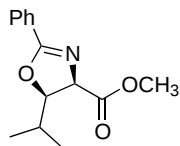
$[\alpha]_D^{24} = -27.8$  (*c* 0.85,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

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

Kazuishi Makino, Naoki Okamoto, Osamu Hara and Yasumasa Hamada\*

*Tetrahedron: Asymmetry* 12 (2001) 1757



(4*R*,5*R*)-4-Methoxycarbonyl-5-(1-methylethyl)-1-phenyl-1,3-oxazoline

E.e. = 97%

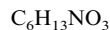
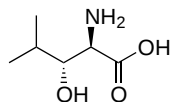
$[\alpha]_D^{24} = -97.5$  (*c* 0.90,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

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

Kazuishi Makino, Naoki Okamoto, Osamu Hara and Yasumasa Hamada\*

*Tetrahedron: Asymmetry* 12 (2001) 1757



(2*R*,3*R*)-3-Hydroxyleucine

E.e. = 97%

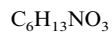
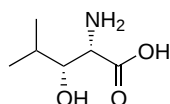
$[\alpha]_D^{26} = -21.6$  (*c* 1.15,  $H_2O$ )

Source of chirality: asymmetric synthesis

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

Kazuishi Makino, Naoki Okamoto, Osamu Hara and Yasumasa Hamada\*

*Tetrahedron: Asymmetry* 12 (2001) 1757



(2*S*,3*R*)-3-Hydroxyleucine

E.e. = 98%

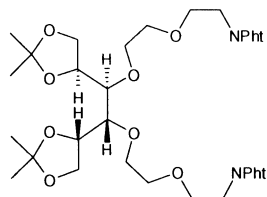
$[\alpha]_D^{26} = -4.3$  (*c* 1.10,  $H_2O$ )

Source of chirality: asymmetric synthesis

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

Piotr Piątek, Mariusz M. Gruza and Janusz Jurczak\*

*Tetrahedron: Asymmetry* 12 (2001) 1763



3,4-Bis-*O*-(5-phthalimido-3-oxapentyl)-1,2;3,4-di-*O*-isopropylidene-*D*-mannitol

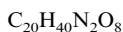
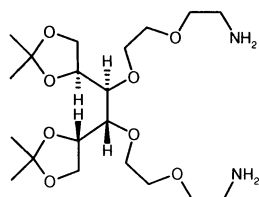
$[\alpha]_D^{24} = +11.4$  (*c* 1.05,  $CHCl_3$ )

Source of chirality: *D*-mannitol

Absolute configuration: 2*R*,3*R*,4*R*,5*R*

Piotr Piątek, Mariusz M. Gruza and Janusz Jurczak\*

*Tetrahedron: Asymmetry* 12 (2001) 1763



3,4-Bis-*O*-(5-amino-3-oxapentyl)-1,2,3,4-di-*O*-isopropylideno-D-mannitol

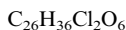
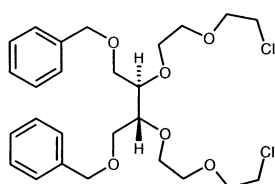
$[\alpha]_{\text{D}}^{20} = +6.2$  (*c* 2.6,  $\text{CHCl}_3$ )

Source of chirality: D-mannitol

Absolute configuration: 2*R*,3*R*,4*R*,5*R*

Piotr Piątek, Mariusz M. Gruza and Janusz Jurczak\*

*Tetrahedron: Asymmetry* 12 (2001) 1763



2,3-Bis-*O*-(5-chloro-3-oxapentyl)-1,4-di-*O*-benzyl-L-threitol

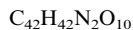
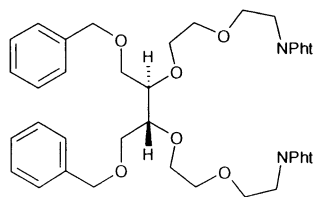
$[\alpha]_{\text{D}}^{20} = +5.2$  (*c* 1.1,  $\text{CHCl}_3$ )

Source of chirality: L-tartaric acid

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

Piotr Piątek, Mariusz M. Gruza and Janusz Jurczak\*

*Tetrahedron: Asymmetry* 12 (2001) 1763



2,3-Bis-*O*-(5-phthalimido-3-oxapentyl)-1,4-di-*O*-benzyl-L-threitol

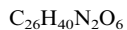
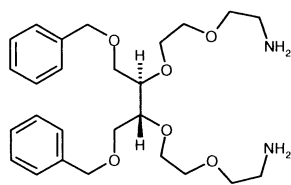
$[\alpha]_{\text{D}}^{20} = +4.0$  (*c* 1.0,  $\text{CHCl}_3$ )

Source of chirality: L-tartaric acid

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

Piotr Piątek, Mariusz M. Gruza and Janusz Jurczak\*

*Tetrahedron: Asymmetry* 12 (2001) 1763



2,3-Bis-*O*-(5-amino-3-oxapentyl)-1,4-di-*O*-benzyl-L-threitol

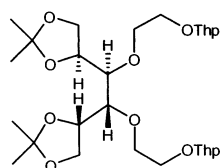
$[\alpha]_{\text{D}}^{20} = +7.9$  (*c* 2.2,  $\text{CHCl}_3$ )

Source of chirality: L-tartaric acid

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

Piotr Piątek, Mariusz M. Gruza and Janusz Jurczak\*

*Tetrahedron: Asymmetry* 12 (2001) 1763



3,4-Bis-*O*-(2-*O*-tetrahydropyranyloxyethyl)-1,2;5,6-di-*O*-isopropylidene-D-mannitol

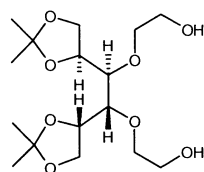
$[\alpha]_D^{20} = +5.9$  (*c* 2.85,  $CHCl_3$ )

Source of chirality: D-mannitol

Absolute configuration: 2*R*,3*R*,4*R*,5*R*

Piotr Piątek, Mariusz M. Gruza and Janusz Jurczak\*

*Tetrahedron: Asymmetry* 12 (2001) 1763



3,4-Bis-*O*-(2-hydroxyethyl)-1,2;5,6-di-*O*-isopropylidene-D-mannitol

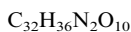
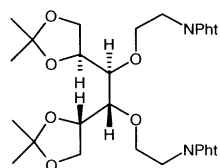
$[\alpha]_D^{20} = +15.3$  (*c* 1.1,  $CHCl_3$ )

Source of chirality: D-mannitol

Absolute configuration: 2*R*,3*R*,4*R*,5*R*

Piotr Piątek, Mariusz M. Gruza and Janusz Jurczak\*

*Tetrahedron: Asymmetry* 12 (2001) 1763



3,4-Bis-*O*-(2-phthalimidoethyl)-1,2;5,6-di-*O*-isopropylidene-D-mannitol

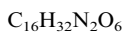
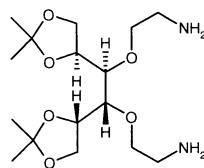
$[\alpha]_D^{24} = +12.8$  (*c* 1.0,  $CHCl_3$ )

Source of chirality: D-mannitol

Absolute configuration: 2*R*,3*R*,4*R*,5*R*

Piotr Piątek, Mariusz M. Gruza and Janusz Jurczak\*

*Tetrahedron: Asymmetry* 12 (2001) 1763

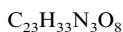
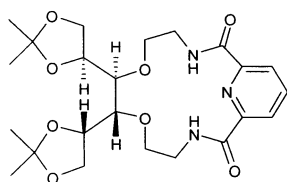


3,4-Bis-*O*-(2-aminoethyl)-1,2;3,4-di-*O*-isopropylidene-D-mannitol

$[\alpha]_D^{24} = +14.8$  (*c* 2.0,  $CHCl_3$ )

Source of chirality: D-mannitol

Absolute configuration: 2*R*,3*R*,4*R*,5*R*

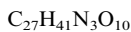
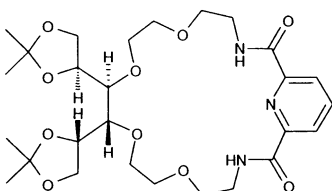


(7*R*,8*R*)-7,8-Bis((4*R*)-2,2-dimethyl-1,3-dioxalan-4-yl)-6,9-dioxa-3,12,18-triazabicyclo[12.3.1]octadeca-1(17),14(18),15-triene-2,13-dione

$[\alpha]_{\text{D}}^{24} = -2.1$  (*c* 1.2,  $\text{CHCl}_3$ )

Source of chirality: D-mannitol

Absolute configuration: 7*R*,8*R*,4'*R*,4''*R*

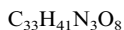
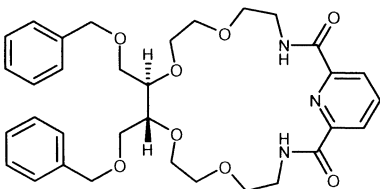


(9*R*,10*R*)-9,10-Bis((4*R*)-2,2-dimethyl-1,3-dioxalan-4-yl)-6,9,12,15-tetraoxa-3,18,24-triazabicyclo[18.3.1]tetracoza-1(23),20(24),21-triene-2,19-dione

$[\alpha]_{\text{D}}^{20} = +7.6$  (*c* 2.5,  $\text{CHCl}_3$ )

Source of chirality: D-mannitol

Absolute configuration: 9*R*,10*R*,4'*R*,4''*R*

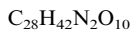
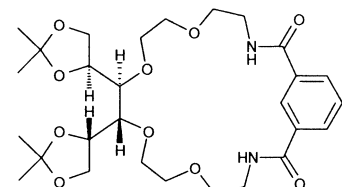


(9*S*,10*S*)-9,10-Bis(benzyloxymethyl)-6,9,12,15-tetraoxa-3,18,24-triazabicyclo[18.3.1]tetracoza-1(23),20(24),21-triene-2,19-dione

$[\alpha]_{\text{D}}^{20} = +42.3$  (*c* 1.97,  $\text{CHCl}_3$ )

Source of chirality: L-tartaric acid

Absolute configuration: 9*S*,10*S*

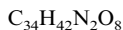
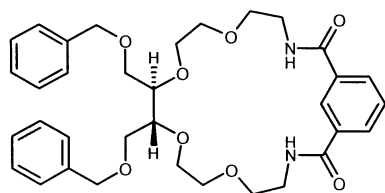


(9*R*,10*R*)-9,10-Bis((4*R*)-2,2-dimethyl-1,3-dioxalan-4-yl)-6,9,12,15-tetraoxa-3,18-diazabicyclo[18.3.1]tetracoza-1(23),20(24),21-triene-2,19-dione

$[\alpha]_{\text{D}}^{20} = -28.5$  (*c* 2.2,  $\text{CHCl}_3$ )

Source of chirality: D-mannitol

Absolute configuration: 9*R*,10*R*,4'*R*,4''*R*

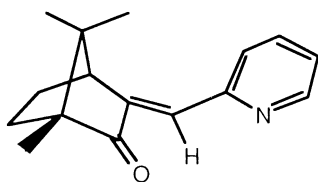


(9*S*,10*S*)-9,10-Bis(benzyloxymethyl)-6,9,12,15-tetraoxa-3,18-diazabicyclo[18.3.1]tetracoza-1(23),20(24),21-triene-2,19-dione

$[\alpha]_D^{20} = +33.4$  ( $c$  1.44,  $CHCl_3$ )

Source of chirality: L-tartaric acid

Absolute configuration: 9*S*,10*S*

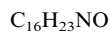
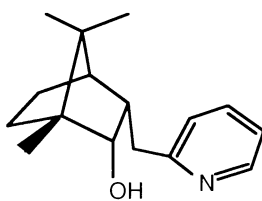


(1*R*)-1,7,7-Trimethyl-3-(pyrid-2-ylmethylidene)bicyclo[2.2.1]heptan-2-one

$[\alpha]_D^{20} = +267$  ( $c$  1.17,  $CHCl_3$ )

Source of chirality: (+)-camphor

Absolute configuration: (1*R*)

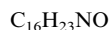
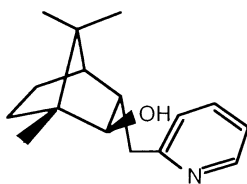


(1*R*)-2-endo,3-endo-1,7,7-Trimethyl-3-(pyrid-2-ylmethyl)bicyclo[2.2.1]heptan-2-ol

$[\alpha]_D^{20} = +34.1$  ( $c$  1.59,  $CHCl_3$ )

Source of chirality: (+)-camphor

Absolute configuration: [(1*R*)-2-endo,3-endo]



(1*R*)-2-exo,3-endo-1,7,7-Trimethyl-3-(pyrid-2-ylmethyl)bicyclo[2.2.1]heptan-2-ol

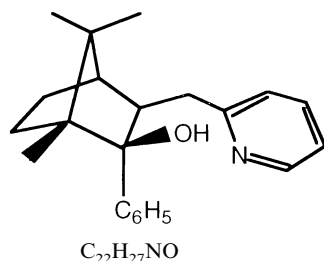
$[\alpha]_D^{20} = +9.2$  ( $c$  0.79, MeOH)

Source of chirality: (+)-camphor

Absolute configuration: [(1*R*)-2-exo,3-endo]

Marta Nevalainen and Vesa Nevalainen\*

*Tetrahedron: Asymmetry* 12 (2001) 1771



(1*R*,2*S*,3*R*)-2-Phenyl-1,7,7-trimethyl-3-(pyrid-2-ylmethyl)bicyclo[2.2.1]heptan-2-ol

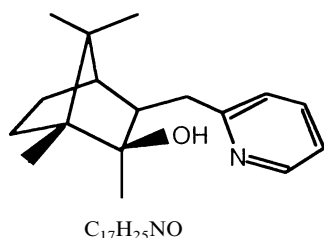
$[\alpha]_D^{20} = +88.9$  ( $c = 0.27$ ,  $CHCl_3$ )

Source of chirality: (+)-camphor

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

Marta Nevalainen and Vesa Nevalainen\*

*Tetrahedron: Asymmetry* 12 (2001) 1771



(1*R*,2*S*,3*R*)-1,2,7,7-Trimethyl-3-(pyrid-2-ylmethyl)bicyclo[2.2.1]heptan-2-ol

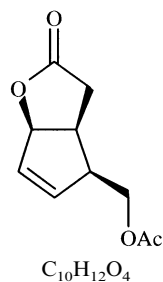
$[\alpha]_D^{20} = +15.7$  ( $c = 0.43$ ,  $CHCl_3$ )

Source of chirality: (+)-camphor

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

Giuseppe Zanoni, Fabio Agnelli, Alessia Meriggi and Giovanni Vidari\*

*Tetrahedron: Asymmetry* 12 (2001) 1779



(3*aS*,4*S*,6*aR*)-(+)-Acetic acid-2-oxo-3,3*a*,4,6*a*-tetrahydro-2*H*-cyclopenta[*b*]furan-4-yl methyl ester

E.e. = 95%

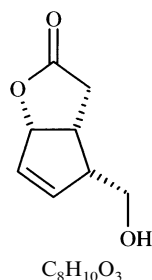
$[\alpha]_D^{20} = +33.7$  ( $c$  0.5,  $CH_2Cl_2$ )

Source of chirality: enzymatic resolution

Absolute configuration: (3*aS*,4*S*,6*aR*)

Giuseppe Zanoni, Fabio Agnelli, Alessia Meriggi and Giovanni Vidari\*

*Tetrahedron: Asymmetry* 12 (2001) 1779



(3*aR*,4*R*,6*aS*)-(+)-4-Hydroxymethyl-3,3*a*,4,6*a*-tetrahydrocyclopenta[*b*]furan-2-one

E.e. = ≥ 97%

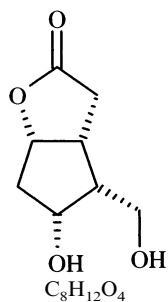
$[\alpha]_D^{20} = +4.54$  ( $c$  0.5,  $CH_2Cl_2$ )

Source of chirality: enzymatic resolution

Absolute configuration: (3*aR*,4*R*,6*aS*)

Giuseppe Zanoni, Savino Re, Alessia Meriggi, Francesca Castronovo and Giovanni Vidari\*

*Tetrahedron: Asymmetry 12 (2001) 1785*



(3aR,4R,5R,6aS)-(-)-5-Hydroxy-4-hydroxymethyl-hexahydro-cyclopenta[b]furan-2-one

E.e.  $\geq 95\%$

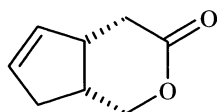
$[\alpha]_D^{20} = -13.5$  (c 0.5,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (3aR,4R,5R,6aS)

Giuseppe Zanoni, Savino Re, Alessia Meriggi, Francesca Castronovo and Giovanni Vidari\*

*Tetrahedron: Asymmetry 12 (2001) 1785*



(4aS,7aR)-(+)-4,4a,7,7a-Tetrahydro-1H-cyclopenta[c]pyran-3-one

E.e.  $\geq 95\%$

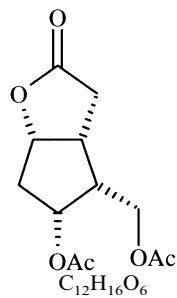
$[\alpha]_D^{20} = +42.0$  (c 0.3,  $CH_2Cl_2$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (4aS,7aR)

Giuseppe Zanoni, Savino Re, Alessia Meriggi, Francesca Castronovo and Giovanni Vidari\*

*Tetrahedron: Asymmetry 12 (2001) 1785*



(3aR,4R,5R,6aS)-(-)-Acetic acid-5-acetoxy-2-oxo-hexahydro-cyclopenta[b]furan-4-yl methyl ester

E.e.  $\geq 95\%$

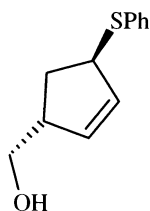
$[\alpha]_D^{20} = -49.1$  (c 1.2,  $CH_2Cl_2$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (3aR,4R,5R,6aS)

Giuseppe Zanoni, Savino Re, Alessia Meriggi, Francesca Castronovo and Giovanni Vidari\*

*Tetrahedron: Asymmetry 12 (2001) 1785*



(1'R,4'R)-(+)-(4-Phenylsulfanyl-cyclopent-2-enyl)-methanol

E.e.  $\geq 95\%$

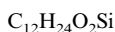
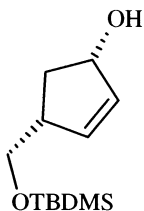
$[\alpha]_D^{20} = +184.1$  (c 1.1,  $CH_2Cl_2$ )

Source of chirality: asymmetric synthesis

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

Giuseppe Zanoni, Savino Re, Alessia Meriggi, Francesca Castronovo and Giovanni Vidari\*

*Tetrahedron: Asymmetry 12 (2001) 1785*



(1*S*,4*R*)-(+)-4-(*tert*-Butyldimethylsilyloxymethyl)-cyclopent-2-enol

E.e.  $\geq 95\%$

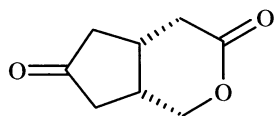
$[\alpha]_D^{20} = +58.6$  (*c* 0.6,  $CH_2Cl_2$ )

Source of chirality: asymmetric synthesis

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

Giuseppe Zanoni, Savino Re, Alessia Meriggi, Francesca Castronovo and Giovanni Vidari\*

*Tetrahedron: Asymmetry 12 (2001) 1785*



(4*aR*,7*aR*)-(+)-Tetrahydro-cyclopenta[*c*]pyran-3,6-dione

E.e.  $\geq 95\%$

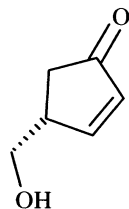
$[\alpha]_D^{20} = +17.0$  (*c* 0.3,  $CH_2Cl_2$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (4*aR*,7*aR*)

Giuseppe Zanoni, Savino Re, Alessia Meriggi, Francesca Castronovo and Giovanni Vidari\*

*Tetrahedron: Asymmetry 12 (2001) 1793*



(4*R*)-(+)-4-Hydroxymethyl-cyclopent-2-enone

E.e.  $\geq 95\%$

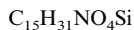
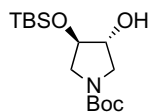
$[\alpha]_D^{20} = +159$  (*c* 0.5,  $CH_2Cl_2$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (4*R*)

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*Tetrahedron: Asymmetry 12 (2001) 1793*



(3*R*,4*R*)-1-*tert*-Butoxycarbonyl-3-(*tert*-butyldimethylsilyloxy)-4-hydroxypyrrolidine

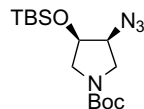
$[\alpha]_D^{26} = +16.1$  (*c* 1.06, MeOH)

Source of chirality: commercially available D-tartaric acid

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

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*Tetrahedron: Asymmetry* 12 (2001) 1793



$C_{15}H_{30}N_4O_3Si$   
(3*S*,4*R*)-3-Azido-1-*tert*-butoxycarbonyl-4-(*tert*-butyldimethylsilyl)oxypyrrolidine

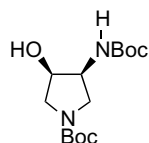
$[\alpha]_D^{26} = -85.3$  (*c* 1.02, MeOH)

Source of chirality: commercially available  
D-tartaric acid

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

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*Tetrahedron: Asymmetry* 12 (2001) 1793



$C_{14}H_{26}N_2O_5$   
(3*S*,4*R*)-1-*tert*-Butoxycarbonyl-3-*tert*-butoxycarbonylamino-4-hydroxypyrrolidine

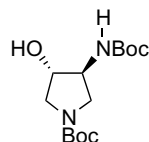
$[\alpha]_D^{26} = +3.5$  (*c* 1.01, MeOH)

Source of chirality: commercially available  
D-tartaric acid

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

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*Tetrahedron: Asymmetry* 12 (2001) 1793



$C_{14}H_{26}N_2O_5$   
(3*S*,4*S*)-1-*tert*-Butoxycarbonyl-3-*tert*-butoxycarbonylamino-4-hydroxypyrrolidine

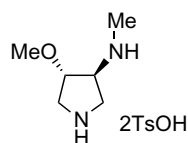
$[\alpha]_D^{24} = +1.50$  (*c* 1.01, MeOH)

Source of chirality: commercially available  
D-tartaric acid

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

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*Tetrahedron: Asymmetry* 12 (2001) 1793



$C_{20}H_{30}N_2O_7S_2$   
(3*S*,4*S*)-3-Methoxy-4-methylaminopyrrolidine di-*p*-toluenesulfonic acid

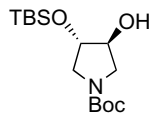
$[\alpha]_D^{29} = +10.4$  (*c* 1.00, MeOH)

Source of chirality: commercially available  
D-tartaric acid

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

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*Tetrahedron: Asymmetry* 12 (2001) 1793



$C_{15}H_{31}NO_4Si$   
(3*S*,4*S*)-1-*tert*-Butoxycarbonyl-3-(*tert*-butyldimethylsilyl)oxy-4-hydroxypyrrolidine

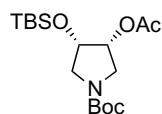
$[\alpha]_D^{26} = -16.2$  (*c* 1.04, MeOH)

Source of chirality: commercially available  
L-tartaric acid

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

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*Tetrahedron: Asymmetry* 12 (2001) 1793



$C_{17}H_{33}NO_5Si$   
(3*R*,4*S*)-3-Acetoxy-1-*tert*-butoxycarbonyl-4-(*tert*-butyldimethylsilyl)oxypyrrolidine

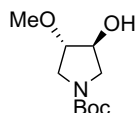
$[\alpha]_D^{26} = +18.2$  (*c* 1.02, MeOH)

Source of chirality: commercially available  
L-tartaric acid

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

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*Tetrahedron: Asymmetry* 12 (2001) 1793



$C_{10}H_{19}NO_4$   
(3*S*,4*S*)-1-*tert*-Butoxycarbonyl-3-methoxy-4-hydroxypyrrolidine

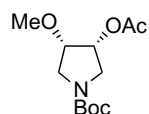
$[\alpha]_D^{25} = -13.7$  (*c* 1.05, MeOH)

Source of chirality: commercially available  
L-tartaric acid

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

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$C_{12}H_{21}NO_5$   
(3*R*,4*S*)-3-Acetoxy-1-*tert*-butoxycarbonyl-4-methoxypyrrolidine

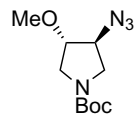
$[\alpha]_D^{25} = +8.1$  (*c* 1.00, MeOH)

Source of chirality: commercially available  
L-tartaric acid

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

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$C_{10}H_{18}N_4O_3$   
(3*S*,4*S*)-3-Azido-1-*tert*-butoxycarbonyl-4-methoxypyrrolidine

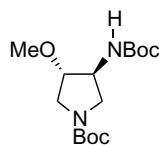
$[\alpha]_D^{25} = +14.5$  (*c* 1.01, MeOH)

Source of chirality: commercially available  
L-tartaric acid

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

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$C_{15}H_{28}N_2O_5$   
(3*S*,4*S*)-1-*tert*-Butoxycarbonyl-3-*tert*-butoxycarbonylamino-4-methoxypyrrolidine

$[\alpha]_D^{25} = -18.1$  (*c* 1.08, MeOH)

Source of chirality: commercially available  
L-tartaric acid

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