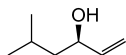


Stereochemistry abstracts

Anna Chojnacka,* Robert Obara and Czesław Wawrzeńczyk

Tetrahedron: Asymmetry 18 (2007) 101



$C_7H_{14}O$

(*R*)-5-Methylhex-1-en-3-ol

Ee = 91%

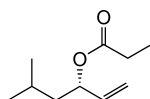
$[\alpha]_{589}^{23} = +12.0$ (*c* 1.9, $CHCl_3$)

Source of chirality: enzyme-mediated kinetic resolution

Configuration predicted: (*R*)

Anna Chojnacka,* Robert Obara and Czesław Wawrzeńczyk

Tetrahedron: Asymmetry 18 (2007) 101



$C_{10}H_{18}O_2$

(*S*)-3-Methyl-1-vinyl-butyl propionate

Ee = 100%

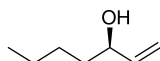
$[\alpha]_{589}^{23} = -6.9$ (*c* 2.5, $CHCl_3$)

Source of chirality: enzyme-mediated kinetic resolution

Configuration predicted: (*S*)

Anna Chojnacka,* Robert Obara and Czesław Wawrzeńczyk

Tetrahedron: Asymmetry 18 (2007) 101



$C_7H_{14}O$

(*R*)-Hept-1-en-3-ol

Ee = 96%

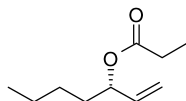
$[\alpha]_{589}^{23} = -8.1$ (*c* 1.1, $CHCl_3$)

Source of chirality: enzyme-mediated kinetic resolution

Absolute configuration: (*R*)

Anna Chojnacka,* Robert Obara and Czesław Wawrzeńczyk

Tetrahedron: Asymmetry 18 (2007) 101



$C_{10}H_{18}O_2$

(*S*)-1-Vinyl-pentyl propionate

Ee = 100%

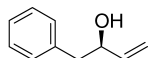
$[\alpha]_{589}^{23} = 6.5$ (*c* 1.9, $CHCl_3$)

Source of chirality: enzyme-mediated kinetic resolution

Absolute configuration: (*S*)

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Tetrahedron: Asymmetry 18 (2007) 101



$C_{10}H_{12}O$
(*R*)-1-Phenylbut-3-en-2-ol

Ee = 95%

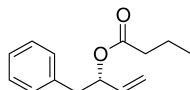
$[\alpha]_{589}^{23} = -12.5$ (*c* 1.0, $CHCl_3$)

Source of chirality: enzyme-mediated kinetic resolution

Absolute configuration: (*R*)

Anna Chojnacka,* Robert Obara and Czesław Wawrzęńczyk

Tetrahedron: Asymmetry 18 (2007) 101



$C_{10}H_{16}O_2$
(*S*)-1-Benzyl-allyl butanoate

Ee = 100%

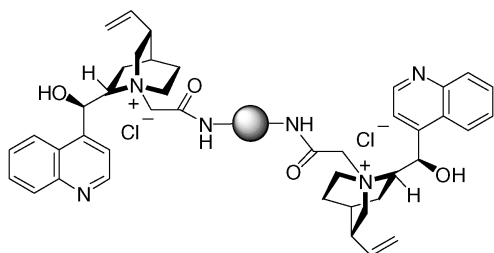
$[\alpha]_{589}^{23} = -5.9$ (*c* 1.0, $CHCl_3$)

Source of chirality: enzyme-mediated kinetic resolution

Absolute configuration: (*S*)

Xin Wang, Liang Yin, Ting Yang and Yongmei Wang*

Tetrahedron: Asymmetry 18 (2007) 108

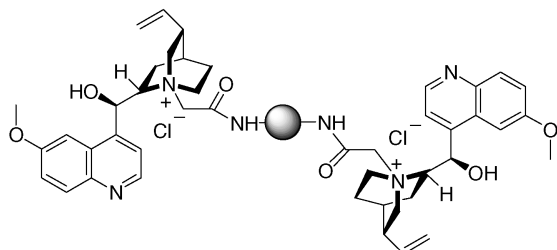


Diacetamido-PEG₂₀₀₀ N-bound cinchonidinium chloride

$[\alpha]_D^{20} = -15.6$ (*c* 0.4, CH_2Cl_2)

Xin Wang, Liang Yin, Ting Yang and Yongmei Wang*

Tetrahedron: Asymmetry 18 (2007) 108

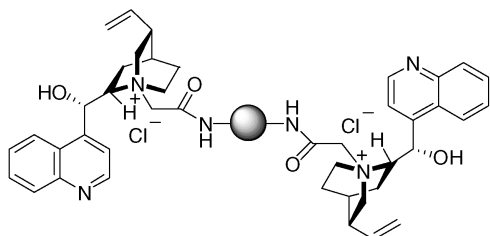


Diacetamido-PEG₂₀₀₀ N-bound quininium chloride

$[\alpha]_D^{20} = -20.2$ (*c* 0.4, CH_2Cl_2)

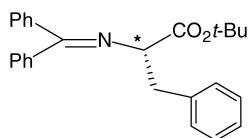
Xin Wang, Liang Yin, Ting Yang and Yongmei Wang*

Tetrahedron: Asymmetry 18 (2007) 108


$$[\alpha]_{\text{D}}^{20} = +45.3 \text{ (} c \text{ 0.4, CH}_2\text{Cl}_2\text{)}$$
Diacetamido-PEG₂₀₀₀ N-bound cinchonium chloride

Xin Wang, Liang Yin, Ting Yang and Yongmei Wang*

Tetrahedron: Asymmetry 18 (2007) 108



Ee = 83%

$$[\alpha]_{\text{D}}^{20} = -12.6 (c\ 0.2, \text{CHCl}_3)$$

Source of chirality: asymmetric synthesis

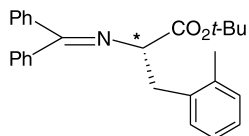
Absolute configuration: *S*

$$\text{C}_{26}\text{H}_{27}\text{NO}_2$$

(*S*)-*tert*-Butyl-3-phenyl-2-diphenylmethylene amino propanoate

Xin Wang, Liang Yin, Ting Yang and Yongmei Wang*

Tetrahedron: Asymmetry 18 (2007) 108



Ee = 82%

$$[\alpha]_{\text{D}}^{20} = -14.1 \text{ (} c \text{ 0.2, CHCl}_3 \text{)}$$

Source of chirality: asymmetric synthesis

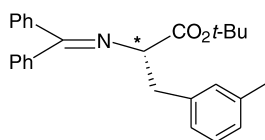
Absolute configuration: *S*

$$\text{C}_{27}\text{H}_{29}\text{NO}_2$$

(*S*)-*tert*-Butyl-3-(2-methylphenyl)-2-diphenylmethylene amino propanoate

Xin Wang, Liang Yin, Ting Yang and Yongmei Wang*

Tetrahedron: Asymmetry 18 (2007) 108


$$E_e = 90\%$$
$$[\alpha]_{\text{D}}^{20} = -13.7 \text{ (} c \text{ 0.2, CHCl}_3 \text{)}$$

Source of chirality: asymmetric synthesis

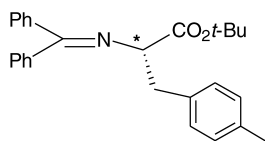
Absolute configuration: *S*

$$\text{C}_{27}\text{H}_{29}\text{NO}_2$$

(*S*)-*tert*-Butyl-3-(3-methylphenyl)-2-diphenylmethylene amino propanoate

Xin Wang, Liang Yin, Ting Yang and Yongmei Wang*

Tetrahedron: Asymmetry 18 (2007) 108



$C_{27}H_{29}NO_2$

(*S*)-*tert*-Butyl-3-(4-methylphenyl)-2-diphenylmethylene amino propanoate

Ee = 85%

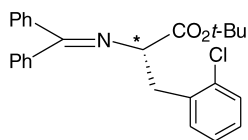
$[\alpha]_D^{20} = -15.7$ (*c* 0.2, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Xin Wang, Liang Yin, Ting Yang and Yongmei Wang*

Tetrahedron: Asymmetry 18 (2007) 108



$C_{26}H_{26}ClNO_2$

(*S*)-*tert*-Butyl-3-(2-chlorophenyl)-2-diphenylmethylene amino propanoate

Ee = 97%

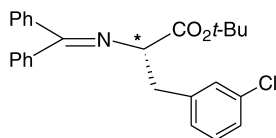
$[\alpha]_D^{20} = -16.3$ (*c* 0.2, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Xin Wang, Liang Yin, Ting Yang and Yongmei Wang*

Tetrahedron: Asymmetry 18 (2007) 108



$C_{26}H_{26}ClNO_2$

(*S*)-*tert*-Butyl-3-(3-chlorophenyl)-2-diphenylmethylene amino propanoate

Ee = 92%

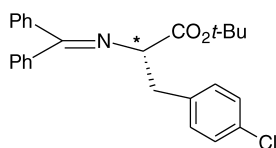
$[\alpha]_D^{20} = -16.6$ (*c* 0.2, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Xin Wang, Liang Yin, Ting Yang and Yongmei Wang*

Tetrahedron: Asymmetry 18 (2007) 108



$C_{26}H_{26}ClNO_2$

(*S*)-*tert*-Butyl-3-(4-chlorophenyl)-2-diphenylmethylene amino propanoate

Ee = 91%

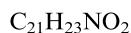
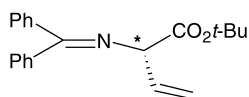
$[\alpha]_D^{20} = -15.8$ (*c* 0.2, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Xin Wang, Liang Yin, Ting Yang and Yongmei Wang*

Tetrahedron: Asymmetry 18 (2007) 108



(*S*)-*tert*-Butyl-3-(2-allyl)-2-diphenylmethylene amino propanoate

Ee = 86%

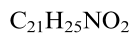
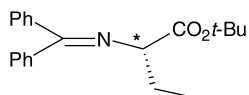
$[\alpha]_{\text{D}}^{20} = -11.4$ (c 0.2, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Xin Wang, Liang Yin, Ting Yang and Yongmei Wang*

Tetrahedron: Asymmetry 18 (2007) 108



(*S*)-*tert*-Butyl-3-ethyl-2-diphenylmethylene amino propanoate

Ee = 90%

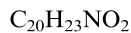
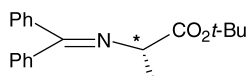
$[\alpha]_{\text{D}}^{20} = -12.2$ (c 0.2, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Xin Wang, Liang Yin, Ting Yang and Yongmei Wang*

Tetrahedron: Asymmetry 18 (2007) 108



(*S*)-*tert*-Butyl-3-methyl-2-diphenylmethylene amino propanoate

Ee = 83%

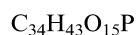
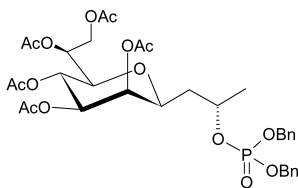
$[\alpha]_{\text{D}}^{20} = -10.8$ (c 0.2, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Andrea Graziani, Hassan Amer, Alla Zamyatina, Andreas Hofinger and Paul Kosma*

Tetrahedron: Asymmetry 18 (2007) 115

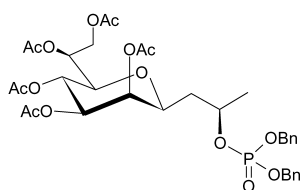


5,6,7,9,10-Penta-*O*-acetyl-4,8-anhydro-2-*O*-[bis(benzyloxy)]phosphoryl]-1,3-dideoxy-*L*-lyxo-*L*-manno-decitol

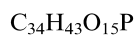
$[\alpha]_{\text{D}}^{20} = -31$ (c 0.8, CHCl₃)

Andrea Graziani, Hassan Amer, Alla Zamyatina, Andreas Hofinger and Paul Kosma*

Tetrahedron: Asymmetry 18 (2007)115



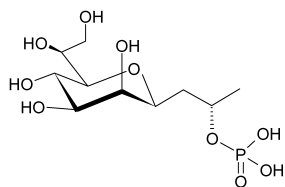
$$[\alpha]_{\text{D}}^{20} = -49 \text{ (} c \text{ 0.7, CHCl}_3 \text{)}$$



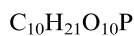
5,6,7,9,10-Penta-*O*-acetyl-4,8-anhydro-2-*O*-[bis(benzyloxy)]phosphoryl]-1,3-dideoxy-*L*-lyxo-*L*-gluco-decitol

Andrea Graziani, Hassan Amer, Alla Zamyatina, Andreas Hofinger and Paul Kosma*

Tetrahedron: Asymmetry 18 (2007)115



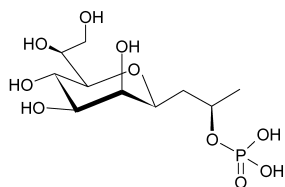
$$[\alpha]_{\text{D}}^{20} = -29 \text{ (} c \text{ 0.7, H}_2\text{O)}$$



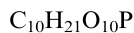
4,8-Anhydro-1,3-dideoxy-*L*-lyxo-*L*-manno-decit-2-yl phosphate (ammonium salt)

Andrea Graziani, Hassan Amer, Alla Zamyatina, Andreas Hofinger and Paul Kosma*

Tetrahedron: Asymmetry 18 (2007)115



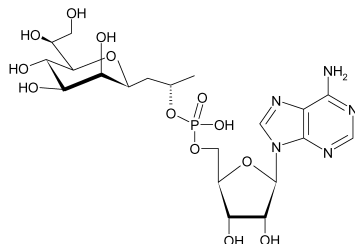
$$[\alpha]_{\text{D}}^{20} = -50 \text{ (} c \text{ 0.7, H}_2\text{O)}$$



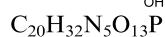
4,8-Anhydro-1,3-dideoxy-*L*-lyxo-*L*-gluco-decit-2-yl phosphate (ammonium salt)

Andrea Graziani, Hassan Amer, Alla Zamyatina, Andreas Hofinger and Paul Kosma*

Tetrahedron: Asymmetry 18 (2007)115



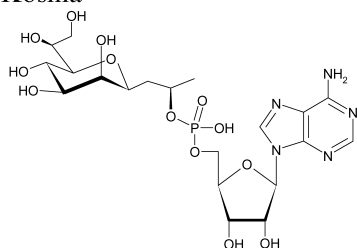
$$[\alpha]_{\text{D}}^{20} = -34 \text{ (} c \text{ 0.8, H}_2\text{O)}$$



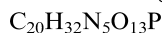
Adenosine 5'-(4,8-anhydro-1,3-dideoxy-*L*-lyxo-*L*-manno-decit-2-yl)phosphate (triethylammonium salt)

Andrea Graziani, Hassan Amer, Alla Zamyatina, Andreas Hofinger and Paul Kosma*

Tetrahedron: Asymmetry 18 (2007)115



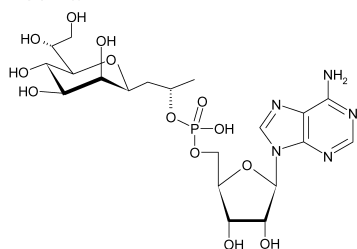
$$[\alpha]_{\text{D}}^{20} = -45 \text{ (} c \text{ 0.8, H}_2\text{O)}$$



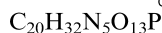
Adenosine 5'-(4,8-anhydro-1,3-dideoxy-L-lyxo-L-gluco-decit-2-yl)phosphate (triethylammonium salt)

Andrea Graziani, Hassan Amer, Alla Zamyatina, Andreas Hofinger and Paul Kosma*

Tetrahedron: Asymmetry 18 (2007)115



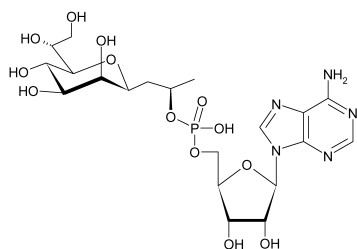
$$[\alpha]_{\text{D}}^{20} = -19.8 \text{ (} c \text{ 0.8, H}_2\text{O)}$$



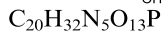
Adenosine 5'-(4,8-anhydro-1,3-dideoxy-D-ribo-L-manno-decit-2-yl)phosphate (triethylammonium salt)

Andrea Graziani, Hassan Amer, Alla Zamyatina, Andreas Hofinger and Paul Kosma*

Tetrahedron: Asymmetry 18 (2007)115



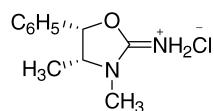
$$[\alpha]_{\text{D}}^{20} = -31 \text{ (} c \text{ 0.8, H}_2\text{O)}$$



Adenosine 5'-(4,8-anhydro-1,3-dideoxy-D-ribo-L-gluco-decit-2-yl)phosphate (triethylammonium salt)

Alejandro Cruz,* Itzia Irene Padilla-Martínez, Efrén V. García-Báez and Rosalinda Contreras

Tetrahedron: Asymmetry 18 (2007)123



$$[\alpha]_{\text{D}}^{24} = -15.0 \text{ (} c \text{ } 2.0 \times 10^{-4} \text{ g/mL, methanol)}$$

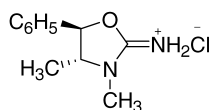
Source of chirality: (1*S*,2*R*)-(+)-ephedrine



(1*S*,2*R*)-(-)-cis-3,4-Dimethyl-5-phenyl-oxazolidine-2-iminium chloride

Alejandro Cruz,* Itzia Irene Padilla-Martínez, Efrén V. García-Báez
and Rosalinda Contreras

Tetrahedron: Asymmetry 18 (2007)123

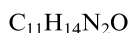
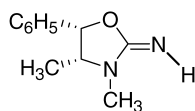


(1*R*,2*R*)-(-)-*trans*-3,4-Dimethyl-5-phenyl-oxazolidine-2-iminium chloride

$[\alpha]_{\text{D}}^{24} = -15.0$ (*c* 2.0×10^{-4} g/mL, methanol)
Source of chirality: (1*S*,2*R*)-(+)-ephedrine

Alejandro Cruz,* Itzia Irene Padilla-Martínez, Efrén V. García-Báez
and Rosalinda Contreras

Tetrahedron: Asymmetry 18 (2007)123

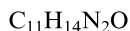
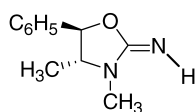


(1*S*,2*R*)-(-)-*cis*-3,4-Dimethyl-5-phenyl-oxazolidine-2-imine

$[\alpha]_{\text{D}}^{24} = -120.0$ (*c* 2.0×10^{-4} g/mL, chloroform)
Source of chirality: (1*S*,2*R*)-(-)-ephedrine

Alejandro Cruz,* Itzia Irene Padilla-Martínez, Efrén V. García-Báez
and Rosalinda Contreras

Tetrahedron: Asymmetry 18 (2007)123

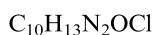
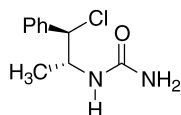


(1*R*,2*R*)-(-)-*trans*-3,4-Dimethyl-5-phenyl-oxazolidine-2-imine

$[\alpha]_{\text{D}}^{24} = -5.0$ (*c* 2.04×10^{-4} g/mL, chloroform)
Source of chirality: (1*S*,2*R*)-(-)-ephedrine

Alejandro Cruz,* Itzia Irene Padilla-Martínez, Efrén V. García-Báez
and Rosalinda Contreras

Tetrahedron: Asymmetry 18 (2007)123

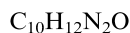
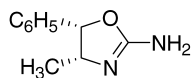


(1*R*,2*R*)-(-)-(2-Chloro-1-methyl-2-phenyl-ethyl)-urea

$[\alpha]_{\text{D}}^{24} = -45.0$ (*c* 2.02×10^{-4} g/mL, methanol)
Source of chirality: (1*S*,2*R*)-(+)-norephedrine

Alejandro Cruz,* Itzia Irene Padilla-Martínez, Efrén V. García-Báez
and Rosalinda Contreras

Tetrahedron: Asymmetry 18 (2007) 123

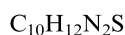
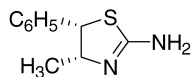


(1*S*,2*R*)-(-)-*cis*-4-Methyl-5-phenyl-oxazoline-2-amine

$[\alpha]_{\text{D}}^{24} = -200.0$ ($c\ 2.0 \times 10^{-4}$ g/mL, chloroform)
Source of chirality: (1*S*,2*R*)-(+)-norephedrine

Alejandro Cruz,* Itzia Irene Padilla-Martínez, Efrén V. García-Báez
and Rosalinda Contreras

Tetrahedron: Asymmetry 18 (2007) 123

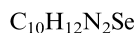
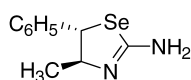


(1*S*,2*R*)-(-)-*cis*-4-Methyl-5-phenyl-thiazoline-2-amine

$[\alpha]_{\text{D}}^{24} = -75.0$ ($c\ 2.04 \times 10^{-4}$ g/mL, chloroform)
Source of chirality: (1*S*,2*R*)-(+)-norephedrine

Alejandro Cruz,* Itzia Irene Padilla-Martínez, Efrén V. García-Báez
and Rosalinda Contreras

Tetrahedron: Asymmetry 18 (2007) 123

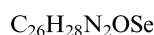
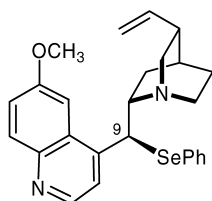


(1*S*,2*S*)-(-)-*trans*-4-Methyl-5-phenyl-selenazoline-2-amine

$[\alpha]_{\text{D}}^{24} = -120.0$ ($c\ 2.0 \times 10^{-4}$ g/mL, chloroform)
Source of chirality: (1*R*,2*S*)-(-)-norephedrine

Mariola Zielińska-Błajet, Renata Siedlecka and Jacek Skarżewski*

Tetrahedron: Asymmetry 18 (2007) 131

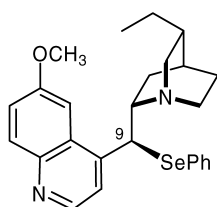


(1*S*,3*R*,4*S*,8*S*,9*S*)-6'-Methoxy-9-phenylselenylcinchonine

$[\alpha]_{\text{D}} = -46.7$ ($c\ 1.20$, CH_2Cl_2)
 $\text{Ee} > 95\%$
Source of chirality: $\text{S}_{\text{N}}2$ substitution on natural quinine

Mariola Zielińska-Błajet, Renata Siedlecka and Jacek Skarżewski*

Tetrahedron: Asymmetry 18 (2007) 131



$C_{26}H_{30}N_2OSe$

(1*S*,3*R*,4*S*,8*S*,9*S*)-10,11-Dihydro-6'-methoxy-9-phenylselenenylcinchonine

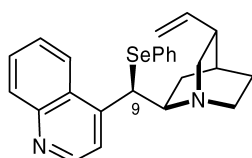
$[\alpha]_D = -73.3$ (*c* 1.80, CH_2Cl_2)

Ee >95%

Source of chirality: S_N2 substitution on natural dihydroquinine

Mariola Zielińska-Błajet, Renata Siedlecka and Jacek Skarżewski*

Tetrahedron: Asymmetry 18 (2007) 131



$C_{25}H_{26}N_2Se$

(1*S*,3*R*,4*S*,8*R*,9*R*)-9-Phenylselenenylcinchonine

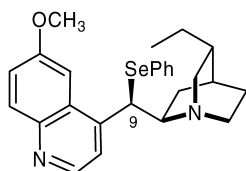
$[\alpha]_D = +69.1$ (*c* 0.98, CH_2Cl_2)

Ee >95%

Source of chirality: S_N2 substitution on natural cinchonine

Mariola Zielińska-Błajet, Renata Siedlecka and Jacek Skarżewski*

Tetrahedron: Asymmetry 18 (2007) 131



$C_{26}H_{30}N_2OSe$

(1*S*,3*R*,4*S*,8*R*,9*R*)-10,11-Dihydro-6'-methoxy-9-phenylselenenylcinchonine

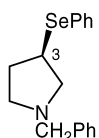
$[\alpha]_D = +160.4$ (*c* 0.96, CH_2Cl_2)

Ee >98%

Source of chirality: S_N2 substitution on natural dihydroquinidine

Mariola Zielińska-Błajet, Renata Siedlecka and Jacek Skarżewski*

Tetrahedron: Asymmetry 18 (2007) 131



$C_{17}H_{19}NSe$

(*R*)-(+)-1-Benzyl-3-2-phenylselenenyl pyrrolidine

$[\alpha]_D = +17.6$ (*c* 0.82, CH_2Cl_2)

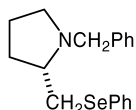
Ee >95%

Source of chirality: S_N2 reaction of (–)-(*S*)-3-hydroxypyrrolidine

Absolute configuration: 3*R* (determined by chemical correlation)

Mariola Zielińska-Błajet, Renata Siedlecka and Jacek Skarżewski*

Tetrahedron: Asymmetry 18 (2007) 131



$C_{18}H_{21}NSe$

(-)-(S)-1-Benzyl-2-(phenylselenenylmethyl)pyrrolidine

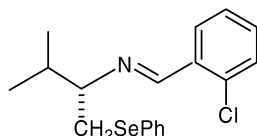
$[\alpha]_D = -70.2$ (*c* 0.94, CH_2Cl_2)

Ee >95%

Source of chirality: transformation of (-)-(S)-benzyl-2-pyrrolidinemethanol

Mariola Zielińska-Błajet, Renata Siedlecka and Jacek Skarżewski*

Tetrahedron: Asymmetry 18 (2007) 131



$C_{26}H_{30}N_2OSe$

(S)-(+)-(2-Chloro-benzylidene)-(2-methyl-1-phenylselenenyl-propyl)-amine

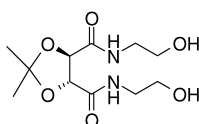
$[\alpha]_D = +119.8$ (*c* 1.06, CH_2Cl_3)

Ee >98%

Source of chirality: transformation of L-valinol

Kristin Lippur, Tõnis Kanger,* Kadri Kriis, Tiit Kailas,
Aleksander-Mati Müürisepp, Tõnis Pehk and Margus Lopp

Tetrahedron: Asymmetry 18 (2007) 137



$C_{11}H_{20}N_2O_6$

(4R,5R)-N,N'-Bis(2-hydroxyethyl)-2,2-dimethyl-1,3-dioxolane-4,5-dicarboxamide

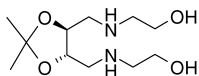
$[\alpha]_D^{22} = -20.9$ (*c* 2.40, MeOH)

Source of chirality: (R,R)-dimethyl tartrate

Absolute configuration: (4R,5R)

Kristin Lippur, Tõnis Kanger,* Kadri Kriis, Tiit Kailas,
Aleksander-Mati Müürisepp, Tõnis Pehk and Margus Lopp

Tetrahedron: Asymmetry 18 (2007) 137



$C_{11}H_{24}N_2O_4$

2,2'--[[[(4S,5S)-2,2-Dimethyl-1,3-dioxolane-4,5-diyl]bis(methyleneimino)]]diethanol

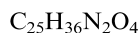
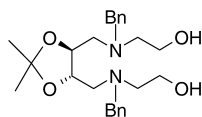
$[\alpha]_D^{23} = -28.0$ (*c* 2.63, MeOH)

Source of chirality: (R,R)-dimethyl tartrate

Absolute configuration: (4S,5S)

Kristin Lippur, Tõnis Kanger,* Kadri Kriis, Tiiu Kailas,
Aleksander-Mati Müürisepp, Tõnis Pehk and Margus Lopp

Tetrahedron: Asymmetry 18 (2007) 137



2,2'-{[(4*S*,5*S*)-2,2-Dimethyl-1,3-dioxolane-4,5-diyl]bis[methylene(benzylimino)]}diethanol

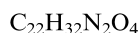
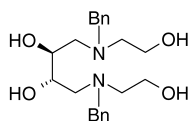
$$[\alpha]_{\text{D}}^{23} = -8.4 \text{ (} c \text{ 2.37, MeOH)}$$

Source of chirality: (*R,R*)-dimethyl tartrate

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

Kristin Lippur, Tõnis Kanger,* Kadri Kriis, Tiiu Kailas,
Aleksander-Mati Müürisepp, Tõnis Pehk and Margus Lopp

Tetrahedron: Asymmetry 18 (2007) 137



(2*S*,3*S*)-1,4-Bis[(2-hydroxyethyl)(benzyl)amino]butane-2,3-diol

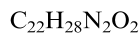
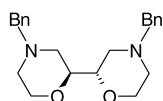
$$[\alpha]_{\text{D}}^{22} = -25.2 \text{ (} c \text{ 4.87, MeOH)}$$

Source of chirality: (*R,R*)-dimethyl tartrate

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

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Aleksander-Mati Müürisepp, Tõnis Pehk and Margus Lopp

Tetrahedron: Asymmetry 18 (2007) 137



(2*S*,2'*S*)-4,4'-Dibenzyl-2,2'-bimorpholine

$$[\alpha]_{\text{D}}^{23} = +49.4 \text{ (} c \text{ 6.36, MeOH)}$$

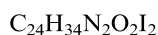
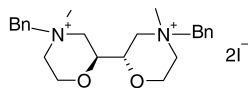
Ee 99% (chiral HPLC analysis)

Source of chirality: (*R,R*)-dimethyl tartrate

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

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Aleksander-Mati Müürisepp, Tõnis Pehk and Margus Lopp

Tetrahedron: Asymmetry 18 (2007) 137



(2*S*,2'*S*)-4,4'-Dibenzyl-4,4'-dimethyl-2,2'-bimorpholinium diiodide

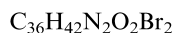
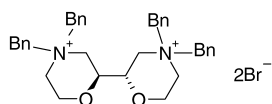
$$[\alpha]_{\text{D}}^{22} = +41.2 \text{ (} c \text{ 4.74, MeOH)}$$

Source of chirality: (*R,R*)-dimethyl tartrate

Absolute configuration: (2*S*,2'*S*, *N* and *N'* unknown)

Kristin Lippur, Tõnis Kanger,* Kadri Kriis, Tiit Kailas,
Aleksander-Mati Müürisepp, Tõnis Pehk and Margus Lopp

Tetrahedron: Asymmetry 18 (2007) 137



(2*S*,2'*S*)-4,4,4',4'-Tetrabenzyl-2,2'-bimorpholinium dibromide

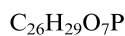
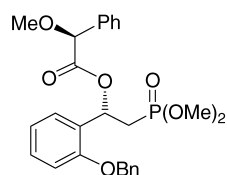
$$[\alpha]_D^{22} = -53.7 \text{ (} c \text{ 2.5, MeOH)}$$

Source of chirality: (*R,R*)-dimethyl tartrate

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

Haydée Rojas-Cabrera, Mario Fernández-Zertuche,
Oscar García-Barradas, Omar Muñoz-Muñiz and Mario Ordóñez*

Tetrahedron: Asymmetry 18 (2007) 142



Dimethyl (*S*)-2-(2-*O*-benzylphenyl)-2-[(*S*)-*O*-methylmandelate]ethylphosphonate

De >98%

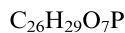
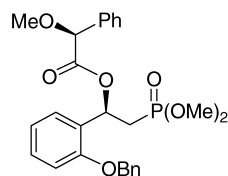
$$[\alpha]_D = +26.9 \text{ (} c \text{ 1.8, CHCl}_3)$$

Source of chirality: chemical resolution

Absolute configuration: (*S,S*)

Haydée Rojas-Cabrera, Mario Fernández-Zertuche,
Oscar García-Barradas, Omar Muñoz-Muñiz and Mario Ordóñez*

Tetrahedron: Asymmetry 18 (2007) 142



Dimethyl (*R*)-2-(2-*O*-benzylphenyl)-2-[(*S*)-*O*-methylmandelate]ethylphosphonate

De >98%

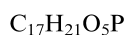
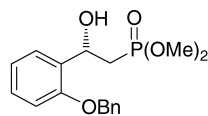
$$[\alpha]_D = +27.2 \text{ (} c \text{ 1.7, CHCl}_3)$$

Source of chirality: chemical resolution

Absolute configuration: (*R,S*)

Haydée Rojas-Cabrera, Mario Fernández-Zertuche,
Oscar García-Barradas, Omar Muñoz-Muñiz and Mario Ordóñez*

Tetrahedron: Asymmetry 18 (2007) 142



Dimethyl (*S*)-2-(2-*O*-benzylphenyl)-2-hydroxyethylphosphonate

Ee >98%

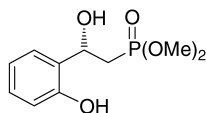
$$[\alpha]_D = +46.8 \text{ (} c \text{ 1.23, CHCl}_3)$$

Source of chirality: chemical resolution

Absolute configuration: (*S*)

Haydée Rojas-Cabrera, Mario Fernández-Zertuche,
Oscar García-Barradas, Omar Muñoz-Muñiz and Mario Ordóñez*

Tetrahedron: Asymmetry 18 (2007) 142



$C_{17}H_{21}O_5P$

Dimethyl (*S*)-2-(2-hydroxyphenyl)-2-hydroxyethylphosphonate

Ee >98%

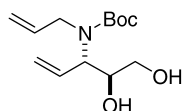
$[\alpha]_D = -0.3$ (*c* 3.0, $CHCl_3$)

Source of chirality: chemical resolution

Absolute configuration: (*S*)

Caterina Murruzzu and Antoni Riera*

Tetrahedron: Asymmetry 18 (2007) 149



$C_{13}H_{23}NO_4$

(2*S*,3*S*)-3-(*N*-Allyl-*N*-*tert*-butoxycarbonyl)-4-penten-1,2-diol

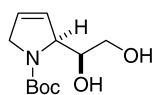
$[\alpha]_D = -22.6$ (*c* 1.0, $CHCl_3$)

Source of chirality: Sharpless asymmetric epoxidation

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

Caterina Murruzzu and Antoni Riera*

Tetrahedron: Asymmetry 18 (2007) 149



$C_{11}H_{19}NO_4$

(2*S*)-*N*-*tert*-Butoxycarbonyl-2-[(1'*S*)-1',2'-dihydroxyethyl]-2,5-dihydropyrrole

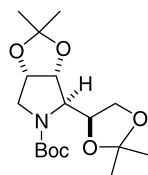
$[\alpha]_D = -108.1$ (*c* 0.97, $CHCl_3$)

Source of chirality: Sharpless asymmetric epoxidation

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

Caterina Murruzzu and Antoni Riera*

Tetrahedron: Asymmetry 18 (2007) 149



$C_{17}H_{29}NO_6$

1,4-Dideoxy-1,4-imino-D-allitol bis-isopropylidene acetal

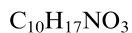
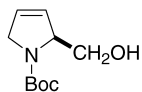
$[\alpha]_D = -58.5$ (*c* 1.0, $CHCl_3$)

Source of chirality: Sharpless asymmetric epoxidation

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

Caterina Murruzzu and Antoni Riera*

Tetrahedron: Asymmetry 18 (2007) 149



(2*S*)-*N*-*tert*-Butoxycarbonyl-2-hydroxymethyl-2,5-dihydro-1*H*-pyrrole

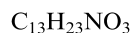
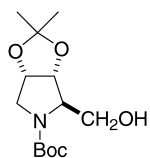
$[\alpha]_D = -124.6$ (*c* 1.0, $CHCl_3$)

Source of chirality: Sharpless asymmetric epoxidation

Absolute configuration: (2*S*)

Caterina Murruzzu and Antoni Riera*

Tetrahedron: Asymmetry 18 (2007) 149



(2*R*,3*R*,4*S*)-*N*-*tert*-Butoxycarbonyl-2-hydroxymethyl-3,4-isopropylidendioxy-pyrrolidine

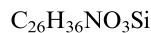
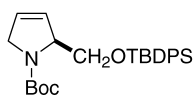
$[\alpha]_D = -30.3$ (*c* 0.3, $CHCl_3$)

Source of chirality: Sharpless asymmetric epoxidation

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

Caterina Murruzzu and Antoni Riera*

Tetrahedron: Asymmetry 18 (2007) 149



(2*R*)-*N*-*tert*-Butoxycarbonyl-2-*tert*-butyldiphenylsilyloxymethyl-2,5-dihydro-1*H*-pyrrole

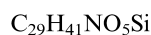
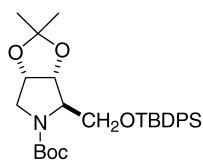
$[\alpha]_D = -24.6$ (*c* 1.0, $CHCl_3$)

Source of chirality: Sharpless asymmetric epoxidation

Absolute configuration: (2*R*)

Caterina Murruzzu and Antoni Riera*

Tetrahedron: Asymmetry 18 (2007) 149



(2*R*,3*R*,4*S*)-*N*-*tert*-Butoxycarbonyl-2-*tert*-butyldiphenylsilyloxymethyl-3,4-dihydroxypyrrolidine isopropylidene acetal

$[\alpha]_D = -36.1$ (*c* 1.05, $CHCl_3$)

Source of chirality: Sharpless asymmetric epoxidation

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