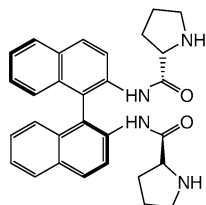


Stereochemistry abstracts

Gabriela Guillena, María del Carmen Hita and Carmen Nájera*

Tetrahedron: Asymmetry 17 (2006) 729



$C_{30}H_{30}N_4O_2$

(2*S*)-*N*-(1-((*S*)-2-((*S*)-Pyrrolidine-2-carboxamido)naphthalen-1-yl)naphthalen-2-yl)pyrrolidine-2-carboxamide

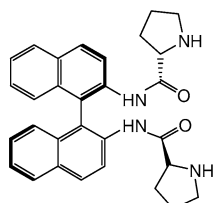
$[\alpha]_D^{26} = -108.6$ (*c* 1, MeOH)

Source of chirality: Commercially available
(*Sa*)-BINAM

Absolute configuration: *Sa*, *S*

Gabriela Guillena, María del Carmen Hita and Carmen Nájera*

Tetrahedron: Asymmetry 17 (2006) 729



$C_{30}H_{30}N_4O_2$

(2*R*)-*N*-(1-((*S*)-2-((*S*)-Pyrrolidine-2-carboxamido)naphthalen-1-yl)naphthalen-2-yl)pyrrolidine-2-carboxamide

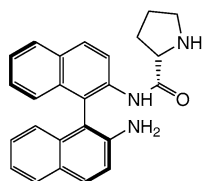
$[\alpha]_D^{25} = +6.7$ (*c* 1, MeOH)

Source of chirality: Commercially available
(*Ra*)-BINAM

Absolute configuration: *Ra*, *S*

Gabriela Guillena, María del Carmen Hita and Carmen Nájera*

Tetrahedron: Asymmetry 17 (2006) 729



$C_{25}H_{23}N_3O$

(2*S*)-*N*-((*S*)-1-(2-Aminonaphthalen-1-yl)naphthalen-2-yl)pyrrolidine-2-carboxamide

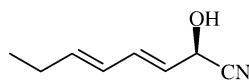
$[\alpha]_D^{29} = -87.4$ (*c* 1, MeOH)

Source of chirality: Commercially available
(*Sa*)-BINAM

Absolute configuration: *Sa*, *S*

Samik Nanda, Yasuo Kato and Yasuhisa Asano*

Tetrahedron: Asymmetry 17 (2006) 735



$C_8H_{11}ON$

(2*R*,3*E*,5*E*)-2-Hydroxy-3,5-octadienenitrile

Ee = 97%

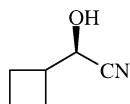
$[\alpha]_D^{25} = -31.1$ (*c* 1.4, $CHCl_3$)

Source of chirality: asymmetric hydrocyanation

Absolute configuration: 2*R*

Samik Nanda, Yasuo Kato and Yasuhisa Asano*

Tetrahedron: Asymmetry 17 (2006) 735



C₆H₉ON

(2*R*)-2-Cyclobutyl-2-hydroxyacetonitrile

Ee = 92%

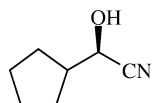
$[\alpha]_D^{25} = +3.8$ (*c* 1.1, CHCl₃)

Source of chirality: asymmetric hydrocyanation

Absolute configuration: 2*R*

Samik Nanda, Yasuo Kato and Yasuhisa Asano*

Tetrahedron: Asymmetry 17 (2006) 735



C₇H₁₁ON

(2*R*)-2-Cyclopentyl-2-hydroxyacetonitrile

Ee = 94%

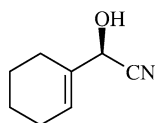
$[\alpha]_D^{25} = +11.2$ (*c* 1.0, CHCl₃)

Source of chirality: asymmetric hydrocyanation

Absolute configuration: 2*R*

Samik Nanda, Yasuo Kato and Yasuhisa Asano*

Tetrahedron: Asymmetry 17 (2006) 735



C₈H₁₁ON

(2*R*)-2-Cyclohexenyl-2-hydroxyacetonitrile

Ee = 90%

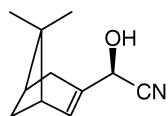
$[\alpha]_D^{25} = -16.7$ (*c* 1.5, CHCl₃)

Source of chirality: asymmetric hydrocyanation

Absolute configuration: 2*R*

Samik Nanda, Yasuo Kato and Yasuhisa Asano*

Tetrahedron: Asymmetry 17 (2006) 735



C₁₁H₁₅ON

(2*R*)-2-Hydroxy-2-(6,6-dimethylbicyclo[3.1.1]hept-2-en-3-yl)acetonitrile

Ee = 99%

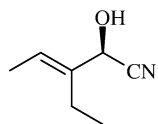
$[\alpha]_D^{25} = -21.1$ (*c* 1.4, CHCl₃)

Source of chirality: asymmetric hydrocyanation

Absolute configuration: 2*R*

Samik Nanda, Yasuo Kato and Yasuhisa Asano*

Tetrahedron: Asymmetry 17 (2006) 735



C₇H₁₁ON

(2*R*,3*E*)-3-Ethyl-2-hydroxy-3-pentenenitrile

Ee = 92%

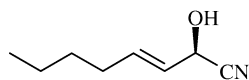
$[\alpha]_D^{25} = -32.1$ (*c* 1.0, CHCl₃)

Source of chirality: asymmetric hydrocyanation

Absolute configuration: 2*R*

Samik Nanda, Yasuo Kato and Yasuhisa Asano*

Tetrahedron: Asymmetry 17 (2006) 735



C₈H₁₃ON

(2*R*,3*E*)-2-Hydroxy-3-octenenitrile

Ee = 72%

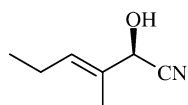
$[\alpha]_D^{25} = -16.3$ (*c* 1.0, CHCl₃)

Source of chirality: asymmetric hydrocyanation

Absolute configuration: 2*R*

Samik Nanda, Yasuo Kato and Yasuhisa Asano*

Tetrahedron: Asymmetry 17 (2006) 735



C₇H₁₁ON

(2*R*,3*E*)-2-Hydroxy-3-methyl-3-hexenenitrile

Ee = 96%

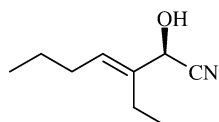
$[\alpha]_D^{25} = -26.8$ (*c* 1.2, CHCl₃)

Source of chirality: asymmetric hydrocyanation

Absolute configuration: 2*R*

Samik Nanda, Yasuo Kato and Yasuhisa Asano*

Tetrahedron: Asymmetry 17 (2006) 735



C₉H₁₅ON

(2*R*,3*E*)-3-Ethyl-2-hydroxy-3-heptenenitrile

Ee = 92%

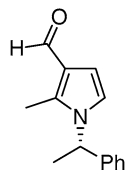
$[\alpha]_D^{25} = -36.8$ (*c* 1.0, CHCl₃)

Source of chirality: asymmetric hydrocyanation

Absolute configuration: 2*R*

Canan Unaleroglu,* A. Ebru Aydin and Ayhan S. Demir*

Tetrahedron: Asymmetry 17 (2006) 742



C₁₄H₁₅NO

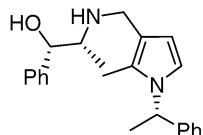
2-Methyl-1-((1S)-1-phenylethyl)-1H-pyrrole-3-carbaldehyde

$[\alpha]_D^{25} = -21.9$ (c 0.8, CHCl₃)

Source of chirality: (S)-1-phenylethylamine

Canan Unaleroglu,* A. Ebru Aydin and Ayhan S. Demir*

Tetrahedron: Asymmetry 17 (2006) 742



C₂₃H₂₈N₂O

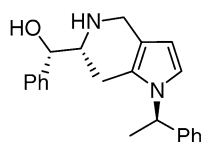
(1S,2R)-2-((2-Methyl-1-((1S)-1-phenylethyl)-1H-pyrrol-3-yl)methylamino)-1-phenylpropan-1-ol

$[\alpha]_D^{25} = +3.7$ (c 11, CHCl₃)

Source of chirality: (1S,2R)-norephedrine,
(S)-2-methyl-1-(1-phenylethyl)-1H-pyrrole

Canan Unaleroglu,* A. Ebru Aydin and Ayhan S. Demir*

Tetrahedron: Asymmetry 17 (2006) 742



C₂₃H₂₈N₂O

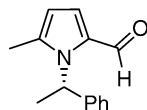
(1S,2R)-2-((2-Methyl-1-((1R)-1-phenylethyl)-1H-pyrrol-3-yl)methylamino)-1-phenylpropan-1-ol

$[\alpha]_D^{25} = +5.6$ (c 7.3, CHCl₃)

Source of chirality: (1S,2R)-norephedrine,
(R)-2-methyl-1-(1-phenylethyl)-1H-pyrrole

Canan Unaleroglu,* A. Ebru Aydin and Ayhan S. Demir*

Tetrahedron: Asymmetry 17 (2006) 742



C₁₄H₁₅NO

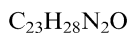
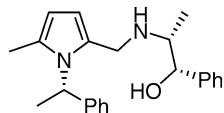
5-Methyl-1-((1S)-1-phenylethyl)-1H-pyrrole-2-carbaldehyde

$[\alpha]_D^{25} = -118.9$ (c 11, CHCl₃)

Source of chirality: (R)-1-phenylethylamine

Canan Unaleroglu,* A. Ebru Aydin and Ayhan S. Demir*

Tetrahedron: Asymmetry 17 (2006) 742



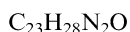
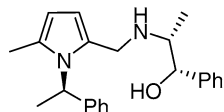
(1*S*,2*R*)-2-((5-Methyl-1-((1*S*)-1-phenylethyl)-1*H*-pyrrol-2-yl)methylamino)-1-phenylpropan-1-ol

$$[\alpha]_D^{27} = +28.2 (c 11, CHCl_3)$$

Source of chirality: (1*S*,2*R*)-norephedrine, (*S*)-2-methyl-1-(1-phenylethyl)-1*H*-pyrrole

Canan Unaleroglu,* A. Ebru Aydin and Ayhan S. Demir*

Tetrahedron: Asymmetry 17 (2006) 742



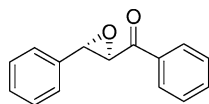
(1*S*,2*R*)-2-((5-Methyl-1-((1*R*)-1-phenylethyl)-1*H*-pyrrol-2-yl)methylamino)-1-phenylpropan-1-ol

$$[\alpha]_D^{27} = +20.6 (c 15.7, CHCl_3)$$

Source of chirality: (1*S*,2*R*)-norephedrine, (*R*)-2-methyl-1-(1-phenylethyl)-1*H*-pyrrole

Xinyuan Liu, Yawen Li, Guangyin Wang, Zhuo Chai, Yongyong Wu and Gang Zhao*

Tetrahedron: Asymmetry 17 (2006) 750



(2*R*,3*S*)-Phenyl(-3-phenyloxiran-2-yl)methanone

$$E_c = 74\%$$

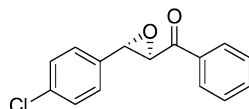
$$[\alpha]_D^{23} = -116.3 (c 0.40, CHCl_3)$$

Source of chirality: asymmetric oxidation

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

Xinyuan Liu, Yawen Li, Guangyin Wang, Zhuo Chai, Yongyong Wu and Gang Zhao*

Tetrahedron: Asymmetry 17 (2006) 750



((2*R*,3*S*)-3-(4-Chlorophenyl)oxiran-2-yl)(phenyl)methanone

$$E_c = 73\%$$

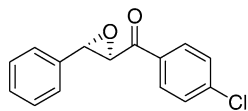
$$[\alpha]_D^{23} = -164.9 (c 0.40, CHCl_3)$$

Source of chirality: asymmetric oxidation

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

Xinyuan Liu, Yawen Li, Guangyin Wang, Zhuo Chai,
Yongyong Wu and Gang Zhao*

Tetrahedron: Asymmetry 17 (2006) 750



(2*R*,3*S*)-(4-Chlorophenyl)(-3-phenyloxiran-2-yl)methanone

Ee = 73%

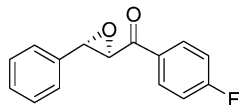
$[\alpha]_D^{23} = -66.8$ (c 0.65, $CHCl_3$)

Source of chirality: asymmetric oxidation

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

Xinyuan Liu, Yawen Li, Guangyin Wang, Zhuo Chai,
Yongyong Wu and Gang Zhao*

Tetrahedron: Asymmetry 17 (2006) 750



(2*R*,3*S*)-(4-Fluorophenyl)(-3-phenyloxiran-2-yl)methanone

Ee = 74%

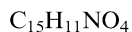
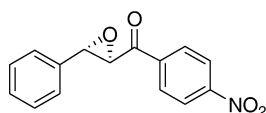
$[\alpha]_D^{23} = -92.5$ (c 0.90, $CHCl_3$)

Source of chirality: asymmetric oxidation

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

Xinyuan Liu, Yawen Li, Guangyin Wang, Zhuo Chai,
Yongyong Wu and Gang Zhao*

Tetrahedron: Asymmetry 17 (2006) 750



(2*R*,3*S*)-(4-Nitrophenyl)(-3-phenyloxiran-2-yl)methanone

Ee = 73%

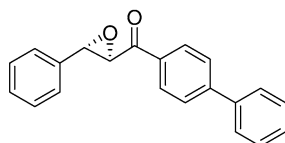
$[\alpha]_D^{23} = -99.6$ (c 1.00, $CHCl_3$)

Source of chirality: asymmetric oxidation

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

Xinyuan Liu, Yawen Li, Guangyin Wang, Zhuo Chai,
Yongyong Wu and Gang Zhao*

Tetrahedron: Asymmetry 17 (2006) 750



(2*R*,3*S*)-Biphenyl-4-yl(-3-phenyloxiran-2-yl)methanone

Ee = 77%

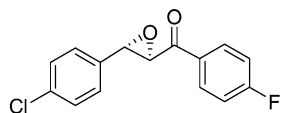
$[\alpha]_D^{23} = -85.6$ (c 0.56, $CHCl_3$)

Source of chirality: asymmetric oxidation

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

Xinyuan Liu, Yawen Li, Guangyin Wang, Zhuo Chai,
Yongyong Wu and Gang Zhao*

Tetrahedron: Asymmetry 17 (2006) 750



((2*R*,3*S*)-3-(4-Chlorophenyl)oxiran-2-yl)(4-fluorophenyl)methanone

Ee = 78%

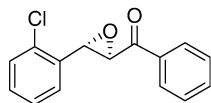
$[\alpha]_D^{23} = -66.8$ (c 0.65, $CHCl_3$)

Source of chirality: asymmetric oxidation

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

Xinyuan Liu, Yawen Li, Guangyin Wang, Zhuo Chai,
Yongyong Wu and Gang Zhao*

Tetrahedron: Asymmetry 17 (2006) 750



((2*R*,3*S*)-3-(2-Chlorophenyl)oxiran-2-yl)(phenyl)methanone

Ee = 56%

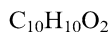
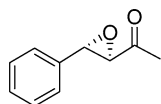
$[\alpha]_D^{23} = -105.8$ (c 1.00, $CHCl_3$)

Source of chirality: asymmetric oxidation

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

Xinyuan Liu, Yawen Li, Guangyin Wang, Zhuo Chai,
Yongyong Wu and Gang Zhao*

Tetrahedron: Asymmetry 17 (2006) 750



1-((2*R*,3*S*)-3-Phenyloxiran-2-yl)ethanone

Ee = 69%

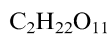
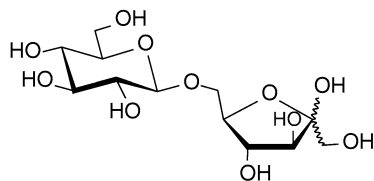
$[\alpha]_D^{23} = -77.6$ (c 1.00, $CHCl_3$)

Source of chirality: asymmetric oxidation

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

Dierk Martin and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry 17 (2006) 756



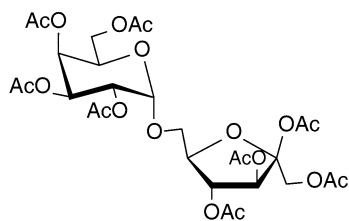
6-*O*-(β-*D*-Glucopyranosyl)-*D*-fructofuranose (gentiobiulose)

$[\alpha]_D^{20} = +9.1$ (c 1.0, H_2O)

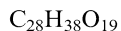
Source of chirality: gentiobiulose

Dierk Martin and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry 17 (2006) 756



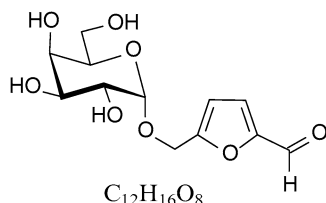
$$[\alpha]_{\text{D}}^{20} = +105 \text{ (} c \text{ 0.8, CHCl}_3\text{)}$$



Octa-*O*-acetyl- β -melibiulose

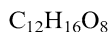
Dierk Martin and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry 17 (2006) 756



$$[\alpha]_{\text{D}}^{20} = +158 \text{ (} c \text{ 1, MeOH)}$$

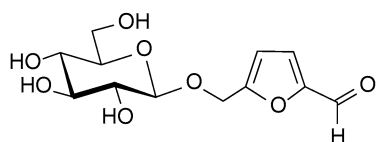
Source of chirality: melibiose



5-[(α -D-Galactopyranosyloxy)methyl]-2-furancarboxyaldehyde

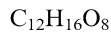
Dierk Martin and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry 17 (2006) 756



$$[\alpha]_{\text{D}}^{20} = -159 \text{ (} c \text{ 1, MeOH)}$$

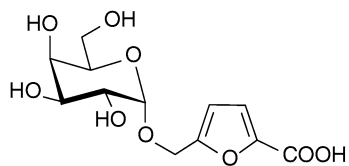
Source of chirality: gentiobiose



5-[(α -D-Glucopyranosyloxy)methyl]-2-furancarboxyaldehyde

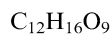
Dierk Martin and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry 17 (2006) 756



$$[\alpha]_{\text{D}}^{20} = +147 \text{ (} c \text{ 0.8, MeOH)}$$

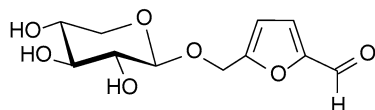
Source of chirality: melibiose



5-[(α -D-Galactopyranosyloxy)methyl]-2-furoic acid

Dierk Martin and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry 17 (2006) 756



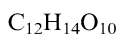
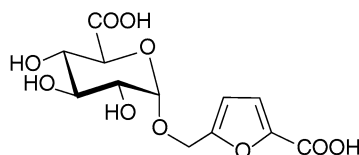
5-[(α -D-Xylopyranosyloxy)methyl]-2-furancarboxyaldehyde

$$[\alpha]_D^{20} = -35 (c 1, \text{MeOH})$$

Source of chirality: primeverose

Dierk Martin and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry 17 (2006) 756



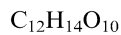
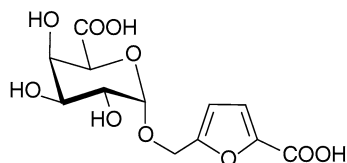
5-[(α -D-Glucopyranuronosyloxy)methyl]-2-furoic acid

$$[\alpha]_D^{20} = +97 (c 0.9, \text{MeOH})$$

Source of chirality: isomaltulose

Dierk Martin and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry 17 (2006) 756



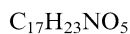
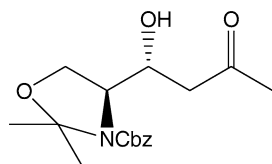
5-[(α -D-Glactopyranuronosyloxy)methyl]-2-furoic acid

$$[\alpha]_D^{20} = +108 (c 0.7, \text{MeOH})$$

Source of chirality: melibiose

Indresh Kumar and C. V. Rode*

Tetrahedron: Asymmetry 17 (2006) 763



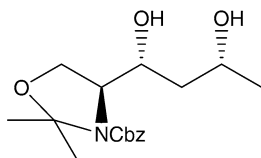
(S)-Benzyl 4-((R)-1-hydroxy-3-oxobutyl)-2,2-dimethylloxazolidine-3-carboxylate

$$[\alpha]_D = +5.7 (c 1, \text{CHCl}_3)$$

Source of chirality: L-serine

Indresh Kumar and C. V. Rode*

Tetrahedron: Asymmetry 17 (2006) 763



$C_{17}H_{25}NO_5$

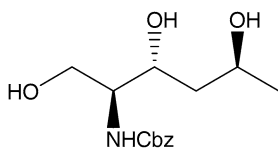
(*S*)-Benzyl 4-((1*R*,3*R*)-1,3-dihydroxybutyl)-2,2-dimethyloxazolidine-3-carboxylate

$[\alpha]_D = -13.2$ (*c* 1, $CHCl_3$)

Source of chirality: L-serine

Indresh Kumar and C. V. Rode*

Tetrahedron: Asymmetry 17 (2006) 763



$C_{14}H_{21}NO_5$

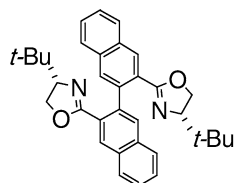
Benzyl (2*S*,3*R*,5*S*)-1,3,5-trihydroxyhexan-2-ylcarbamate

$[\alpha]_D = +6.6$ (*c* 0.5, MeOH)

Source of chirality: L-serine

Wanbin Zhang,* Fang Xie, Shigeaki Matsuo, Yuji Imahori,
Toshiyuki Kida, Yohji Nakatsuji and Isao Ikeda*

Tetrahedron: Asymmetry 17 (2006) 767



$C_{34}H_{36}N_2O_2$

3,3'-Bis[(4'*S*)-*tert*-Butyloxazolin-2'-yl]-2,2'-binaphthyl

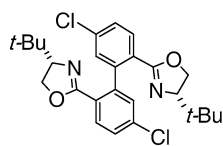
$[\alpha]_D^9 = -78.5$ (*c* 0.5, $CHCl_3$)

Source of chirality: (*S*)-(+)-leucinol

Absolute configuration: (*S*)

Wanbin Zhang,* Fang Xie, Shigeaki Matsuo, Yuji Imahori,
Toshiyuki Kida, Yohji Nakatsuji and Isao Ikeda*

Tetrahedron: Asymmetry 17 (2006) 767



$C_{26}H_{30}Cl_2N_2O_2$

5,5'-Dichloro-2,2'-bis[(4'*S*)-*tert*-butylloxazolin-2'-yl]-1,1'-biphenyl

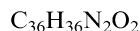
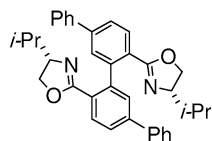
$[\alpha]_D^{13} = -96.6$ (*c* 0.5, $CHCl_3$)

Source of chirality: (*S*)-(+)-leucinol

Absolute configuration: (*S*)

Wanbin Zhang,* Fang Xie, Shigeaki Matsuo, Yuji Imahori,
Toshiyuki Kida, Yohji Nakatsuji and Isao Ikeda*

Tetrahedron: Asymmetry 17 (2006) 767



5,5'-Diphenyl-2,2'-bis[(4'*S*)-isopropylloxazolin-2'-yl]-1,1'-biphenyl

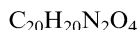
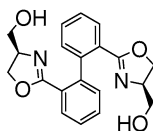
$$[\alpha]_D^{13} = -59.0 \text{ (} c \text{ 0.5, CHCl}_3\text{)}$$

Source of chirality: (*S*)-(+)-valinol

Absolute configuration: (*S*)

Wanbin Zhang,* Fang Xie, Shigeaki Matsuo, Yuji Imahori,
Toshiyuki Kida, Yohji Nakatsuji and Isao Ikeda*

Tetrahedron: Asymmetry 17 (2006) 767



2,2'-Bis[(4'*R*)-(hydroxymethyl)oxazolin-2'-yl]-1,1'-biphenyl

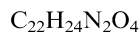
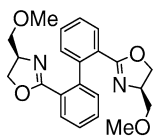
$$[\alpha]_D^9 = +53.4 \text{ (} c \text{ 0.51, CHCl}_3\text{)}$$

Source of chirality: L-serine methyl ester

Absolute configuration: (*R*)

Wanbin Zhang,* Fang Xie, Shigeaki Matsuo, Yuji Imahori,
Toshiyuki Kida, Yohji Nakatsuji and Isao Ikeda*

Tetrahedron: Asymmetry 17 (2006) 767



2,2'-Bis[(4'*R*)-(methoxymethyl)oxazolin-2'-yl]-1,1'-biphenyl

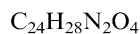
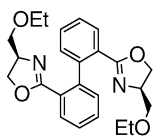
$$[\alpha]_D^9 = +150.5 \text{ (} c \text{ 0.49, CHCl}_3\text{)}$$

Source of chirality: L-serine methyl ester

Absolute configuration: (*R*)

Wanbin Zhang,* Fang Xie, Shigeaki Matsuo, Yuji Imahori,
Toshiyuki Kida, Yohji Nakatsuji and Isao Ikeda*

Tetrahedron: Asymmetry 17 (2006) 767



2,2'-Bis[(4'*R*)-(ethoxymethyl)oxazolin-2'-yl]-1,1'-biphenyl

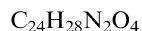
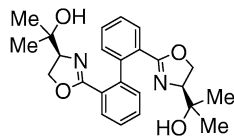
$$[\alpha]_D^9 = +116.4 \text{ (} c \text{ 0.51, CHCl}_3\text{)}$$

Source of chirality: L-serine methyl ester

Absolute configuration: (*R*)

Wanbin Zhang,* Fang Xie, Shigeaki Matsuo, Yuji Imahori,
Toshiyuki Kida, Yohji Nakatsuji and Isao Ikeda*

Tetrahedron: Asymmetry 17 (2006) 767



2,2'-Bis[(4'*S*)-(dimethylhydroxymethyl)oxazolin-2'-yl]-1,1'-biphenyl

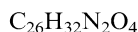
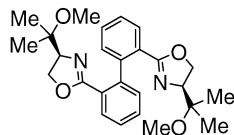
$$[\alpha]_D^{27} = +71.2 (c 0.70, CHCl_3)$$

Source of chirality: L-serine methyl ester

Absolute configuration: (*S*)

Wanbin Zhang,* Fang Xie, Shigeaki Matsuo, Yuji Imahori,
Toshiyuki Kida, Yohji Nakatsuji and Isao Ikeda*

Tetrahedron: Asymmetry 17 (2006) 767



2,2'-Bis[(4'*S*)-(dimethylmethoxymethyl)oxazolin-2'-yl]-1,1'-biphenyl

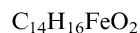
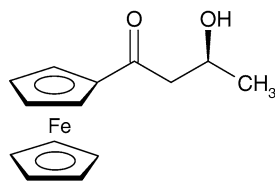
$$[\alpha]_D^{10} = +11.9 (c 0.50, CHCl_3)$$

Source of chirality: L-serine methyl ester

Absolute configuration: (*S*)

Angela Patti* and Sonia Pedotti

Tetrahedron: Asymmetry 17 (2006) 778



(*S*)-1-Ferrocenyl-3-hydroxybutan-1-one

Ee = >99% (chiral HPLC)

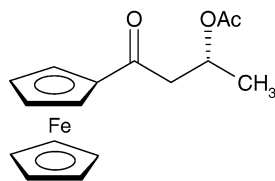
$$[\alpha]_D = -25.0 (c 0.24, CHCl_3)$$

Source of chirality: kinetic resolution by lipase-catalyzed esterification

Absolute configuration: *S*

Angela Patti* and Sonia Pedotti

Tetrahedron: Asymmetry 17 (2006) 778



(*R*)-1-Ferrocenyl-3-acetoxybutan-1-one

Ee = >99% (chiral HPLC)

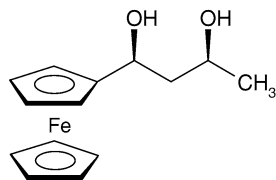
$$[\alpha]_D = +91.7 (c 0.63, CHCl_3)$$

Source of chirality: kinetic resolution by lipase-catalyzed esterification

Absolute configuration: *R*

Angela Patti* and Sonia Pedotti

Tetrahedron: Asymmetry 17 (2006) 778



(1*S*,3*S*)-1-Ferrocenyl-1,3-dihydroxybutane

Ee = >99% (chiral HPLC)

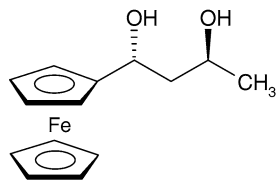
$[\alpha]_D = +27.0$ (*c* 0.75, $CHCl_3$)

Source of chirality: enantiopure starting material

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

Angela Patti* and Sonia Pedotti

Tetrahedron: Asymmetry 17 (2006) 778



(1*R*,3*S*)-1-Ferrocenyl-1,3-dihydroxybutane

Ee = >99% (chiral HPLC)

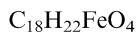
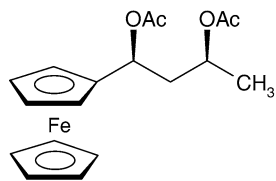
$[\alpha]_D = -11.8$ (*c* 0.68, $CHCl_3$)

Source of chirality: enantiopure starting material

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

Angela Patti* and Sonia Pedotti

Tetrahedron: Asymmetry 17 (2006) 778



(1*S*,3*S*)-1-Ferrocenyl-1,3-diacetoxybutane

Ee = >99%

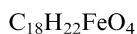
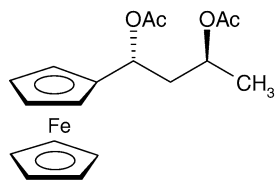
$[\alpha]_D = +77.9$ (*c* 1.10, $CHCl_3$)

Source of chirality: enantiopure starting material

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

Angela Patti* and Sonia Pedotti

Tetrahedron: Asymmetry 17 (2006) 778



(1*R*,3*S*)-1-Ferrocenyl-1,3-diacetoxybutane

Ee = >99%

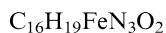
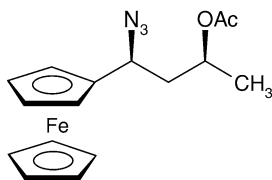
$[\alpha]_D = -49.5$ (*c* 0.90, $CHCl_3$)

Source of chirality: enantiopure starting material

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

Angela Patti* and Sonia Pedotti

Tetrahedron: Asymmetry 17 (2006) 778



(1*S*,3*S*)-1-Ferrocenyl-1-azido-3-acetoxybutane

Ee = >99%

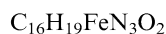
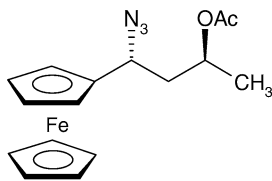
$[\alpha]_D = +26.6$ (c 0.90, $CHCl_3$)

Source of chirality: enantiopure starting material

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

Angela Patti* and Sonia Pedotti

Tetrahedron: Asymmetry 17 (2006) 778



(1*R*,3*S*)-1-Ferrocenyl-1-azido-3-acetoxybutane

Ee = >99%

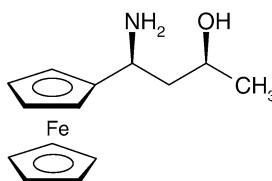
$[\alpha]_D = -70.7$ (c 1.20, $CHCl_3$)

Source of chirality: enantiopure starting material

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

Angela Patti* and Sonia Pedotti

Tetrahedron: Asymmetry 17 (2006) 778



(1*S*,3*S*)-1-Ferrocenyl-1-amino-3-hydroxybutane

Ee = >99%

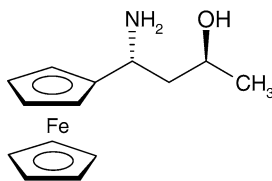
$[\alpha]_D = +20.5$ (c 0.53, EtOH)

Source of chirality: enantiopure starting material

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

Angela Patti* and Sonia Pedotti

Tetrahedron: Asymmetry 17 (2006) 778



(1*R*,3*S*)-1-Ferrocenyl-1-amino-3-hydroxybutane

Ee = >99%

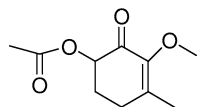
$[\alpha]_D = -6.9$ (c 0.42, EtOH)

Source of chirality: enantiopure starting material

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

Ayhan S. Demir,* Zerrin Caliskan, A. Ebru Aydin and Isil Bicer

Tetrahedron: Asymmetry 17 (2006) 786



$C_{10}H_{14}O_4$

(-)-3-Methoxy-4-methyl-2-oxocyclohex-3-enyl acetate

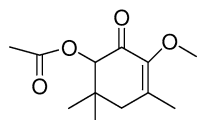
Ee = 97%

$[\alpha]_D^{25} = -140$ (c 0.5, $CHCl_3$)

Source of chirality: enzymatic resolution

Ayhan S. Demir,* Zerrin Caliskan, A. Ebru Aydin and Isil Bicer

Tetrahedron: Asymmetry 17 (2006) 786



$C_{12}H_{18}O_4$

(+)-3-Methoxy-4,6,6-trimethyl-2-oxocyclohex-3-enyl acetate

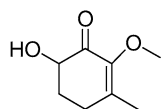
Ee = 76%

$[\alpha]_D^{25} = -39.5$ (c 0.6, $CHCl_3$)

Source of chirality: enzymatic resolution

Ayhan S. Demir,* Zerrin Caliskan, A. Ebru Aydin and Isil Bicer

Tetrahedron: Asymmetry 17 (2006) 786



$C_8H_{12}O_3$

(+)-6-Hydroxy-2-methoxy-3-methylcyclohex-2-en-1-one

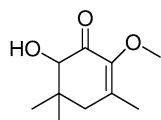
Ee = 90%

$[\alpha]_D^{25} = +81.6$ (c 0.2, $CHCl_3$)

Source of chirality: enzymatic resolution

Ayhan S. Demir,* Zerrin Caliskan, A. Ebru Aydin and Isil Bicer

Tetrahedron: Asymmetry 17 (2006) 786



$C_{10}H_{16}O_3$

(+)-6-Hydroxy-2-methoxy-3,5,5-trimethylcyclohex-2-en-1-one

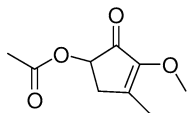
Ee = 99%

$[\alpha]_D^{25} = +111$ (c 0.3, $CHCl_3$)

Source of chirality: enzymatic resolution

Ayhan S. Demir,* Zerrin Caliskan, A. Ebru Aydin and Isil Bicer

Tetrahedron: Asymmetry 17 (2006) 786



C₉H₁₂O₄

(+)-3-Methoxy-4-methyl-2-oxocyclopent-3-enyl acetate

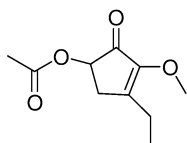
Ee = 87%

[α]_D²⁵ = +10.6 (c 0.8, CHCl₃)

Source of chirality: enzymatic resolution

Ayhan S. Demir,* Zerrin Caliskan, A. Ebru Aydin and Isil Bicer

Tetrahedron: Asymmetry 17 (2006) 786



C₁₀H₁₄O₄

(+)-4-Ethyl-3-methoxy-2-oxocyclopent-3-enyl acetate

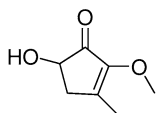
Ee = 93%

[α]_D²⁰ = +32.1 (c 1, CHCl₃)

Source of chirality: enzymatic resolution

Ayhan S. Demir,* Zerrin Caliskan, A. Ebru Aydin and Isil Bicer

Tetrahedron: Asymmetry 17 (2006) 786



C₇H₁₀O₃

(-)-5-Hydroxy-3-methyl-2-methoxy-2-cyclopentene-1-one

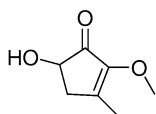
Ee = 96%

[α]_D²⁰ = -9.6 (c 0.8, CHCl₃)

Source of chirality: enzymatic resolution

Ayhan S. Demir,* Zerrin Caliskan, A. Ebru Aydin and Isil Bicer

Tetrahedron: Asymmetry 17 (2006) 786



C₈H₁₂O₃

(+)-3-Ethyl-5-hydroxy-2-methoxy-2-cyclopentene-1-one

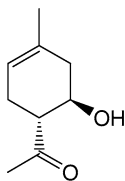
Ee = 95%

[α]_D²⁰ = +15.2 (c 0.8, CHCl₃)

Source of chirality: enzymatic resolution

Elisabetta Brenna, Claudio Fuganti, Francesco G. Gatti,*
Marco Perego and Stefano Serra

Tetrahedron: Asymmetry 17 (2006) 792



$C_9H_{14}O_2$

1-((1*R*,6*R*)-6-Hydroxy-4-methylcyclohex-3-enyl)ethanone

Ee = 86%

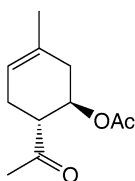
$[\alpha]_D^{20} = -158.4$

Source of chirality: enzymatic resolution

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

Elisabetta Brenna, Claudio Fuganti, Francesco G. Gatti,*
Marco Perego and Stefano Serra

Tetrahedron: Asymmetry 17 (2006) 792



$C_{11}H_{16}O_3$

(1*R*,6*R*)-6-Acetyl-3-methylcyclohex-3-enyl acetate

Ee = 86%

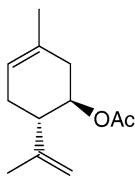
$[\alpha]_D^{20} = 131.8$

Source of chirality: enzymatic resolution

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

Elisabetta Brenna, Claudio Fuganti, Francesco G. Gatti,*
Marco Perego and Stefano Serra

Tetrahedron: Asymmetry 17 (2006) 792



$C_{12}H_{18}O_2$

(1*R*,6*S*)-3-Methyl-6-(prop-1-en-2-yl)cyclohex-3-enyl acetate

Ee = 98%

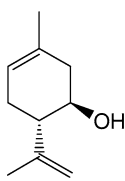
$[\alpha]_D^{20} = -29.3$

Source of chirality: enzymatic resolution

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

Elisabetta Brenna, Claudio Fuganti, Francesco G. Gatti,*
Marco Perego and Stefano Serra

Tetrahedron: Asymmetry 17 (2006) 792



$C_{10}H_{16}O$

(1*R*,6*S*)-3-Methyl-6-(prop-1-en-2-yl)cyclohex-3-enol

Ee = 98%

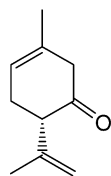
$[\alpha]_D^{20} = -53.0$

Source of chirality: enzymatic resolution

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

Elisabetta Brenna, Claudio Fuganti, Francesco G. Gatti,*
Marco Perego and Stefano Serra

Tetrahedron: Asymmetry 17 (2006) 792



C₁₀H₁₄O

(*S*)-3-Methyl-6-(prop-1-en-2-yl)cyclohex-3-enone

Ee = 98%

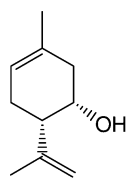
[α]_D²⁰ = -127.2

Source of chirality: enzymatic resolution

Absolute configuration: 1*S*

Elisabetta Brenna, Claudio Fuganti, Francesco G. Gatti,*
Marco Perego and Stefano Serra

Tetrahedron: Asymmetry 17 (2006) 792



C₁₀H₁₆O

(1*S*,6*S*)-3-Methyl-6-(prop-1-en-2-yl)cyclohex-3-enol

Ee = 98%

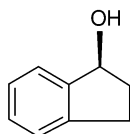
[α]_D²⁰ = -5.1

Source of chirality: enzymatic resolution

Absolute configuration: 1*S*,6*S*

Nassima Bouzemi, Louisa Aribi-Zouieche* and Jean-Claude Fiaud*

Tetrahedron: Asymmetry 17 (2006) 797



C₉H₁₀O

(*S*)-(+)-1-Indanol

Ee >99% by HPLC on (Chiralcel® OD-H) column

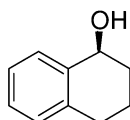
[α]_D²⁰ = +16.7 (*c* 1, MeOH)

Source of chirality: asymmetric catalysis

Absolute configuration: *S*

Nassima Bouzemi, Louisa Aribi-Zouieche* and Jean-Claude Fiaud*

Tetrahedron: Asymmetry 17 (2006) 797



C₁₀H₁₂O

(*S*)-(+)-1,2,3,4-Tetrahydro-1-naphthalenol

Ee >99% by HPLC on (Chiralcel® OB-H) column

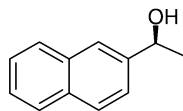
[α]_D²⁰ = +28.1 (*c* 2, MeOH)

Source of chirality: asymmetric catalysis

Absolute configuration: *S*

Nassima Bouzemi, Louisa Aribi-Zouioueche* and Jean-Claude Fiaud*

Tetrahedron: Asymmetry 17 (2006) 797



C₁₂H₁₂O

(S)-(-)-1-(2-Naphthyl)ethanol

Ee >99% by HPLC on (Chiralcel® OD-H) column

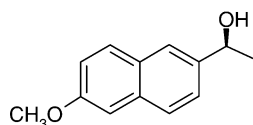
[α]_D²⁰ = -36.5 (c 1, MeOH)

Source of chirality: asymmetric catalysis

Absolute configuration: S

Nassima Bouzemi, Louisa Aribi-Zouioueche* and Jean-Claude Fiaud*

Tetrahedron: Asymmetry 17 (2006) 797



C₁₃H₁₄O₂

(S)-(-)-1-(6-Methoxy-2-naphthyl)ethanol

Ee >99% by HPLC on (Chiralcel® OD-H) column

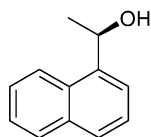
[α]_D²⁰ = -36.4 (c 0.8, EtOH)

Source of chirality: asymmetric catalysis

Absolute configuration: S

Nassima Bouzemi, Louisa Aribi-Zouioueche* and Jean-Claude Fiaud*

Tetrahedron: Asymmetry 17 (2006) 797



C₁₂H₁₂O

(S)-(-)-1-(1-Naphthyl)ethanol

Ee >99% by HPLC on (Chiralcel® OD-H) column

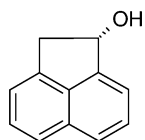
[α]_D²⁰ = -66.5 (c 1, MeOH)

Source of chirality: asymmetric catalysis

Absolute configuration: S

Nassima Bouzemi, Louisa Aribi-Zouioueche* and Jean-Claude Fiaud*

Tetrahedron: Asymmetry 17 (2006) 797



C₁₂H₁₀O

(S)-(+)-1-Acenaphthenol

Ee >99% by HPLC on (Chiralcel® OD-H) column

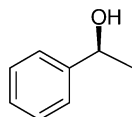
[α]_D²⁰ = +1.4 (c 2.6, CHCl₃)

Source of chirality: asymmetric catalysis

Absolute configuration: S

Nassima Bouzemi, Louisa Aribi-Zouiouèche* and Jean-Claude Fiaud*

Tetrahedron: Asymmetry 17 (2006) 797



C₈H₁₀O

(S)-(-)-1-Phenylethanol

Ee >99% by HPLC on (Chiralcel® OB-H) column

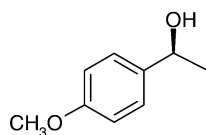
[α]_D²⁰ = -41.5 (c 0.8, MeOH)

Source of chirality: asymmetric catalysis

Absolute configuration: *S*

Nassima Bouzemi, Louisa Aribi-Zouiouèche* and Jean-Claude Fiaud*

Tetrahedron: Asymmetry 17 (2006) 797



C₉H₁₂O₂

(S)-(-)-1-(4-Methoxyphenyl)ethanol

Ee >99% by HPLC on (Chiralcel® OB-H) column

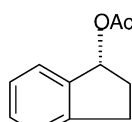
[α]_D²⁰ = -43.5 (c 0.7, MeOH)

Source of chirality: asymmetric catalysis

Absolute configuration: *S*

Nassima Bouzemi, Louisa Aribi-Zouiouèche* and Jean-Claude Fiaud*

Tetrahedron: Asymmetry 17 (2006) 797



C₁₁H₁₂O₂

(R)-(+)-Indan-1-yl acetate

Ee >99% by HPLC on (Chiralcel® OD-H) column

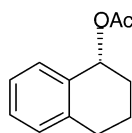
[α]_D²⁰ = +110.1 (c 2, CHCl₃)

Source of chirality: asymmetric catalysis

Absolute configuration: *R*

Nassima Bouzemi, Louisa Aribi-Zouiouèche* and Jean-Claude Fiaud*

Tetrahedron: Asymmetry 17 (2006) 797



C₁₂H₁₄O₂

(R)-(+)-1,2,3,4-Tetrahydro-1-naphthalenol acetate

Ee >99% by HPLC on (Chiralcel® OB-H) column

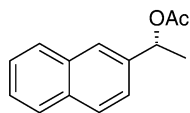
[α]_D²⁰ = +112.8 (c 2, CHCl₃)

Source of chirality: asymmetric catalysis

Absolute configuration: *R*

Nassima Bouzemi, Louisa Aribi-Zouioueche* and Jean-Claude Fiaud*

Tetrahedron: Asymmetry 17 (2006) 797



C₁₄H₁₄O₂

(R)-(+)-1-(2-Naphthyl)ethyl acetate

Ee >99% by HPLC on (Chiralcel® OD-H) column

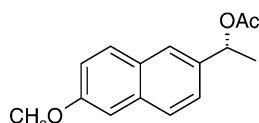
[α]_D²⁰ = +110.2 (c 1, CHCl₃)

Source of chirality: asymmetric catalysis

Absolute configuration: R

Nassima Bouzemi, Louisa Aribi-Zouioueche* and Jean-Claude Fiaud*

Tetrahedron: Asymmetry 17 (2006) 797



C₁₅H₁₆O₃

(R)-(+)-1-[2-(6-Methoxynaphthyl)]ethyl acetate

Ee >99% by HPLC on (Chiralcel® OD-H) column

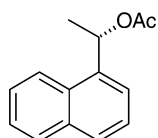
[α]_D²⁰ = +110 (c 1, EtOH)

Source of chirality: asymmetric catalysis

Absolute configuration: R

Nassima Bouzemi, Louisa Aribi-Zouioueche* and Jean-Claude Fiaud*

Tetrahedron: Asymmetry 17 (2006) 797



C₁₄H₁₄O₂

(R)-(+)-1-(1-Naphthyl)ethyl acetate

Ee >99% by HPLC on (Chiralcel® OD-H) column

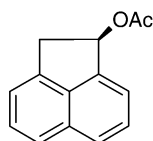
[α]_D²⁰ = +49.5 (c 1, CHCl₃)

Source of chirality: asymmetric catalysis

Absolute configuration: R

Nassima Bouzemi, Louisa Aribi-Zouioueche* and Jean-Claude Fiaud*

Tetrahedron: Asymmetry 17 (2006) 797



C₁₄H₁₂O₂

(R)-(+)-1-Acenaphthylenol-1,2-dihydro acetate

Ee >99% by HPLC on (Chiralcel® OD-H) column

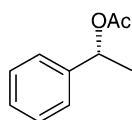
[α]_D²⁰ = +85.9 (c 2.4, CHCl₃)

Source of chirality: asymmetric catalysis

Absolute configuration: R

Nassima Bouzemi, Louisa Aribi-Zouioueche* and Jean-Claude Fiaud*

Tetrahedron: Asymmetry 17 (2006) 797



$C_{10}H_{12}O_2$

(*R*)-(+)-1-Phenylethyl acetate

Ee >99% by HPLC on (Chiralcel® OB-H) column

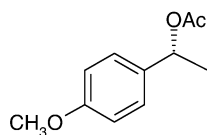
$[\alpha]_D^{20} = +135.9$ (c 1, $CHCl_3$)

Source of chirality: asymmetric catalysis

Absolute configuration: *R*

Nassima Bouzemi, Louisa Aribi-Zouioueche* and Jean-Claude Fiaud*

Tetrahedron: Asymmetry 17 (2006) 797



$C_{11}H_{14}O_3$

(*R*)-(+)-1-(4-Methoxyphenyl)ethyl acetate

Ee = 91% by HPLC on (Chiralcel® OB-H) column

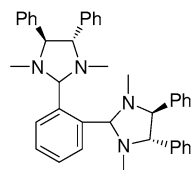
$[\alpha]_D^{20} = +123.6$ (c 1.2, $CHCl_3$)

Source of chirality: asymmetric catalysis

Absolute configuration: *R*

Václav Jurčík and René Wilhelm*

Tetrahedron: Asymmetry 17 (2006) 801



$C_{40}H_{42}N_4$

(-)-(4*S*,5*S*)-1,3-Dimethyl-2-(2-((4*S*,5*S*)-1,3-dimethyl-4,5-diphenylimidazolidin-2-yl)phenyl)-4,5-diphenylimidazolidine

Ee = 99%

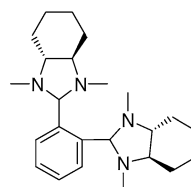
$[\alpha]_D^{22} = -89.8$ (c 0.44, $CHCl_3$)

Source of chirality: resolution

Absolute configuration: (*S,S*)

Václav Jurčík and René Wilhelm*

Tetrahedron: Asymmetry 17 (2006) 801



$C_{24}H_{28}N_4$

(+)-(3*aR*,7*aR*)-Octahydro-2-(2-((3*aR*,7*aR*)-octahydro-1,3-dimethyl-1*H*-benzo[*d*]imidazol-2-yl)phenyl)-1,3-dimethyl-1*H*-benzo[*d*]imidazole

Ee = 99%

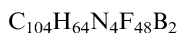
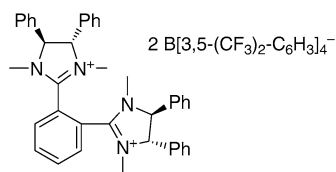
$[\alpha]_D^{22} = +103.6$ (c 1.48, $CHCl_3$)

Source of chirality: resolution

Absolute configuration: (*R,R*)

Václav Jurčík and René Wilhelm*

Tetrahedron: Asymmetry 17 (2006) 801



(-)-(4*S*,5*S*)-1,3-Dimethyl-2-(2-((4*S*,5*S*)-1,3-dimethyl-4,5-diphenylimidazolidin-2-yl)phenyl)-4,5-diphenylimidazolium bis-tetrakis-(3,5-bis(trifluoromethyl)phenyl)borate

Ee = 99%

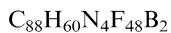
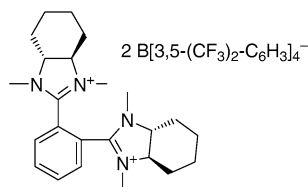
$[\alpha]_D^{22} = -25$ (c 0.45, acetone)

Source of chirality: resolution

Absolute configuration: (*S,S*)

Václav Jurčík and René Wilhelm*

Tetrahedron: Asymmetry 17 (2006) 801



(-)-(4*R*,5*R*)-1,3-Dimethyl-2-(2-((4*R*,5*R*)-1,3-dimethyl-4,5-diphenylimidazolidin-2-yl)phenyl)-4,5-diphenylimidazolium bis-tetrakis-(3,5-bis(trifluoromethyl)phenyl)borate

Ee = 99%

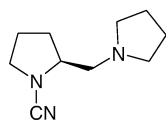
$[\alpha]_D^{22} = -5.9$ (c 0.67, acetone)

Source of chirality: resolution

Absolute configuration: (*R,R*)

Uwe Köhn, Maurice Klopffleisch, Helmar Görls and Ernst Anders*

Tetrahedron: Asymmetry 17 (2006) 811



(*S*)-2-(Pyrrolidin-1-ylmethyl)-pyrrolidine-1-carbonitrile

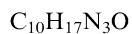
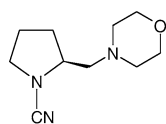
$[\alpha]_D^{rt} = -50.2$ (c 2.95, $CHCl_3$)

Source of chirality: (*S*)-2-(pyrrolidin-1-ylmethyl)-pyrrolidine

Absolute configuration: 2*S*

Uwe Köhn, Maurice Klopffleisch, Helmar Görls and Ernst Anders*

Tetrahedron: Asymmetry 17 (2006) 811



(*S*)-2-(Morpholin-4-ylmethyl)-pyrrolidine-1-carbonitrile

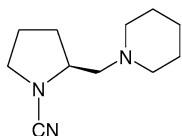
$[\alpha]_D^{rt} = -40.5$ (c 2.37, $CHCl_3$)

Source of chirality: 4-(pyrrolidin-(*S*)-2-ylmethyl)-morpholine

Absolute configuration: 2*S*

Uwe Köhn, Maurice Klopffleisch, Helmar Görls and Ernst Anders*

Tetrahedron: Asymmetry 17 (2006) 811



$C_{11}H_{19}N_3$

(S)-2-(Piperidin-1-ylmethyl)-pyrrolidine-1-carbonitrile

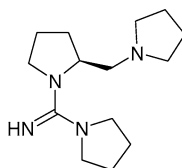
$[\alpha]_D^{25} = -50.8$ (c 2.71, CH_2Cl_2)

Source of chirality: 1-(pyrrolidin-(S)-2-ylmethyl)-piperidine

Absolute configuration: 2S

Uwe Köhn, Maurice Klopffleisch, Helmar Görls and Ernst Anders*

Tetrahedron: Asymmetry 17 (2006) 811



$C_{14}H_{26}N_4$

C-Pyrrolidin-1-yl-C-(2-(pyrrolidin-1-ylmethyl)-pyrrolidin-1-yl)-methylenamine

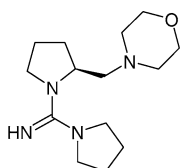
$[\alpha]_D^{25} = -22.2$ (c 2.47, CH_2Cl_2)

Source of chirality: (S)-2-(pyrrolidin-1-ylmethyl)-pyrrolidine

Absolute configuration: 2S

Uwe Köhn, Maurice Klopffleisch, Helmar Görls and Ernst Anders*

Tetrahedron: Asymmetry 17 (2006) 811



$C_{14}H_{26}N_4O$

C-(2-(Morpholin-4-ylmethyl)-pyrrolidin-1-yl)-C-pyrrolidin-1-yl-methylenamine

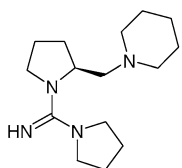
$[\alpha]_D^{25} = -18.9$ (c 3.49, CH_2Cl_2)

Source of chirality: 4-(pyrrolidin-(S)-2-ylmethyl)-morpholine

Absolute configuration: 2S

Uwe Köhn, Maurice Klopffleisch, Helmar Görls and Ernst Anders*

Tetrahedron: Asymmetry 17 (2006) 811



$C_{15}H_{28}N_4$

C-(2-(Piperidin-1-ylmethyl)-pyrrolidin-1-yl)-C-pyrrolidin-1-yl-methylenamine

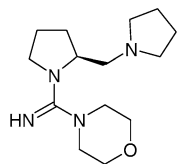
$[\alpha]_D^{25} = -21.5$ (c 3.08, CH_2Cl_2)

Source of chirality: 1-(pyrrolidin-(S)-2-ylmethyl)-piperidine

Absolute configuration: 2S

Uwe Köhn, Maurice Klopffleisch, Helmar Görls and Ernst Anders*

Tetrahedron: Asymmetry 17 (2006) 811



$C_{14}H_{26}N_4O$

C-Morpholin-4-yl-C-(2-(pyrrolidin-1-ylmethyl)-pyrrolidin-1-yl)-methylenamine

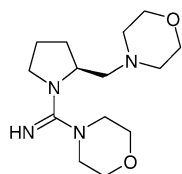
$[\alpha]_D^{rt} = +27.7$ (c 2.60, CH_2Cl_2)

Source of chirality: (S)-2-(pyrrolidin-1-ylmethyl)-pyrrolidine

Absolute configuration: 2S

Uwe Köhn, Maurice Klopffleisch, Helmar Görls and Ernst Anders*

Tetrahedron: Asymmetry 17 (2006) 811



$C_{14}H_{26}N_4O_2$

C-Morpholin-4-yl-C-(2-(morpholin-4-ylmethyl)-pyrrolidin-1-yl)-methylenamine

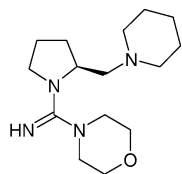
$[\alpha]_D^{rt} = +26.2$ (c 2.60, CH_2Cl_2)

Source of chirality: 4-(pyrrolidin-(S)-2-ylmethyl)-morpholine

Absolute configuration: 2S

Uwe Köhn, Maurice Klopffleisch, Helmar Görls and Ernst Anders*

Tetrahedron: Asymmetry 17 (2006) 811



$C_{15}H_{28}N_4O$

C-Morpholin-4-yl-C-(2-(piperidin-1-ylmethyl)-pyrrolidin-1-yl)-methylenamine

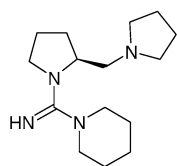
$[\alpha]_D^{rt} = +23.1$ (c 2.60, CH_2Cl_2)

Source of chirality: 1-(pyrrolidin-(S)-2-ylmethyl)-piperidine

Absolute configuration: 2S

Uwe Köhn, Maurice Klopffleisch, Helmar Görls and Ernst Anders*

Tetrahedron: Asymmetry 17 (2006) 811



$C_{15}H_{28}N_4$

C-Piperidin-1-yl-C-(2-(pyrrolidin-1-ylmethyl)-pyrrolidin-1-yl)-methylenamine

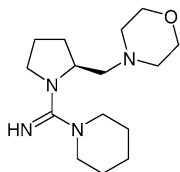
$[\alpha]_D^{rt} = +54.2$ (c 2.40, CH_2Cl_2)

Source of chirality: (S)-2-(pyrrolidin-1-ylmethyl)-pyrrolidine

Absolute configuration: 2S

Uwe Köhn, Maurice Klopffleisch, Helmar Görls and Ernst Anders*

Tetrahedron: Asymmetry 17 (2006) 811



C₁₅H₂₈N₄O

C-(2-(Morpholin-4-ylmethyl)-pyrrolidin-1-yl)-C-piperidin-1-yl-methylenamine

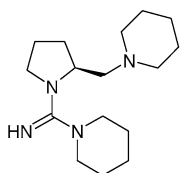
$[\alpha]_D^{rt} = +51.7$ (*c* 2.32, CH₂Cl₂)

Source of chirality: 4-(pyrrolidin-(*S*)-2-ylmethyl)-morpholine

Absolute configuration: 2*S*

Uwe Köhn, Maurice Klopffleisch, Helmar Görls and Ernst Anders*

Tetrahedron: Asymmetry 17 (2006) 811



C₁₆H₃₀N₄

C-Piperidin-1-yl-C-(2-(piperidin-1-ylmethyl)-pyrrolidin-1-yl)-methylenamine

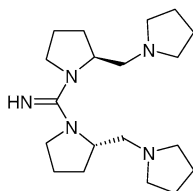
$[\alpha]_D^{rt} = +34.3$ (*c* 3.45, CH₂Cl₂)

Source of chirality: 1-(pyrrolidin-(*S*)-2-ylmethyl)-piperidine

Absolute configuration: 2*S*

Uwe Köhn, Maurice Klopffleisch, Helmar Görls and Ernst Anders*

Tetrahedron: Asymmetry 17 (2006) 811



C₁₉H₃₅N₅

C-[Bis-(2-(pyrrolidin-1-ylmethyl)-pyrrolidin-1-yl)]-methylenamine

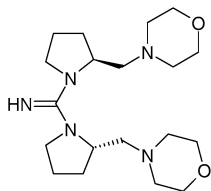
$[\alpha]_D^{rt} = -40.8$ (*c* 3.19, CH₂Cl₂)

Source of chirality: (*S*)-2-(pyrrolidin-1-ylmethyl)-pyrrolidine

Absolute configuration: 2*S*

Uwe Köhn, Maurice Klopffleisch, Helmar Görls and Ernst Anders*

Tetrahedron: Asymmetry 17 (2006) 811



C₁₉H₃₅N₅O

C-[Bis-(2-(morpholin-4-ylmethyl)-pyrrolidin-1-yl)]-methylenamine

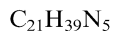
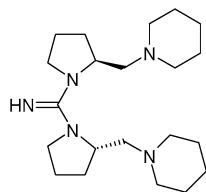
$[\alpha]_D^{rt} = -49.3$ (*c* 2.23, CH₂Cl₂)

Source of chirality: 4-(pyrrolidin-(*S*)-2-ylmethyl)-morpholine

Absolute configuration: 2*S*

Uwe Köhn, Maurice Klopffleisch, Helmar Görls and Ernst Anders*

Tetrahedron: Asymmetry 17 (2006) 811



C-[Bis-(2-(piperidin-1-ylmethyl)-pyrrolidin-1-yl)]-methylenamine

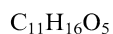
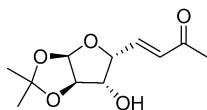
$$[\alpha]_D^{rt} = -40.4 (c 3.66, CH_2Cl_2)$$

Source of chirality: 1-(pyrrolidin-(S)-2-ylmethyl)-piperidine

Absolute configuration: 2S

D. Gautam, D. Naveen Kumar and B. Venkateswara Rao*

Tetrahedron: Asymmetry 17 (2006) 819



(1R,2R,3S,4R)-(E)-5,6,8-Trideoxy-1,2-O-isopropylidene- α -D-xyluloct-5-eno-1,4-furanos-7-ulose

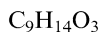
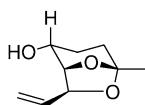
$$[\alpha]_D^{28} = -59.8 (c 0.57, CHCl_3)$$

Source of chirality: D-glucose

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

D. Gautam, D. Naveen Kumar and B. Venkateswara Rao*

Tetrahedron: Asymmetry 17 (2006) 819



(1S,2R,5R,7S)-exo-2-Hydroxy-5-methyl-7-vinyl-6,8-dioxabicyclo[3.2.1]octane

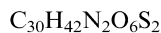
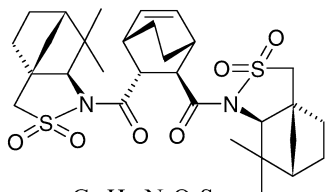
$$[\alpha]_D^{26.4} = -42.7 (c 0.53, CHCl_3)$$

Source of chirality: D-glucose

Absolute configuration: (1S,2R,5R,7S)

Agnieszka Chojnacka, Anna M. Piątek, Christian Chapuis* and Janusz Jurczak*

Tetrahedron: Asymmetry 17 (2006) 822



(-)-[(2R,3R)-Bicyclo[2.2.2]oct-5-ene-2,3-diyl]bis[[(3aS,6S,7aR)-1,4,5,6,7,7a-hexahydro-7,7-dimethyl-2,2-dioxido-3H-3a,6-methano-2,1-benzothiazol-1-yl]methanone]

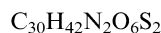
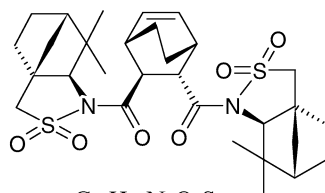
$$E_e = 100\%$$

$$[\alpha]_D^{20} = -88.7 (c 0.5, CHCl_3)$$

Source of chirality: (-)-fenchone

Agnieszka Chojnacka, Anna M. Piątek, Christian Chapuis* and Janusz Jurczak*

Tetrahedron: Asymmetry 17 (2006) 822



(-)-[(2*S*,3*S*)-Bicyclo[2.2.2]oct-5-ene-2,3-diyl]bis[[(3*aS*,6*S*,7*aR*)-1,4,5,6,7,7*a*-hexahydro-7,7-dimethyl-2,2-dioxido-3*H*-3*a*,6-methano-2,1-benzothiazol-1-yl]methanone]

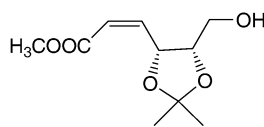
Ee = 100%

$[\alpha]_D^{20} = -4.5$ (c 0.6, $CHCl_3$)

Source of chirality: (-)-fenchone

Nikolaos G. Argyropoulos,* Theodoros D. Panagiotidis and John K. Gallos

Tetrahedron: Asymmetry 17 (2006) 829



Methyl (Z)-3-[(4*R*,5*S*)-5-(hydroxymethyl)-2,2-dimethyl-1,3-dioxolan-4-yl]-2-propenoate

Ee = 100%

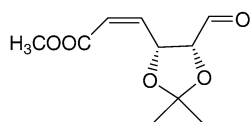
$[\alpha]_D^{25} = -140$ (c 1.2, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Nikolaos G. Argyropoulos,* Theodoros D. Panagiotidis and John K. Gallos

Tetrahedron: Asymmetry 17 (2006) 829



Methyl (Z)-3-[(4*R*,5*R*)-5-formyl-2,2-dimethyl-1,3-dioxolan-4-yl]-2-propenoate

Ee = 100%

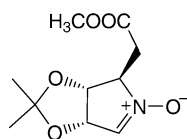
$[\alpha]_D^{25} = +16.3$ (c 0.65, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Nikolaos G. Argyropoulos,* Theodoros D. Panagiotidis and John K. Gallos

Tetrahedron: Asymmetry 17 (2006) 829



(3*aR*,4*R*,6*aS*)-4-(2-Methoxy-2-oxoethyl)-2,2-dimethyl-1-4,6*a*-dihydro-3*aH*-[1,3]dioxolo[4,5-*c*]pyrrol-5-ium-5-olate

Ee = 100%

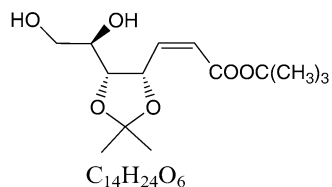
$[\alpha]_D^{25} = +11.0$ (c 0.96, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Nikolaos G. Argyropoulos,* Theodoros D. Panagiotidis
and John K. Gallos

Tetrahedron: Asymmetry 17 (2006) 829



(*Z*)-*tert*-Butyl-3-[(1*R*)-1,2-dihydroxyethyl]-2,2-dimethyl-1,3-dioxolan-4-yl]-2-propenoates

Ee = 100%

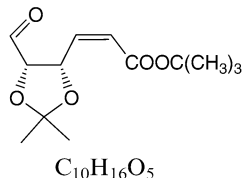
$[\alpha]_D^{25} = +92.3$ (*c* 1.24, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (3*aR*,5*R*,5(1*R*))

Nikolaos G. Argyropoulos,* Theodoros D. Panagiotidis
and John K. Gallos

Tetrahedron: Asymmetry 17 (2006) 829



(*Z*)-*tert*-Butyl-3-[(4*S*,5*S*)-5-formyl-2,2-dimethyl-1,3-dioxolan-4-yl]-2-propenoate

Ee = 100%

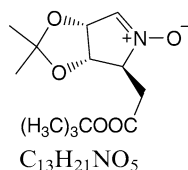
$[\alpha]_D^{25} = +92.3$ (*c* 1.24, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Nikolaos G. Argyropoulos,* Theodoros D. Panagiotidis
and John K. Gallos

Tetrahedron: Asymmetry 17 (2006) 829



(3*aS*,4*S*,6*aR*)-4-[2-(*tert*-Butoxy)-2-oxoethyl]-2,2-dimethyl-4,6*a*-dihydro-3*aH*-[1,3]dioxolo[4,5-*c*]pyrrol-5-ium-5-olate

Ee = 100%

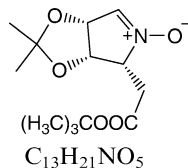
$[\alpha]_D^{25} = -3.1$ (*c* 3.4, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Nikolaos G. Argyropoulos,* Theodoros D. Panagiotidis
and John K. Gallos

Tetrahedron: Asymmetry 17 (2006) 829



(3*aS*,4*R*,6*aR*)-4-[2-(*tert*-butoxy)-2-oxoethyl]-2,2-dimethyl-4,6*a*-dihydro-3*aH*-[1,3]dioxolo[4,5-*c*]pyrrol-5-ium-5-olate

Ee = 100%

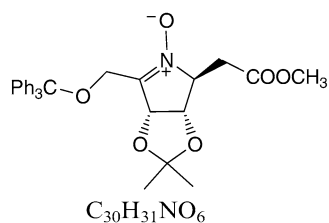
$[\alpha]_D^{25} = -62.1$ (*c* 1.76, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Nikolaos G. Argyropoulos,* Theodoros D. Panagiotidis
and John K. Gallos

Tetrahedron: Asymmetry 17 (2006) 829



Ee = 100%

$[\alpha]_D^{25} = +5$ (c 0.38, $CHCl_3$)

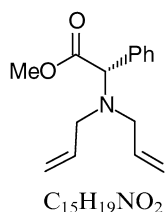
Source of chirality: asymmetric synthesis

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

(3a*S*,4*S*,6a*R*)-4-(2-Methoxy-2-oxoethyl)-2,2-dimethyl-6-[(trityloxy)methyl]-4,6a-dihydro-3a*H*-[1,3]dioxolo[4,5-*c*]pyrrol-5-ium-5-olate

Lara De Benassuti, Paola Del Buttero and Giorgio Molteni*

Tetrahedron: Asymmetry 17 (2006) 842



N,N-Diallyl-(*S*)-phenylglycine methylester

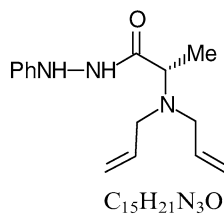
$[\alpha]_D^{25} = -23.7$ (c 0.26, CH_2Cl_2)

Source of chirality: (*S*)-phenylglycine methylester

Absolute configuration: (2*S*)

Lara De Benassuti, Paola Del Buttero and Giorgio Molteni*

Tetrahedron: Asymmetry 17 (2006) 842



N-2(*S*)-Diallylamino propanoyl-*N'*-phenylhydrazine

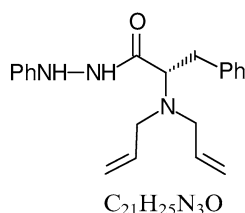
$[\alpha]_D^{25} = -16.4$ (c 0.24, $CHCl_3$)

Source of chirality: *N,N*-diallyl-(*S*)-alanine methylester

Absolute configuration: (2*S*)

Lara De Benassuti, Paola Del Buttero and Giorgio Molteni*

Tetrahedron: Asymmetry 17 (2006) 842



N-2(*S*)-Diallylamino-3-phenyl-propanoyl-*N'*-phenylhydrazine

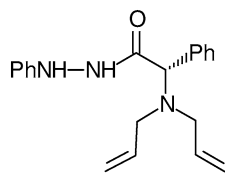
$[\alpha]_D^{25} = -9.4$ (c 0.15, CH_2Cl_2)

Source of chirality: *N,N*-diallyl-(*S*)-phenylalanine methylester

Absolute configuration: (2*S*)

Lara De Benassuti, Paola Del Buttero and Giorgio Molteni*

Tetrahedron: Asymmetry 17 (2006) 842



$C_{20}H_{23}N_3O$

N-2(*S*)-Diallylamino-2-phenyl-ethanoyl-*N'*-phenylhydrazine

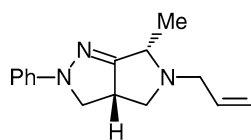
$[\alpha]_D^{25} = -12.2$ (*c* 0.21, CH_2Cl_2)

Source of chirality: *N,N*-diallyl-(*S*)-phenylglycine methylester

Absolute configuration: (*2S*)

Lara De Benassuti, Paola Del Buttero and Giorgio Molteni*

Tetrahedron: Asymmetry 17 (2006) 842



$C_{12}H_{14}N_2O$

2-Phenyl-5-allyl-3a(*R*)-6(*S*)-methyl-2,3,3a,4,5,6-hexahydro-pyrrolo[3,4-*c*]pyrazole

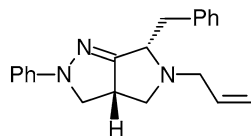
$[\alpha]_D^{25} = -106.0$ (*c* 0.43, CH_2Cl_2)

Source of chirality: the precursor

Absolute configuration: 3a(*R*),6(*S*)

Lara De Benassuti, Paola Del Buttero and Giorgio Molteni*

Tetrahedron: Asymmetry 17 (2006) 842



$C_{21}H_{23}N_3$

2-Phenyl-5-allyl-3a(*S*)-6(*S*)-benzyl-2,3,3a,4,5,6-hexahydro-pyrrolo[3,4-*c*]pyrazole

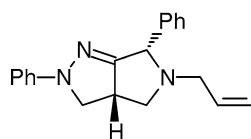
$[\alpha]_D^{25} = -83.2$ (*c* 0.51, $CHCl_3$)

Source of chirality: the precursor

Absolute configuration: 3a(*R*),6(*S*)

Lara De Benassuti, Paola Del Buttero and Giorgio Molteni*

Tetrahedron: Asymmetry 17 (2006) 842



$C_{20}H_{21}N_3$

2-Phenyl-5-allyl-3a(*R*)-6(*S*)-phenyl-2,3,3a,4,5,6-hexahydro-pyrrolo[3,4-*c*]pyrazole

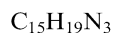
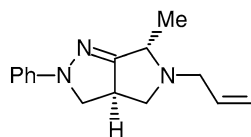
$[\alpha]_D^{25} = -76.1$ (*c* 0.29, $CHCl_3$)

Source of chirality: the precursor

Absolute configuration: 3a(*R*),6(*S*)

Lara De Benassuti, Paola Del Buttero and Giorgio Molteni*

Tetrahedron: Asymmetry 17 (2006) 842



2-Phenyl-5-allyl-3a(S)-6(S)-methyl-2,3,3a,4,5,6-hexahydro-pyrrolo[3,4-c]pyrazole

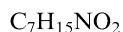
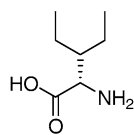
$[\alpha]_D^{25} = +112.7$ (c 0.58, $CHCl_3$)

Source of chirality: the precursor

Absolute configuration: 3a(S),6(S)

Lynn Resnick* and Rocco J. Galante

Tetrahedron: Asymmetry 17 (2006) 846



3-Ethyl-L-norvaline

Ee = 100%

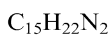
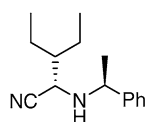
$[\alpha]_D^{25} = +40$ (c 0.5, 5 M HCl)

Source of chirality: asymmetric synthesis

Absolute configuration: (S)

Lynn Resnick* and Rocco J. Galante

Tetrahedron: Asymmetry 17 (2006) 846



(2S)-3-Ethyl-2-([(1S)-1-phenylethyl]amino)pentanenitrile

Ee = 100%

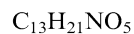
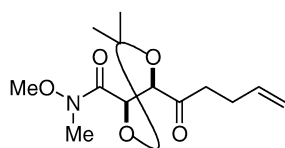
$[\alpha]_D^{25} = -187.4$ (c 1.0, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (1S,2S)

Kavirayani R. Prasad* and Pazhamalai Anbarasan

Tetrahedron: Asymmetry 17 (2006) 850



(+)-(4R,5R)-5-(Pent-4-enoyl)-N-methoxy-N,2,2-trimethyl-1,3-dioxolane-4-carboxamide

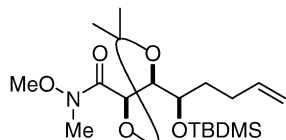
$[\alpha]_D = +4.4$ (c 3.6, $CHCl_3$)

Source of chirality: L-(+)-tartaric acid

Absolute configuration: (4R,5R)

Kavirayani R. Prasad* and Pazhamalai Anbarasan

Tetrahedron: Asymmetry 17 (2006) 850



$C_{19}H_{37}NO_5Si$

(-)-(4*R*,5*R*)-5-((*R*)-1-*tert*-Butyldimethylsilyloxypent-4-enyl)-*N*-methoxy-*N*,2,2-trimethyl-1,3-dioxolane-4-carboxamide

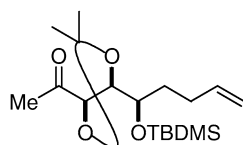
$[\alpha]_D = -9.5$ (*c* 2.1, $CHCl_3$)

Source of chirality: L-(+)-tartaric acid

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

Kavirayani R. Prasad* and Pazhamalai Anbarasan

Tetrahedron: Asymmetry 17 (2006) 850



$C_{18}H_{34}NO_4Si$

(+)-(4*R*,5*R*)-5-((*R*)-1-*tert*-Butyldimethylsilyloxypent-4-enyl)-4-acetyl-2,2-dimethyl-1,3-dioxolane

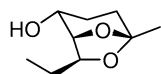
$[\alpha]_D = +12.7$ (*c* 1.1, $CHCl_3$)

Source of chirality: L-(+)-tartaric acid

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

Kavirayani R. Prasad* and Pazhamalai Anbarasan

Tetrahedron: Asymmetry 17 (2006) 850



$C_{17}H_{30}O_4$

(-)-2-Hydroxy-*exo*-brevicomin

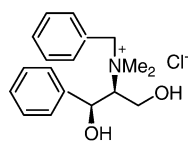
$[\alpha]_D = -32$ (*c* 0.5, $CHCl_3$)

Source of chirality: L-(+)-tartaric acid

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

Wuzu Ha and Zixing Shan*

Tetrahedron: Asymmetry 17 (2006) 854



BDDNPAC

$C_{16}H_{24}ClNO_2$

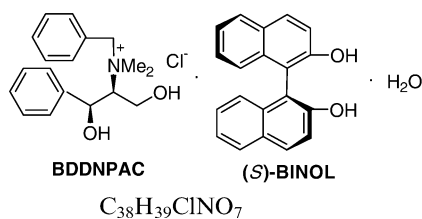
$[\alpha]_D^{20} = +48.8$ (*c* 1.184, EtOH)

Source of chirality: synthesis from *threo*-(1*S*,2*S*)-2-amino-1-(4'-nitrophenyl)-1,3-propanediol

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

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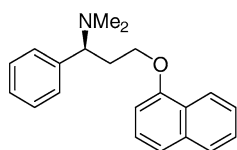
$[\alpha]_D^{20} = -25.9$ (*c* 1.012, DMF)

Source of chirality: synthesis from BDDNPAC and racemic BINOL

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

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$C_{21}H_{23}NO$

(*S*)-(+)-*N,N*-Dimethyl- α -[2-(1-naphthalenyloxy)ethyl]benzenemethanamine or (*S*)-dapoxetine

Ee = 93% (HPLC, Chiralcel OD)

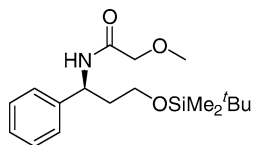
$[\alpha]_D^{20} = +62.5$ (*c* 0.3, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: *S*

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$C_{18}H_{31}NO_3Si$

(*S*)-(-)-*N*-(*O*-*tert*-Butyldimethylsilyl-3-hydroxy-1-phenylpropyl)methoxyacetamide

Ee = 93% (HPLC, Chiralcel OD)

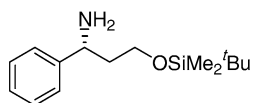
$[\alpha]_D^{20} = -40.5$ (*c* 0.7, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: *S*

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$C_{15}H_{27}NOSi$

(*R*)-(+)-3-Amino-*O*-*tert*-butyldimethylsilyl-3-phenylpropan-1-ol

Ee = 58% (HPLC, Chiralcel OD)

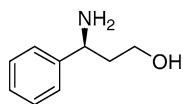
$[\alpha]_D^{20} = +7.1$ (*c* 0.55, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: *R*

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Tetrahedron: Asymmetry 17 (2006) 860



$C_9H_{13}NO$

(S)-(-)-3-Amino-3-phenylpropan-1-ol

Ee = 93% (HPLC, Chiralcel OD)

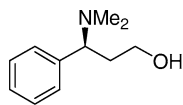
$[\alpha]_D^{20} = -11.2$ (c 0.5, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: S

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Tetrahedron: Asymmetry 17 (2006) 860



$C_{11}H_{17}NO$

(S)-(+)-3-(N,N-Dimethylamino)-3-phenylpropan-1-ol

Ee = 93% (HPLC, Chiralcel OD)

$[\alpha]_D^{20} = +38.0$ (c 0.6, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: S