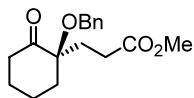
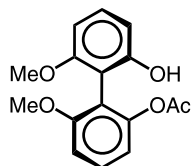


Cheikhou Camara, Laurent Keller and Françoise Dumas*

Tetrahedron: Asymmetry 14 (2003) 3263C₁₇H₂₂O₄Methyl (*R*)-3-(1-benzyloxy-2-oxocyclohexyl)propionate

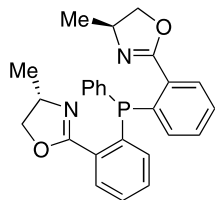
E.e. = 96% (by chiral HPLC)

 $[\alpha]_{\text{D}}^{20} = +32$ (*c* 10, EtOH_{abs})Source of chirality: asymmetric Michael addition using (*R*)-1-phenylethylamine (99% ee)Absolute configuration: (*R*)Claudia Sanfilippo,* Giovanni Nicolosi, Giovanna Delogu,*
Davide Fabbri and Maria Antonietta Dettori*Tetrahedron: Asymmetry 14 (2003) 3267*C₁₆H₁₆O₅(a*R*)-(+)-2-Hydroxy-2'-acetoxy-6,6'-dimethoxy-1,1'-biphenyl

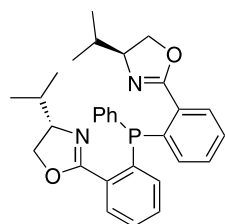
E.e. = 98% (HPLC)

 $[\alpha]_{\text{D}}^{25} = +91.2$ (*c* 0.7, CHCl₃)

Source of chirality: enzymatic resolution

Absolute configuration: (a*R*)Takamichi Yamagishi,* Masatoshi Ohnuki, Takahiro Kiyooka,
Dai Masui, Kiyoshi Sato and Motowo Yamaguchi*Tetrahedron: Asymmetry 14 (2003) 3275*C₂₆H₂₅N₂O₂P(4*S*,4'*S*)-Bis[2-(4-methyl-4,5-dihydrooxazol-2-yl)phenyl]phenylphosphine

Ee >99%

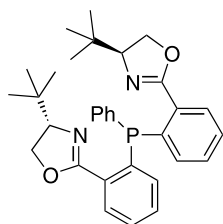
 $[\alpha]_{\text{D}}^{25} = -56.7$ (*c* 1.27, CH₂Cl₂)Source of chirality: (*S*)-alanineAbsolute configuration: 4*S*,4'*S*Takamichi Yamagishi,* Masatoshi Ohnuki, Takahiro Kiyooka,
Dai Masui, Kiyoshi Sato and Motowo Yamaguchi*Tetrahedron: Asymmetry 14 (2003) 3275*C₃₀H₃₃N₂O₂P(4*S*,4'*S*)-Bis[2-(4-isopropyl-4,5-dihydrooxazol-2-yl)phenyl]phenylphosphine

Ee >99%

 $[\alpha]_{\text{D}}^{25} = -50.9$ (*c* 1.66, CH₂Cl₂)Source of chirality: (*S*)-valineAbsolute configuration: 4*S*,4'*S*

Takamichi Yamagishi,* Masatoshi Ohnuki, Takahiro Kiyooka,
Dai Masui, Kiyoshi Sato and Motowo Yamaguchi

Tetrahedron: Asymmetry 14 (2003) 3275



$C_{32}H_{37}N_2O_2P$

(4*S*,4'*S*)-Bis[2-(4-*t*-butyl-4,5-dihydrooxazol-2-yl)phenyl]phenylphosphine

Ee >99%

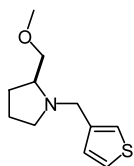
$[\alpha]_D^{25} = -39.5$ (*c* 1.97, CH_2Cl_2)

Source of chirality: (*S*)-*t*-leucine

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

Craig A. Ogle* and Jason B. Human

Tetrahedron: Asymmetry 14 (2003) 3281



$C_{11}H_{17}NOS$

(*S*)-2-Methoxymethyl-1-thiophen-3-ylmethyl-pyrrolidine

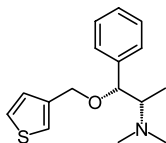
$[\alpha]_D^{25} = -90$ (*c* 2.0, EtOH)

Source of chirality: L-proline

Absolute configuration: (*S*)

Craig A. Ogle* and Jason B. Human

Tetrahedron: Asymmetry 14 (2003) 3281



$C_{16}H_{21}NOS$

(1*S*,2*R*)-Dimethyl-[1-methyl-2-phenyl-2-(thiophen-3-ylmethoxy)-ethyl]amine

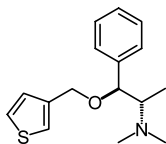
$[\alpha]_D^{25} = -50$ (*c* 2.0, EtOH)

Source of chirality: (–)-ephedrine hydrochloride

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

Craig A. Ogle* and Jason B. Human

Tetrahedron: Asymmetry 14 (2003) 3281



$C_{16}H_{21}NOS$

(1*S*,2*S*)-Dimethyl-[1-methyl-2-phenyl-2-(thiophen-3-ylmethoxy)-ethyl]amine

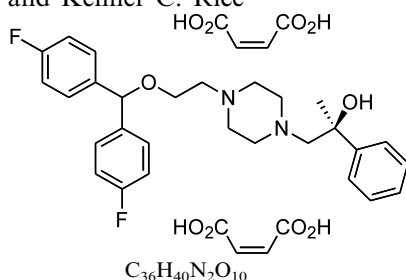
$[\alpha]_D^{25} = +74$ (*c* 2.0, EtOH)

Source of chirality: (+)-pseudoephedrine

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

Thomas Prisinzano, Ling-Wei Hsin, John E. Folk,
Judith L. Flippen-Anderson, Clifford George, Arthur E. Jacobson
and Kenner C. Rice*

Tetrahedron: Asymmetry 14 (2003) 3285

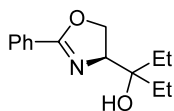


(S)-(+)-1-(4-{2-[Bis-(4-fluorophenyl)methoxy]-ethyl}piperazin-1-yl)-2-phenylpropan-2-ol dimaleate

$[\alpha]_D^{20} = +10.4$ (*c* 0.68, MeOH)
Source of chirality: (S)-(+)-atrolactic acid
Absolute configuration: *S*

Antonio L. Braga,* Rodrigo M. Rubim, Henri S. Schrekker,
Ludger A. Wessjohann, Martin W. G. de Bolster, Gilson Zeni
and Jasquer A. Sehnem

Tetrahedron: Asymmetry 14 (2003) 3291



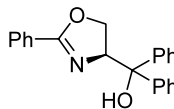
$C_{14}H_{19}NO_2$

(S)-4-(1'-Ethyl-1'-hydroxypropyl)-2-phenyl-1,3-oxazoline

$[\alpha]_D^{20} = +41$ (*c* 0.55, CH_2Cl_2)
Absolute configuration: *S*

Antonio L. Braga,* Rodrigo M. Rubim, Henri S. Schrekker,
Ludger A. Wessjohann, Martin W. G. de Bolster, Gilson Zeni
and Jasquer A. Sehnem

Tetrahedron: Asymmetry 14 (2003) 3291



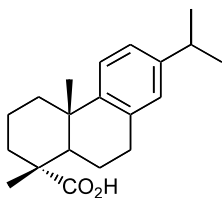
$C_{22}H_{19}NO_2$

(S)-4-(Hydroxydiphenylmethyl)-2-phenyl-1,3-oxazoline

$[\alpha]_D^{20} = -41$ (*c* 0.79, CH_2Cl_2)
Absolute configuration: *S*

Zhang Guangyou, Liao Yuqing, Wang Zhaohui, Hiroyuki Nohira
and Takuji Hirose*

Tetrahedron: Asymmetry 14 (2003) 3297



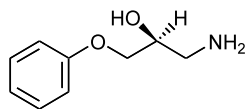
$C_{20}H_{28}O_2$

Dehydroabietic acid 7-isopropyl-1,4a-dimethyl-1,2,3,4,4a,9,10,10a-octahydrophenanthrene-1-carboxylic acid

$[\alpha]_D^{20} = +62.5$ (*c* 2.0, 95% ethanol)
Source of chirality: natural source
Absolute configuration: (1*S*,4*aS*)

Zhang Guangyou, Liao Yuqing, Wang Zhaohui, Hiroyuki Nohira and Takuji Hirose*

Tetrahedron: Asymmetry 14 (2003) 3297



$C_9H_{13}NO_2$

(*S*)-(+)-1-Amino-3-phenyloxy-2-propanol

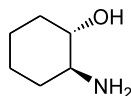
$[\alpha]_D^{20} = +2.4$ (*c* 1.0, methanol)

Source of chirality: resolution

Absolute configuration: (*S*)

Zhang Guangyou, Liao Yuqing, Wang Zhaohui, Hiroyuki Nohira and Takuji Hirose*

Tetrahedron: Asymmetry 14 (2003) 3297



$C_6H_{13}NO$

(1*S*,2*S*)-(+)-2-Aminocyclohexanol

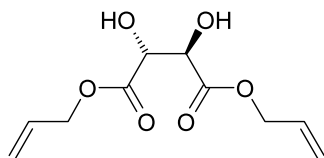
$[\alpha]_D^{24} = +8.2$ (*c* 1.0, methanol)

Source of chirality: resolution

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

Alexander Breuning, Radim Vicik and Tanja Schirmeister*

Tetrahedron: Asymmetry 14 (2003) 3301



$C_{10}H_{14}O_6$

(*R,R*)-Diallyl tartrate

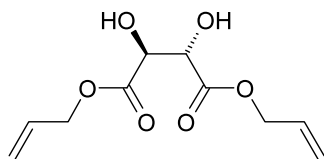
$[\alpha]_D^{20} = +18.4$ (*c* 1.0, MeOH)

Source of chirality: L-tartaric acid

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

Alexander Breuning, Radim Vicik and Tanja Schirmeister*

Tetrahedron: Asymmetry 14 (2003) 3301



$C_{10}H_{14}O_6$

(*S,S*)-Diallyl tartrate

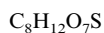
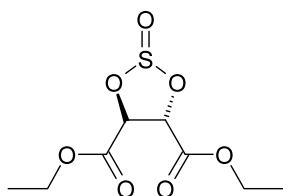
$[\alpha]_D^{20} = -18.9$ (*c* 1.0, MeOH)

Source of chirality: D-tartaric acid

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

Alexander Breuning, Radim Vicik and Tanja Schirmeister*

Tetrahedron: Asymmetry 14 (2003) 3301



(*S,S*)-Diethyl-1,3,2-dioxathiolane-2-oxo-4,5-dicarboxylate

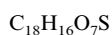
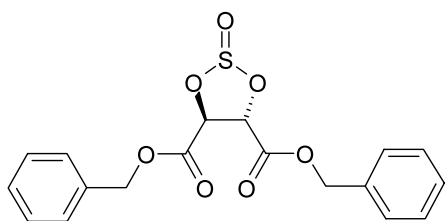
$[\alpha]_D^{20} = +186.5$ (*c* 2.28, MeOH)

Source of chirality: D-tartaric acid

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

Alexander Breuning, Radim Vicik and Tanja Schirmeister*

Tetrahedron: Asymmetry 14 (2003) 3301



(*S,S*)-Dibenzyl-1,3,2-dioxathiolane-2-oxo-4,5-dicarboxylate

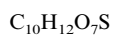
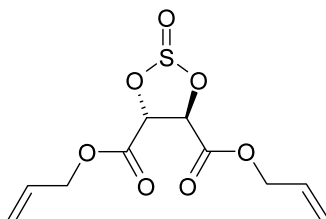
$[\alpha]_D^{20} = +71.8$ (*c* 1.16, MeOH)

Source of chirality: D-tartaric acid

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

Alexander Breuning, Radim Vicik and Tanja Schirmeister*

Tetrahedron: Asymmetry 14 (2003) 3301



(*R,R*)-Diallyl-1,3,2-dioxathiolane-2-oxo-4,5-dicarboxylate

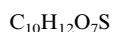
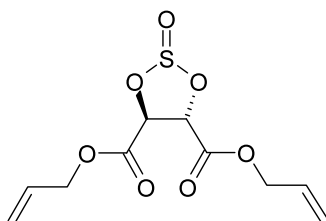
$[\alpha]_D^{20} = -173.5$ (*c* 1.07, MeOH)

Source of chirality: L-tartaric acid

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

Alexander Breuning, Radim Vicik and Tanja Schirmeister*

Tetrahedron: Asymmetry 14 (2003) 3301



(*S,S*)-Diallyl-1,3,2-dioxathiolane-2-oxo-4,5-dicarboxylate

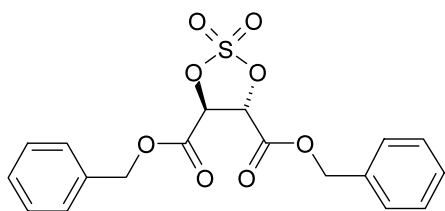
$[\alpha]_D^{20} = +167.0$ (*c* 1.12, MeOH)

Source of chirality: D-tartaric acid

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

Alexander Breuning, Radim Vicik and Tanja Schirmeister*

Tetrahedron: Asymmetry 14 (2003) 3301

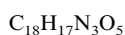
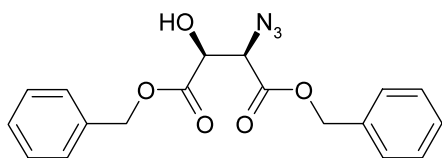


(*S,S*)-Dibenzyl-1,3,2-dioxathiolane-2,2-dioxo-4,5-dicarboxylate

$[\alpha]_D^{20} = +161.9$ (*c* 1.02, MeOH)
Source of chirality: D-tartaric acid
Absolute configuration: (*2S,3S*)

Alexander Breuning, Radim Vicik and Tanja Schirmeister*

Tetrahedron: Asymmetry 14 (2003) 3301

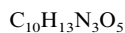
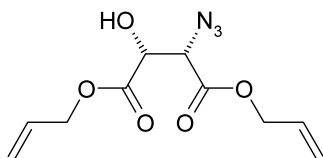


(*2S,3R*)-Dibenzyl-3-azido-2-hydroxy succinate

$[\alpha]_D^{20} = -37.1$ (*c* 1.1, MeOH)
Source of chirality: D-tartaric acid
Absolute configuration: (*2S,3R*)

Alexander Breuning, Radim Vicik and Tanja Schirmeister*

Tetrahedron: Asymmetry 14 (2003) 3301

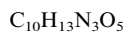
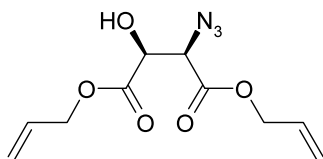


(*2R,3S*)-Diallyl-3-azido-2-hydroxy succinate

$[\alpha]_D^{20} = +30.4$ (*c* 2.005, MeOH)
Source of chirality: L-tartaric acid
Absolute configuration: (*2R,3S*)

Alexander Breuning, Radim Vicik and Tanja Schirmeister*

Tetrahedron: Asymmetry 14 (2003) 3301

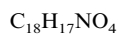
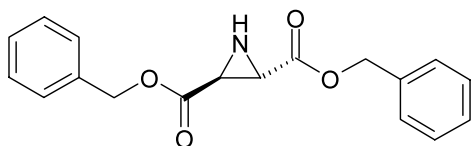


(*2S,3R*)-Diallyl-3-azido-2-hydroxy succinate

$[\alpha]_D^{20} = -30.7$ (*c* 1.06, MeOH)
Source of chirality: D-tartaric acid
Absolute configuration: (*2S,3R*)

Alexander Breuning, Radim Vicik and Tanja Schirmeister*

Tetrahedron: Asymmetry 14 (2003) 3301



(*S,S*)-Dibenzyl aziridine-2,3-dicarboxylate

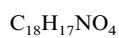
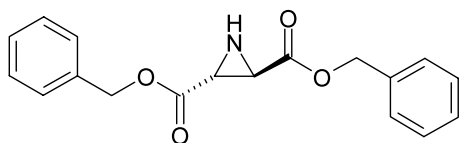
$[\alpha]_D^{20} = +79.3$ (*c* 1.02, MeOH)

Source of chirality: L-tartaric acid

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

Alexander Breuning, Radim Vicik and Tanja Schirmeister*

Tetrahedron: Asymmetry 14 (2003) 3301



(*R,R*)-Dibenzyl aziridine-2,3-dicarboxylate

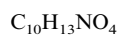
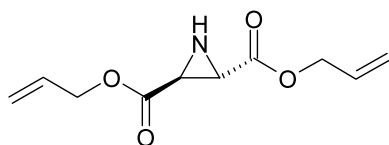
$[\alpha]_D^{20} = -79.8$ (*c* 1.04, MeOH)

Source of chirality: D-tartaric acid

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

Alexander Breuning, Radim Vicik and Tanja Schirmeister*

Tetrahedron: Asymmetry 14 (2003) 3301



(*S,S*)-Diallyl aziridine-2,3-dicarboxylate

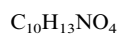
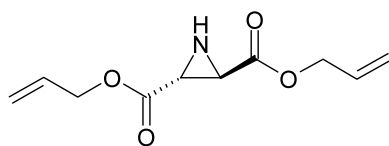
$[\alpha]_D^{20} = +131.5$ (*c* 1.16, MeOH)

Source of chirality: L-tartaric acid

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

Alexander Breuning, Radim Vicik and Tanja Schirmeister*

Tetrahedron: Asymmetry 14 (2003) 3301



(*R,R*)-Diallyl aziridine-2,3-dicarboxylate

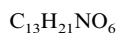
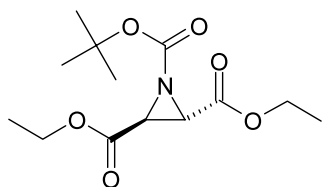
$[\alpha]_D^{20} = -130.8$ (*c* 1.02, MeOH)

Source of chirality: D-tartaric acid

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

Alexander Breuning, Radim Vicik and Tanja Schirmeister*

Tetrahedron: Asymmetry 14 (2003) 3301



(*S,S*)-1-*tert*-Butyl-2,3-diethyl aziridine-1,2,3-tricarboxylate

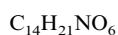
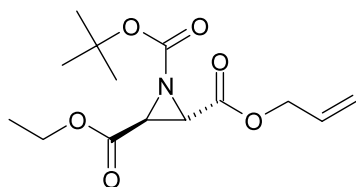
$[\alpha]_D^{20} = +14.8$ (*c* 1.37, EtOH)

Source of chirality: L-tartaric acid

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

Alexander Breuning, Radim Vicik and Tanja Schirmeister*

Tetrahedron: Asymmetry 14 (2003) 3301



(*S,S*)-2-Allyl-1-*tert*-butyl-3-ethyl aziridine-1,2,3-tricarboxylate

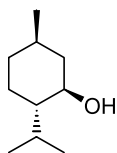
$[\alpha]_D^{20} = +9.0$ (*c* 1.06, MeOH)

Source of chirality: L-tartaric acid

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

Stefano Serra,* Elisabetta Brenna, Claudio Fuganti
and Francesco Maggioni

Tetrahedron: Asymmetry 14 (2003) 3313



(1*R*,3*R*,4*S*)-(-)-Menthol

E_e = 97% (by GC analysis of its acetate)

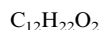
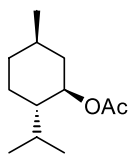
$[\alpha]_D^{20} = -48.9$ (*c* 2, EtOH)

Source of chirality: lipase PS resolution

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

Stefano Serra,* Elisabetta Brenna, Claudio Fuganti
and Francesco Maggioni

Tetrahedron: Asymmetry 14 (2003) 3313



(1*R*,3*R*,4*S*)-(-)-Menthol acetate

E_e = 97% (by GC analysis)

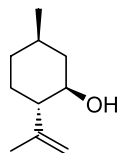
$[\alpha]_D^{20} = -80.5$ (*c* 2, CHCl₃)

Source of chirality: lipase PS resolution

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

Stefano Serra,* Elisabetta Brenna, Claudio Fuganti
and Francesco Maggioni

Tetrahedron: Asymmetry 14 (2003) 3313



C₁₀H₁₈O

(1*R*,3*R*,4*S*)-(-)-Isopulegol

Ee=98% (by GC analysis of its acetate)

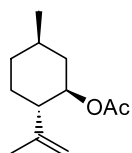
$[\alpha]_D^{20} = -13.6$ (c 1, CHCl₃)

Source of chirality: lipase PS resolution

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

Stefano Serra,* Elisabetta Brenna, Claudio Fuganti
and Francesco Maggioni

Tetrahedron: Asymmetry 14 (2003) 3313



C₁₂H₂₀O₂

(1*R*,3*R*,4*S*)-(-)-Isopulegol acetate

Ee=98% (by GC analysis)

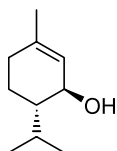
$[\alpha]_D^{20} = -17.9$ (c 1, CHCl₃)

Source of chirality: lipase PS resolution

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

Stefano Serra,* Elisabetta Brenna, Claudio Fuganti
and Francesco Maggioni

Tetrahedron: Asymmetry 14 (2003) 3313



C₁₀H₁₈O

(3*S*,4*S*)-(-)-*trans*-Piperitol

Ee=99% (by GC analysis of its acetate)

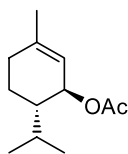
$[\alpha]_D^{20} = -30.4$ (c 2, EtOH)

Source of chirality: lipase PS resolution

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

Stefano Serra,* Elisabetta Brenna, Claudio Fuganti
and Francesco Maggioni

Tetrahedron: Asymmetry 14 (2003) 3313



C₁₂H₂₀O₂

(3*S*,4*S*)-(-)-*trans*-Piperitol acetate

Ee=99% (by GC analysis of its acetate)

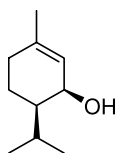
$[\alpha]_D^{20} = -144.6$ (c 2, CHCl₃)

Source of chirality: lipase PS resolution

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

Stefano Serra,* Elisabetta Brenna, Claudio Fuganti
and Francesco Maggioni

Tetrahedron: Asymmetry 14 (2003) 3313



$C_{10}H_{18}O$

(3*S*,4*R*)-(-)-*cis*-Piperitol

Ee=99% (by GC analysis of its acetate)

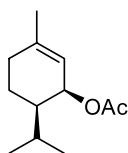
$[\alpha]_D^{20} = -203$ (c 2, EtOH)

Source of chirality: lipase PS resolution

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

Stefano Serra,* Elisabetta Brenna, Claudio Fuganti
and Francesco Maggioni

Tetrahedron: Asymmetry 14 (2003) 3313



$C_{12}H_{20}O_2$

(3*S*,4*R*)-(-)-*cis*-piperitol acetate

Ee=99% (by GC analysis)

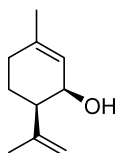
$[\alpha]_D^{20} = -376$ (c 2, $CHCl_3$)

Source of chirality: lipase PS resolution

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

Stefano Serra,* Elisabetta Brenna, Claudio Fuganti
and Francesco Maggioni

Tetrahedron: Asymmetry 14 (2003) 3313



$C_{10}H_{16}O$

(3*R*,4*R*)-(-)-*cis*-Isopiperitenol

Ee=99% (by GC analysis of its acetate)

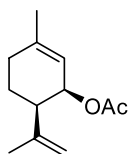
$[\alpha]_D^{20} = -228$ (c 2, EtOH)

Source of chirality: lipase PS resolution

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

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and Francesco Maggioni

Tetrahedron: Asymmetry 14 (2003) 3313



$C_{12}H_{18}O_2$

(3*R*,4*R*)-(-)-*cis*-Isopiperitenol acetate

Ee=99% (by GC analysis)

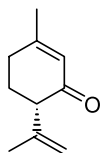
$[\alpha]_D^{20} = -378$ (c 2, $CHCl_3$)

Source of chirality: lipase PS resolution

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

Stefano Serra,* Elisabetta Brenna, Claudio Fuganti
and Francesco Maggioni

Tetrahedron: Asymmetry 14 (2003) 3313



C₁₀H₁₄O

(4S)-(+)-Isopiperitenone

Ee = 70%

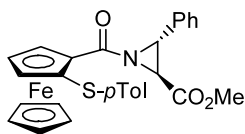
[α]_D²⁰ = +30.1 (c 2, CHCl₃)

Source of chirality: lipase PS resolution

Absolute configuration: 4S

Bianca F. Bonini,* Mariafrancesca Fochi, Mauro Comes-Franchini,
Alfredo Ricci, Lambertus Thijs and Binne Zwanenburg*

Tetrahedron: Asymmetry 14 (2003) 3321



C₂₈H₂₅FeNO₃S

Methyl (2S,3R)-1-[(S_{Fc})-(p-tolylsulfanyl)ferrocenyl]-3-phenyl-aziridine-2-carboxylate

[α]_D²⁰ -32.6 (c 0.59, CHCl₃)

D.e. >99

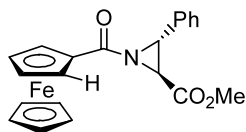
E.e. >99

Source of chirality: asymmetric synthesis and
chemical resolution

Absolute configuration: (2R,3S,S_{Fc})

Bianca F. Bonini,* Mariafrancesca Fochi, Mauro Comes-Franchini,
Alfredo Ricci, Lambertus Thijs and Binne Zwanenburg*

Tetrahedron: Asymmetry 14 (2003) 3321



C₂₁H₁₉FeNO₃

Methyl (2S,3R)-1-ferrocenyl-3-phenyl-aziridine-2-carboxylate

[α]_D²⁰ -33.2 (c 0.48, CHCl₃)

D.e. >99

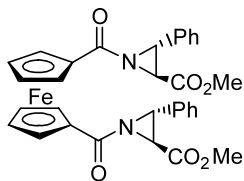
E.e. >99

Source of chirality: chemical resolution

Absolute configuration: (2R,3S)

Bianca F. Bonini,* Mariafrancesca Fochi, Mauro Comes-Franchini,
Alfredo Ricci, Lambertus Thijs and Binne Zwanenburg*

Tetrahedron: Asymmetry 14 (2003) 3321



C₃₂H₂₉FeN₂O₆

1,1'-Bis[(2S,3R)keto(3-phenyl-2-methoxycarbonyl)-aziridin-1-yl]ferrocene

[α]_D²⁰ +115.2 (c 0.73, CHCl₃)

D.e. >99

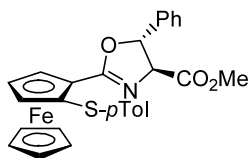
E.e. >99

Source of chirality: chemical resolution

Absolute configuration: (2R,3S)

Bianca F. Bonini,* Mariafrancesca Fochi, Mauro Comes-Franchini,
Alfredo Ricci, Lambertus Thijs and Binne Zwanenburg*

Tetrahedron: Asymmetry 14 (2003) 3321



$C_{28}H_{25}FeNO_3S$

Methyl (5*R*,4*S*)-2-[(*S*_{FC})-(p-tolylsulfanyl)ferrocenyl]-5-phenyl-oxazoline-4-carboxylate

$[\alpha]_D^{20} +230$ (*c* 0.815, CHCl₃)

D.e. >99

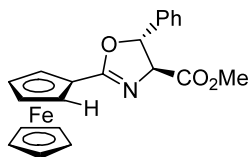
E.e. >99

Source of chirality: asymmetric synthesis and
chemical resolution

Absolute configuration: (5*R*,4*S*,*S*_{FC})

Bianca F. Bonini,* Mariafrancesca Fochi, Mauro Comes-Franchini,
Alfredo Ricci, Lambertus Thijs and Binne Zwanenburg*

Tetrahedron: Asymmetry 14 (2003) 3321



$C_{21}H_{19}FeNO_3$

Methyl (5*R*,4*S*)-2-ferrocenyl-5-phenyl-oxazoline-4-carboxylate

$[\alpha]_D^{20} +51.5$ (*c* 0.71, CHCl₃)

D.e. >99

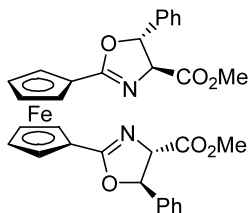
E.e. >99

Source of chirality: chemical resolution

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

Bianca F. Bonini,* Mariafrancesca Fochi, Mauro Comes-Franchini,
Alfredo Ricci, Lambertus Thijs and Binne Zwanenburg*

Tetrahedron: Asymmetry 14 (2003) 3321



$C_{32}H_{29}FeN_2O_6$

1,1'-Bis[(5*R*,4*S*)-5-phenyl-4-methoxycarbonyl-oxazolin-2-yl]ferrocene

$[\alpha]_D^{20} +128.3$ (*c* 0.5, CHCl₃)

D.e. >99

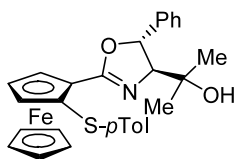
E.e. >99

Source of chirality: chemical resolution

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

Bianca F. Bonini,* Mariafrancesca Fochi, Mauro Comes-Franchini,
Alfredo Ricci, Lambertus Thijs and Binne Zwanenburg*

Tetrahedron: Asymmetry 14 (2003) 3321



$C_{29}H_{29}FeNO_2S$

(5*R*,4*S*)-2-[(*S*_{FC})-(p-Tolylsulfanyl)ferrocenyl]-5-phenyl-4-(1-hydroxy-1-methylethyl) oxazoline

$[\alpha]_D^{20} +98.0$ (*c* 0.585, CHCl₃)

D.e. >99

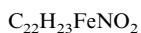
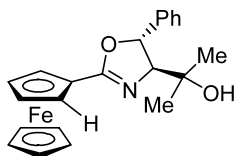
E.e. >99

Source of chirality: asymmetric synthesis and
chemical resolution

Absolute configuration: (5*R*,4*S*,*S*_{FC})

Bianca F. Bonini,* Mariafrancesca Fochi, Mauro Comes-Franchini,
Alfredo Ricci, Lambertus Thijs and Binne Zwanenburg*

Tetrahedron: Asymmetry 14 (2003) 3321



(5*R*,4*S*)-2-Ferrocenyl-5-phenyl-4-(1-hydroxy-1-methylethyl)oxazoline

$[\alpha]_D^{20} -31.6$ (*c* 0.98, $CHCl_3$)

D.e. >99

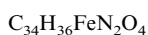
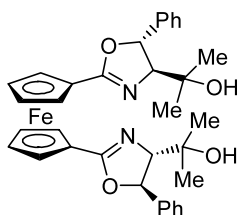
E.e. >99

Source of chirality: chemical resolution

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

Bianca F. Bonini,* Mariafrancesca Fochi, Mauro Comes-Franchini,
Alfredo Ricci, Lambertus Thijs and Binne Zwanenburg*

Tetrahedron: Asymmetry 14 (2003) 3321



1,1'-Bis[(4*S*,5*R*)-(5-phenyl-4-(1-hydroxy-1-methylethyl)oxazolin-2-yl)]ferrocene

$[\alpha]_D^{20} -67$ (*c* 0.43, $CHCl_3$)

D.e. >99

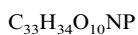
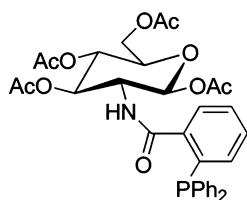
E.e. >99

Source of chirality: chemical resolution

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

Mustapha Tollabi, Eric Framery, Catherine Goux-Henry
and Denis Sinou*

Tetrahedron: Asymmetry 14 (2003) 3329



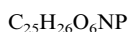
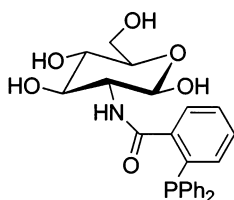
1,3,4,6-Tetra-*O*-acetyl-2-deoxy-2-[(2-(diphenylphosphino)benzoyl)amino]- β -D-glucopyranose

$[\alpha]_D^{20} = +36.3$ (*c* 1, $CHCl_3$)

Source of chirality: 2-amino-1,3,4,6-tetra-*O*-acetyl-2-deoxy- β -D-glucopyranose

Mustapha Tollabi, Eric Framery, Catherine Goux-Henry
and Denis Sinou*

Tetrahedron: Asymmetry 14 (2003) 3329



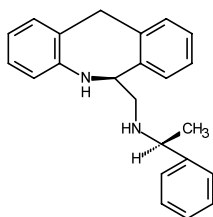
2-Deoxy-2-[(2-(diphenylphosphino)benzoyl)amino]-D-glucopyranose

$[\alpha]_D^{20} = +25.2$ (*c* 1, THF)

Source of chirality: 2-amino-2-deoxy-D-glucopyranose

J. Pawłowska, Z. Czarnocki,* K. Wojtasiewicz and J. K. Maurin

Tetrahedron: Asymmetry 14 (2003) 3335



$C_{23}H_{23}N_2$

N-[(6*S*)-6,11-Dihydro-5*H*-dibenzo[*b,e*]azepin-6-ylmethyl]-*N*-(1'*S*-1-phenylethyl)amine

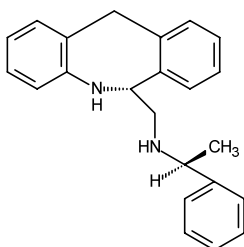
$[\alpha]_D^{22} = +40.5$ (*c* 1.2, $CHCl_3$)

Source of chirality: diastereoselective synthesis

Absolute configuration: (6*S*)-(1'*S*)

J. Pawłowska, Z. Czarnocki,* K. Wojtasiewicz and J. K. Maurin

Tetrahedron: Asymmetry 14 (2003) 3335



$C_{23}H_{23}N_2$

N-[(6*R*)-6,11-Dihydro-5*H*-dibenzo[*b,e*]azepin-6-ylmethyl]-*N*-(1'*S*-1-phenylethyl)amine

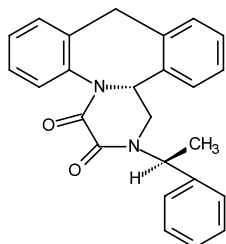
$[\alpha]_D^{22} = -89$ (*c* 1.2, $CHCl_3$)

Source of chirality: diastereoselective synthesis

Absolute configuration: (6*R*)-(1'*S*)

J. Pawłowska, Z. Czarnocki,* K. Wojtasiewicz and J. K. Maurin

Tetrahedron: Asymmetry 14 (2003) 3335



$C_{25}H_{22}N_2O_2$

(14*bR*)-2-(1'*S*-1-Phenylethyl)-1,2,10,14*b*-tetrahydrodibenzo[*c,f*]pyrazino[1,2-*a*]azepine-3,4-dione

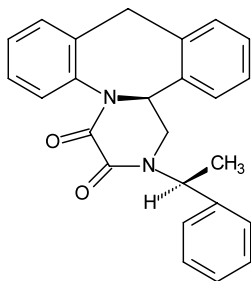
$[\alpha]_D^{22} = -156$ (*c* 1.2, $CHCl_3$)

Source of chirality: diastereoselective synthesis

Absolute configuration: (14*bR*)-(1'*S*)

J. Pawłowska, Z. Czarnocki,* K. Wojtasiewicz and J. K. Maurin

Tetrahedron: Asymmetry 14 (2003) 3335



$C_{25}H_{22}N_2O_2$

(14*bS*)-2-(1'*S*-1-Phenylethyl)-1,2,10,14*b*-tetrahydrodibenzo[*c,f*]pyrazino[1,2-*a*]azepine-3,4-dione

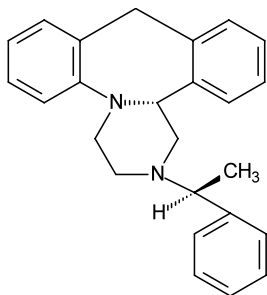
$[\alpha]_D^{22} = +85$ (*c* 1.2, $CHCl_3$)

Source of chirality: diastereoselective synthesis

Absolute configuration: (14*bS*)-(1'*S*)

J. Pawłowska, Z. Czarnocki,* K. Wojtasiewicz and J. K. Maurin

Tetrahedron: Asymmetry 14 (2003) 3335



$C_{25}H_{26}N_2$

(14bR)-2-(1'S-1-Phenylethyl)-1,2,3,4,10,14b-hexahydrodibenzo[*c,f*]pyrazino[1,2-*a*]azepine

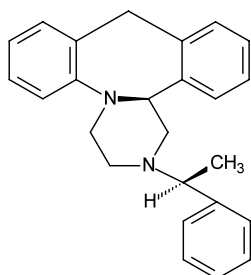
$[\alpha]_D^{22} = -341.8$ (*c* 1.1, $CHCl_3$)

Source of chirality: diastereoselective synthesis

Absolute configuration: (14bR)-(1'S)

J. Pawłowska, Z. Czarnocki,* K. Wojtasiewicz and J. K. Maurin

Tetrahedron: Asymmetry 14 (2003) 3335



$C_{25}H_{26}N_2$

(14bS)-2-(1'S-1-Phenylethyl)-1,2,3,4,10,14b-hexahydrodibenzo[*c,f*]pyrazino[1,2-*a*]azepine

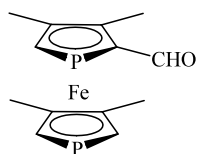
$[\alpha]_D^{22} = +157.7$ (*c* 0.91, $CHCl_3$)

Source of chirality: diastereoselective synthesis

Absolute configuration: (14bS)-(1'S)

Arkadiusz Kłys, Janusz Zakrzewski* and Lucjan Jerzykiewicz

Tetrahedron: Asymmetry 14 (2003) 3343



$C_{13}H_{16}FeOP_2$

(*R*)-3,3',4,4'-Tetramethyl-1,1'-diphosphaferrocene-2-carboxaldehyde

E.e. >99%

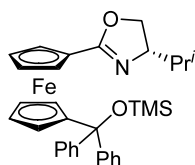
$[\alpha]_D^{20} = -403$ (*c* = 0.036, chloroform)

Source of chirality: resolution

Absolute configuration : *R*

Ming Li, Ke Yuan, Yang-Yang Li, Bo-Xun Cao, Jie Sun and Xue-Long Hou*

Tetrahedron: Asymmetry 14 (2003) 3347



$C_{32}H_{37}FeNO_2Si$

1-[(*S*)-4-Isopropyl-2,5-oxazoliny]-1'-(α -diphenyltrimethylsilyloxymethyl)ferrocene

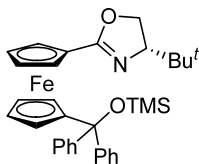
$[\alpha]_D^{20} = -82.6$ (*c* 0.16, $CHCl_3$)

Source of chirality: (*S*)-valinol

Absolute configuration: (*S*)

Ming Li, Ke Yuan, Yang-Yang Li, Bo-Xun Cao, Jie Sun and Xue-Long Hou*

Tetrahedron: Asymmetry 14 (2003) 3347



$C_{33}H_{39}FeNO_2Si$

1-[(*S*)-4-*tert*-Butyl-2,5-oxazoliny]-1'-(α -diphenyltrimethylsiloxymethyl)ferrocene

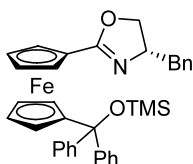
$[\alpha]_D^{20} = -116$ (*c* 0.28, $CHCl_3$)

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

Absolute configuration: (*S*)

Ming Li, Ke Yuan, Yang-Yang Li, Bo-Xun Cao, Jie Sun and Xue-Long Hou*

Tetrahedron: Asymmetry 14 (2003) 3347



$C_{36}H_{37}FeNO_2Si$

1-[(*S*)-4-Benzyl-2,5-oxazoliny]-1'-(α -diphenyltrimethylsiloxymethyl)ferrocene

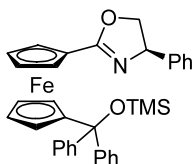
$[\alpha]_D^{20} = -14$ (*c* 0.15, $CHCl_3$)

Source of chirality: (*S*)-phenylaniol

Absolute configuration: (*S*)

Ming Li, Ke Yuan, Yang-Yang Li, Bo-Xun Cao, Jie Sun and Xue-Long Hou*

Tetrahedron: Asymmetry 14 (2003) 3347



$C_{35}H_{35}FeNO_2Si$

1-[(*R*)-4-Phenyl-2,5-oxazoliny]-1'-(α -diphenyltrimethylsiloxymethyl)ferrocene

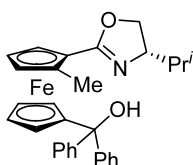
$[\alpha]_D^{20} = +97.2$ (*c* 0.35, $CHCl_3$)

Source of chirality: (*R*)-phenylglycinol

Absolute configuration: (*R*)

Ming Li, Ke Yuan, Yang-Yang Li, Bo-Xun Cao, Jie Sun and Xue-Long Hou*

Tetrahedron: Asymmetry 14 (2003) 3347



$C_{30}H_{31}FeNO_2$

1-[(*S*)-4-Isopropyl-2,5-oxazoliny]-1'-(α -diphenylhydroxymethyl)-2-(*Rp*)-methylferrocene

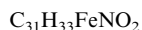
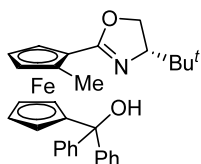
$[\alpha]_D^{20} = -281$ (*c* 0.24, $CHCl_3$)

Source of chirality: (*S*)-valinol

Absolute configuration: (*S,Rp*)

Ming Li, Ke Yuan, Yang-Yang Li, Bo-Xun Cao, Jie Sun and Xue-Long Hou*

Tetrahedron: Asymmetry 14 (2003) 3347



1-[(*S*)-4-*tert*-Butyl-2,5-oxazoliny]-1'-(α -diphenylhydroxymethyl)-2-(*Rp*)-methylferrocene

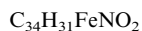
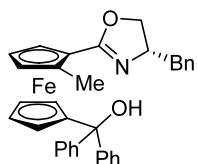
$[\alpha]_D^{20} = -358$ (*c* 0.27, $CHCl_3$)

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

Absolute configuration: (*S,Rp*)

Ming Li, Ke Yuan, Yang-Yang Li, Bo-Xun Cao, Jie Sun and Xue-Long Hou*

Tetrahedron: Asymmetry 14 (2003) 3347



1-[(*S*)-4-Benzyl-2,5-oxazoliny]-1'-(α -diphenylhydroxymethyl)-2-(*Rp*)-methylferrocene

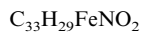
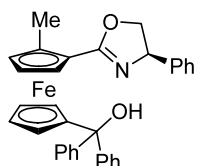
$[\alpha]_D^{20} = -224$ (*c* 0.10, $CHCl_3$)

Source of chirality: (*S*)-phenylaniol

Absolute configuration: (*S,Rp*)

Ming Li, Ke Yuan, Yang-Yang Li, Bo-Xun Cao, Jie Sun and Xue-Long Hou*

Tetrahedron: Asymmetry 14 (2003) 3347



1-[(*R*)-4-Phenyl-2,5-oxazoliny]-1'-(α -diphenylhydroxymethyl)-2-(*Sp*)-methylferrocene

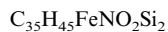
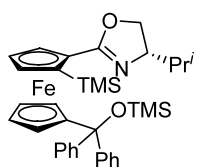
$[\alpha]_D^{20} = +284$ (*c* 0.10, $CHCl_3$)

Source of chirality: (*R*)-phenylglycinol

Absolute configuration: (*R,Sp*)

Ming Li, Ke Yuan, Yang-Yang Li, Bo-Xun Cao, Jie Sun and Xue-Long Hou*

Tetrahedron: Asymmetry 14 (2003) 3347



1-[(*S*)-4-Isopropyl-2,5-oxazoliny]-1'-(α -diphenyltrimethylsilyloxymethyl)-2-(*Sp*)-trimethylsilylferrocene

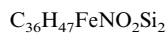
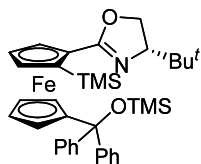
$[\alpha]_D^{20} = +49$ (*c* 0.195, $CHCl_3$)

Source of chirality: (*S*)-valinol

Absolute configuration: (*S,Sp*)

Ming Li, Ke Yuan, Yang-Yang Li, Bo-Xun Cao, Jie Sun and Xue-Long Hou*

Tetrahedron: Asymmetry 14 (2003) 3347



1-[(*S*)-4-*tert*-Butyl-2,5-oxazoliny]-1'-(α -diphenyltrimethylsiloxymethyl)-2-(*Sp*)-trimethylsilylferrocene

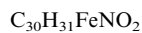
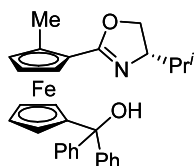
$[\alpha]_D^{20} = +129$ (*c* 0.09, $CHCl_3$)

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

Absolute configuration: (*S,Sp*)

Ming Li, Ke Yuan, Yang-Yang Li, Bo-Xun Cao, Jie Sun and Xue-Long Hou*

Tetrahedron: Asymmetry 14 (2003) 3347



1-[(*S*)-4-Isopropyl-2,5-oxazoliny]-1'-(α -diphenylhydroxymethyl)-2-(*Sp*)-methylferrocene

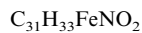
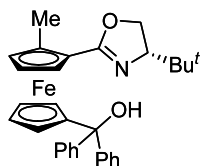
$[\alpha]_D^{20} = +136$ (*c* 0.23, $CHCl_3$)

Source of chirality: (*S*)-valinol

Absolute configuration: (*S,Sp*)

Ming Li, Ke Yuan, Yang-Yang Li, Bo-Xun Cao, Jie Sun and Xue-Long Hou*

Tetrahedron: Asymmetry 14 (2003) 3347



1-[(*S*)-4-*tert*-Butyl-2,5-oxazoliny]-1'-(α -diphenylhydroxymethyl)-2-(*Sp*)-methylferrocene

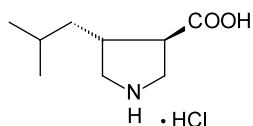
$[\alpha]_D^{20} = +127$ (*c* 0.15, $CHCl_3$)

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

Absolute configuration: (*S,Sp*)

Roberta Galeazzi, Gianluca Martelli, Giovanna Mobbili, Mario Orena* and Samuele Rinaldi

Tetrahedron: Asymmetry 14 (2003) 3353



(3*R,4R*)-4-(2'-Methylprop-1'-yl)-3-pyrrolidine carboxylic acid hydrochloride

E.e. >98%

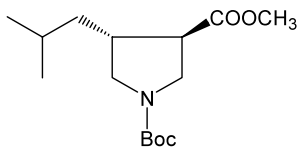
$[\alpha]_D = +36.9$ (*c* 1.0, H_2O)

Source of chirality: (*S*)-phenylethylamine

Absolute configuration: 3*R,4R*

Roberta Galeazzi, Gianluca Martelli, Giovanna Mobbili,
Mario Orena* and Samuele Rinaldi

Tetrahedron: Asymmetry 14 (2003) 3353

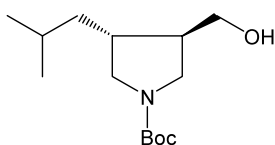


$C_{15}H_{27}NO_4$
Methyl (3*R*,4*R*)-1-*t*-butoxycarbonyl-4-(2'-methylprop-1'-yl)-3-pyrrolidine carboxylate

E.e. >98%
 $[\alpha]_D = +37.5$ (*c* 2.0, $CHCl_3$)
Source of chirality: (*S*)-phenylethylamine
Absolute configuration: 3*R*,4*R*

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Mario Orena* and Samuele Rinaldi

Tetrahedron: Asymmetry 14 (2003) 3353

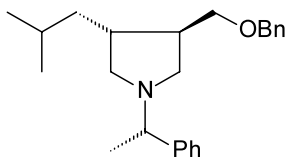


$C_{14}H_{27}NO_3$
(3*R*,4*R*)-1-(*t*-Butoxycarbonyl)-3-hydroxymethyl-4-(2'-methylprop-1'-yl)pyrrolidine

E.e. >98%
 $[\alpha]_D = +35.8$ (*c* 4.6, $CHCl_3$)
Source of chirality: (*S*)-phenylethylamine
Absolute configuration: 3*R*,4*R*

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Mario Orena* and Samuele Rinaldi

Tetrahedron: Asymmetry 14 (2003) 3353

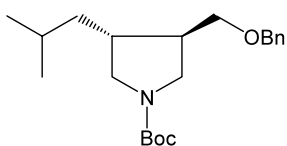


$C_{24}H_{33}NO$
(3*R*,4*R*,1'*S*)-4-Benzyloxymethyl-3-(2''-methylprop-1''-yl)-1-(1'-phenylethyl)pyrrolidine

E.e. >98%
 $[\alpha]_D = +10.1$ (*c* 1, $CHCl_3$)
Source of chirality: (*S*)-phenylethylamine
Absolute configuration: 3*R*,4*R*,1'*S*

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Mario Orena* and Samuele Rinaldi

Tetrahedron: Asymmetry 14 (2003) 3353

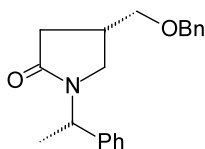


$C_{21}H_{33}NO_3$
(3*R*,4*R*)-1-(*t*-Butoxycarbonyl)-3-hydroxymethyl-4-(2'-methylprop-1'-yl)pyrrolidine

E.e. >98%
 $[\alpha]_D = +26.8$ (*c* 0.5, $CHCl_3$)
Source of chirality: (*S*)-phenylethylamine
Absolute configuration: 3*R*,4*R*

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Mario Orena* and Samuele Rinaldi

Tetrahedron: Asymmetry 14 (2003) 3353



$C_{20}H_{23}NO_2$
(4*S*,1'*S*)-4-Benzyloxymethyl-1-(1'-phenylethyl)pyrrolidin-2-one

E.e. >98%

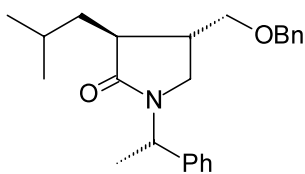
$[\alpha]_D = -79.4$ (*c* 1, $CHCl_3$)

Source of chirality: (*S*)-phenylethylamine

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

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Mario Orena* and Samuele Rinaldi

Tetrahedron: Asymmetry 14 (2003) 3353



$C_{24}H_{31}NO_2$
(3*S*,4*S*,1'*S*)-4-Benzyloxymethyl-3-(2''-methylprop-1''-yl)-1-(1'-phenylethyl)pyrrolidin-2-one

E.e. >98%

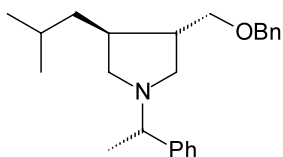
$[\alpha]_D = -75.2$ (*c* 1, $CHCl_3$)

Source of chirality: (*S*)-phenylethylamine

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

Roberta Galeazzi, Gianluca Martelli, Giovanna Mobbili,
Mario Orena* and Samuele Rinaldi

Tetrahedron: Asymmetry 14 (2003) 3353



$C_{24}H_{33}NO$
(3*S*,4*S*,1'*S*)-4-Benzyloxymethyl-3-(2''-methylprop-1''-yl)-1-(1'-phenylethyl)pyrrolidine

E.e. >98%

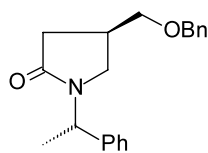
$[\alpha]_D = -38.6$ (*c* 0.7, $CHCl_3$)

Source of chirality: (*S*)-phenylethylamine

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

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Mario Orena* and Samuele Rinaldi

Tetrahedron: Asymmetry 14 (2003) 3353



$C_{20}H_{23}NO_2$
(4*R*,1'*S*)-4-Benzyloxymethyl-1-(1'-phenylethyl)pyrrolidin-2-one

E.e. >98%

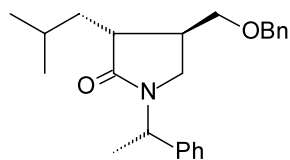
$[\alpha]_D = -38.4$ (*c* 1, $CHCl_3$)

Source of chirality: (*S*)-phenylethylamine

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

Roberta Galeazzi, Gianluca Martelli, Giovanna Mobbili,
Mario Orena* and Samuele Rinaldi

Tetrahedron: Asymmetry 14 (2003) 3353

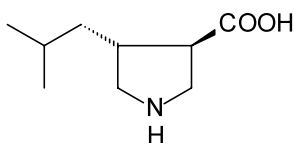


$C_{24}H_{31}NO_2$
(3*R*,4*R*,1'*S*)-4-Benzyloxymethyl-3-(2''-methylprop-1''-yl)-1-(1'-phenylethyl)pyrrolidin-2-one

E.e. >98%
 $[\alpha]_D = -56.1$ (*c* 1, $CHCl_3$)
Source of chirality: (*S*)-phenylethylamine
Absolute configuration: 3*R*,4*R*,1'*S*

Roberta Galeazzi, Gianluca Martelli, Giovanna Mobbili,
Mario Orena* and Samuele Rinaldi

Tetrahedron: Asymmetry 14 (2003) 3353

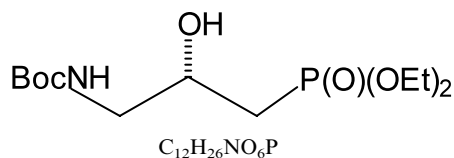


$C_9H_{17}NO_2$
(3*R*,4*R*)-4-(2'-Methylprop-1'-yl)-3-pyrrolidine carboxylic acid

E.e. >98%
 $[\alpha]_D = +43.8$ (*c* 0.5, MeOH)
Source of chirality: (*S*)-phenylethylamine
Absolute configuration: 3*R*,4*R*

Andrzej E. Wróblewski* and Anetta Hałajewska-Wosik

Tetrahedron: Asymmetry 14 (2003) 3359

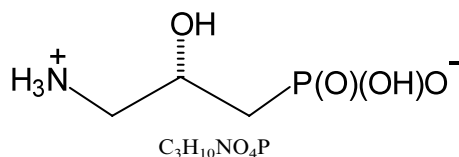


$C_{12}H_{26}NO_6P$
Diethyl (*S*)-3-[(*tert*-butoxycarbonyl)amino]-2-hydroxypropylphosphonate

E.e. = 100%
 $[\alpha]_D^{20} = -2.6$ (*c* 2.8 in $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (2*S*)

Andrzej E. Wróblewski* and Anetta Hałajewska-Wosik

Tetrahedron: Asymmetry 14 (2003) 3359

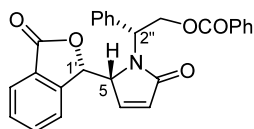


$C_3H_{10}NO_4P$
(*S*)-3-Amino-2-hydroxypropylphosphonic acid

E.e. = 100%
 $[\alpha]_D^{20} = -41.4$ (*c* 0.9 in H_2O)
Source of chirality: asymmetric synthesis
Absolute configuration: (2*S*)

Martial Toffano, Bruno Dudot, Anne Zaparucha, Jacques Royer,*
Mireille Sevrin, Pascal George and Angèle Chiaroni

Tetrahedron: Asymmetry 14 (2003) 3365



$C_{27}H_{21}NO_5$

Benzoic acid 2-[2-oxo-(5R)-5-[(1S)-3-oxo-1,3-dihydroisobenzofuran-1-yl]-2,5-dihydropyrrolidin-1-yl]-(2R)-2-phenylethyl ester

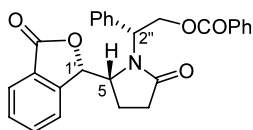
$[\alpha]_D^{20} = +175$ (c 0.5, $CHCl_3$)

Source of chirality: asymmetric synthesis and separation

Absolute configuration: (5R,1'S,2''R) (chemical correlation)

Martial Toffano, Bruno Dudot, Anne Zaparucha, Jacques Royer,*
Mireille Sevrin, Pascal George and Angèle Chiaroni

Tetrahedron: Asymmetry 14 (2003) 3365



$C_{27}H_{23}NO_5$

Benzoic acid 2-[2-oxo-(5R)-5-[(1S)-3-oxo-1,3-dihydroisobenzofuran-1-yl]pyrrolidin-1-yl]-(2R)-2-phenylethyl ester

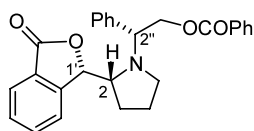
$[\alpha]_D^{20} = +56$ (c 0.7, $CHCl_3$)

Source of chirality: asymmetric synthesis and separation

Absolute configuration: (5R,1'S,2''R) (chemical correlation)

Martial Toffano, Bruno Dudot, Anne Zaparucha, Jacques Royer,*
Mireille Sevrin, Pascal George and Angèle Chiaroni

Tetrahedron: Asymmetry 14 (2003) 3365



$C_{27}H_{25}NO_4$

Benzoic acid 2-[(2R)-2-[(1S)-3-oxo-1,3-dihydroisobenzofuran-1-yl]pyrrolidin-1-yl]-(2R)-2-phenylethyl ester

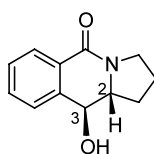
$[\alpha]_D^{20} = +34$ (c 1.6, $CHCl_3$)

Source of chirality: asymmetric synthesis and separation

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

Martial Toffano, Bruno Dudot, Anne Zaparucha, Jacques Royer,*
Mireille Sevrin, Pascal George and Angèle Chiaroni

Tetrahedron: Asymmetry 14 (2003) 3365



$C_{12}H_{13}NO_2$

10-Hydroxy-(10S,10aR)-2,3,10,10a-tetrahydro-1H-pyrrolo[1,2-b]isoquinolin-5-one

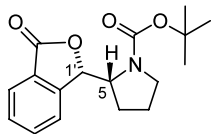
$[\alpha]_D^{20} = -172$ (c 0.5, $CHCl_3$)

Source of chirality: asymmetric synthesis and separation

Absolute configuration: (2R,3S) (chemical correlation)

Martial Toffano, Bruno Dudot, Anne Zaparucha, Jacques Royer,*
Mireille Sevrin, Pascal George and Angèle Chiaroni

Tetrahedron: Asymmetry 14 (2003) 3365



C₁₇H₂₁NO₄

(2R)-2-[(1S)-3-Oxo-1,3-dihydroisobenzofuran-1-yl]pyrrolodone-1-carboxylic acid *tert*-butyl ester

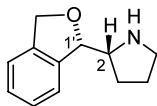
$[\alpha]_D^{20} = +51$ (*c* 0.7, CHCl₃)

Source of chirality: asymmetric synthesis and separation

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

Martial Toffano, Bruno Dudot, Anne Zaparucha, Jacques Royer,*
Mireille Sevrin, Pascal George and Angèle Chiaroni

Tetrahedron: Asymmetry 14 (2003) 3365



C₁₂H₁₅NO

(2R)-2-[(1S)-1,3-Dihydroisobenzofuran-1-yl]pyrrolidine

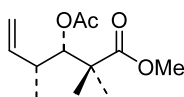
$[\alpha]_D^{20} = +24$ (*c* 0.45, CH₃OH)

Source of chirality: asymmetric synthesis and separation

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

Carmela Della Monica, Nakia Maulucci, Francesco De Riccardis*
and Irene Izzo*

Tetrahedron: Asymmetry 14 (2003) 3371



C₁₂H₂₀O₄

(3S,4R)-3-Acetoxy-2,2,4-trimethyl-hex-5-enoic acid methyl ester

E.e. = 85%

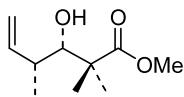
$[\alpha]_D^{25} = +8.5$ (*c* 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (3S,4R)

Carmela Della Monica, Nakia Maulucci, Francesco De Riccardis*
and Irene Izzo*

Tetrahedron: Asymmetry 14 (2003) 3371



C₁₀H₁₈O₃

(3S,4R)-3-Hydroxy-2,2,4-trimethyl-hex-5-enoic acid methyl ester

E.e. = 85%

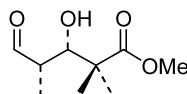
$[\alpha]_D^{25} = +12.2$ (*c* 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (3S,4R)

Carmela Della Monica, Nakia Maulucci, Francesco De Riccardis*
and Irene Izzo*

Tetrahedron: Asymmetry 14 (2003) 3371



C₉H₁₆O₄

(3*S*,4*S*)-3-Hydroxy-2,2,4-trimethyl-5-oxo-pentanoic acid methyl ester

E.e. = 85%

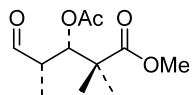
$[\alpha]_D^{25} = +13.8$ (*c* 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

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

Carmela Della Monica, Nakia Maulucci, Francesco De Riccardis*
and Irene Izzo*

Tetrahedron: Asymmetry 14 (2003) 3371



C₉H₁₄O₃

(3*S*,4*S*)-3-Acetoxy-2,2,4-trimethyl-5-oxo-pentanoic acid methyl ester

E.e. = 85%

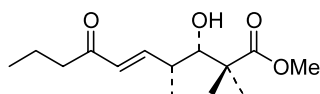
$[\alpha]_D^{25} = +13.1$ (*c* 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

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

Carmela Della Monica, Nakia Maulucci, Francesco De Riccardis*
and Irene Izzo*

Tetrahedron: Asymmetry 14 (2003) 3371



C₁₄H₂₄O₄

(3*S*,4*R*)-3-Hydroxy-2,2,4-trimethyl-7-oxo-dec-5-enoic acid methyl ester

E.e. = 85%

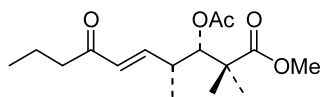
$[\alpha]_D^{25} = +12.1$ (*c* 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

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

Carmela Della Monica, Nakia Maulucci, Francesco De Riccardis*
and Irene Izzo*

Tetrahedron: Asymmetry 14 (2003) 3371



C₁₆H₂₆O₅

(3*S*,4*R*)-3-Acetoxy-2,2,4-trimethyl-7-oxo-dec-5-enoic acid methyl ester

E.e. = 85%

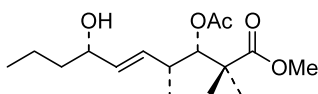
$[\alpha]_D^{25} = +30.6$ (*c* 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

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

Carmela Della Monica, Nakiá Maulucci, Francesco De Riccardis* and Irene Izzo*

Tetrahedron: Asymmetry 14 (2003) 3371



$C_{16}H_{28}O_5$

(3*S*,4*R*,7*S*)-3-Acetoxy-7-hydroxy-2,2,4-trimethyl-dec-5-enoic acid methyl ester

E.e. = 85%

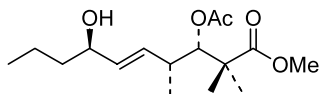
$[\alpha]_D^{25} = +24.2$ (*c* 1.0, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (3*S*,4*R*,7*S*)

Carmela Della Monica, Nakiá Maulucci, Francesco De Riccardis* and Irene Izzo*

Tetrahedron: Asymmetry 14 (2003) 3371



$C_{16}H_{28}O_5$

(3*S*,4*R*,7*R*)-3-Acetoxy-7-hydroxy-2,2,4-trimethyl-dec-5-enoic acid methyl ester

E.e. = 85%

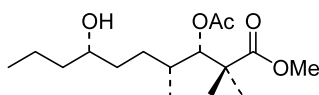
$[\alpha]_D^{25} = -1.8$ (*c* 0.6, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (3*S*,4*R*,7*R*)

Carmela Della Monica, Nakiá Maulucci, Francesco De Riccardis* and Irene Izzo*

Tetrahedron: Asymmetry 14 (2003) 3371



$C_{16}H_{30}O_5$

(3*S*,4*R*,7*S*)-3-Acetoxy-7-hydroxy-2,2,4-trimethyl-decanoic acid methyl ester

E.e. = 85%

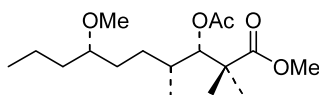
$[\alpha]_D^{25} = +17.2$ (*c* 1, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (3*S*,4*R*,7*S*)

Carmela Della Monica, Nakiá Maulucci, Francesco De Riccardis* and Irene Izzo*

Tetrahedron: Asymmetry 14 (2003) 3371



$C_{17}H_{32}O_5$

(3*S*,4*R*,7*S*)-3-Acetoxy-7-methoxy-2,2,4-trimethyl-decanoic acid methyl ester

E.e. = 85%

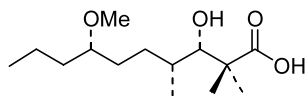
$[\alpha]_D^{25} = +12.9$ (*c* 1, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (3*S*,4*R*,7*S*)

Carmela Della Monica, Nakia Maulucci, Francesco De Riccardis* and Irene Izzo*

Tetrahedron: Asymmetry 14 (2003) 3371



(3*S*,4*R*,7*S*)-3-Hydroxy-7-methoxy-2,2,4-trimethyl-decanoic acid

E.e. = 85%

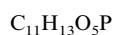
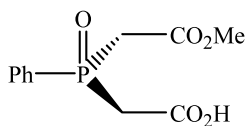
$[\alpha]_D^{25} = -31.8$ (c 1, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (3*S*,4*R*,7*S*)

Piotr Kiełbasiński,* Remigiusz Żurawiński, Małgorzata Albrycht and Marian Mikołajczyk*

Tetrahedron: Asymmetry 14 (2003) 3379



Carboxymethyl(methoxycarbonylmethyl)phenylphosphine oxide

E.e. = 72%

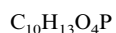
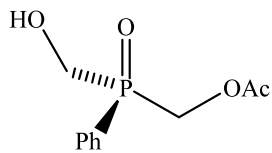
$[\alpha]_D^{20} = +3.9$ (c 1.1, MeOH)

Source of chirality: enzymatic asymmetric synthesis

Absolute configuration: *R*, chemical correlation

Piotr Kiełbasiński,* Remigiusz Żurawiński, Małgorzata Albrycht and Marian Mikołajczyk*

Tetrahedron: Asymmetry 14 (2003) 3379



Acetoxymethyl(hydroxymethyl)phenylphosphine oxide

E.e. = 48%

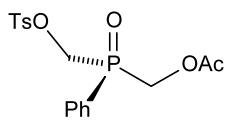
$[\alpha]_D^{20} = -2.4$ (c 1.34, $CHCl_3$)

Source of chirality: stereoselective synthesis

Absolute configuration: *S*, chemical correlation

Piotr Kiełbasiński,* Remigiusz Żurawiński, Małgorzata Albrycht and Marian Mikołajczyk*

Tetrahedron: Asymmetry 14 (2003) 3379



Acetoxymethyl(tosyloxymethyl)phenylphosphine oxide

E.e. = 48%

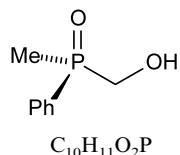
$[\alpha]_D^{20} = -14.55$ (c 1.12, $CHCl_3$)

Source of chirality: stereoselective synthesis

Absolute configuration: *R*, chemical correlation

Piotr Kiełbasiński,* Remigiusz Żurawiński, Małgorzata Albrycht and Marian Mikołajczyk*

Tetrahedron: Asymmetry 14 (2003) 3379



Hydroxymethyl(methyl)phenylphosphine oxide

E.e. = 48%

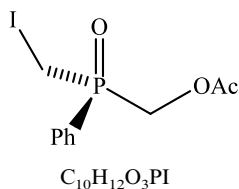
$[\alpha]_D^{20} = +9.4$ (c 1.01, $CHCl_3$)

Source of chirality: stereoselective synthesis

Absolute configuration: *R*, chemical correlation

Piotr Kiełbasiński,* Remigiusz Żurawiński, Małgorzata Albrycht and Marian Mikołajczyk*

Tetrahedron: Asymmetry 14 (2003) 3379



Acetoxy(iodomethyl)phenylphosphine oxide

E.e. = 48%

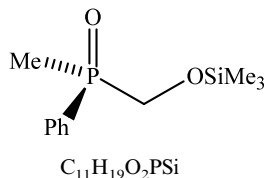
$[\alpha]_D^{20} = -10.1$ (c 1.39, $CHCl_3$)

Source of chirality: stereoselective synthesis

Absolute configuration: *R*, chemical correlation

Piotr Kiełbasiński,* Remigiusz Żurawiński, Małgorzata Albrycht and Marian Mikołajczyk*

Tetrahedron: Asymmetry 14 (2003) 3379



Methyl(trimethylsilyloxymethyl)phenylphosphine oxide

E.e. = 48%

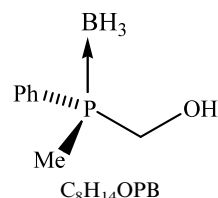
$[\alpha]_D^{20} = -5.2$ (c 1.10, $CHCl_3$)

Source of chirality: stereoselective synthesis

Absolute configuration: *R*, chemical correlation

Piotr Kiełbasiński,* Remigiusz Żurawiński, Małgorzata Albrycht and Marian Mikołajczyk*

Tetrahedron: Asymmetry 14 (2003) 3379



Hydroxymethyl(methyl)phenylphosphine P-borane

E.e. = 7%

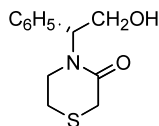
$[\alpha]_D^{20} = -0.5$ (c 1.57, $CHCl_3$)

Source of chirality: stereoselective synthesis

Absolute configuration: *R*, chemical correlation

Nicolas Franceschini, Sophie Da Nascimento, Pascal Sonnet and Dominique Guillaume*

Tetrahedron: Asymmetry 14 (2003) 3401



$C_{12}H_{15}NO_2S$

4-(2-Hydroxy-(1*R*)-phenylethyl)-thiomorpholin-3-one

Ee = 100%

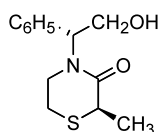
$[\alpha]_D^{18} = -102$ (c 1, EtOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (1*R*)

Nicolas Franceschini, Sophie Da Nascimento, Pascal Sonnet and Dominique Guillaume*

Tetrahedron: Asymmetry 14 (2003) 3401



$C_{13}H_{17}NO_2S$

(2*R*)-Methyl-4-(2-hydroxy-(1'*R*)-phenylethyl)thiomorpholin-3-one

Ee >96%

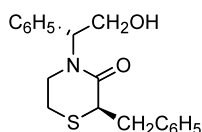
$[\alpha]_D^{18} = -97$ (c 0.1, EtOH)

Source of chirality: alkylation of 4-(2-hydroxy-(1*R*)-phenylethyl)-thiomorpholin-3-one

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

Nicolas Franceschini, Sophie Da Nascimento, Pascal Sonnet and Dominique Guillaume*

Tetrahedron: Asymmetry 14 (2003) 3401



$C_{19}H_{21}NO_2S$

(2*R*)-Benzyl-4-(2-hydroxy-(1'*R*)-phenylethyl)thiomorpholin-3-one

Ee >99%

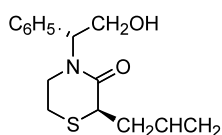
$[\alpha]_D^{18} = -99$ (c 0.1, EtOH)

Source of chirality: alkylation of 4-(2-hydroxy-(1*R*)-phenylethyl)-thiomorpholin-3-one

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

Nicolas Franceschini, Sophie Da Nascimento, Pascal Sonnet and Dominique Guillaume*

Tetrahedron: Asymmetry 14 (2003) 3401



$C_{15}H_{19}NO_2S$

(2*R*)-Allyl-4-(2-hydroxy-(1'*R*)-phenylethyl)thiomorpholin-3-one

Ee >96%

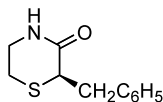
$[\alpha]_D^{18} = -97$ (c 0.1, EtOH)

Source of chirality: alkylation of 4-(2-hydroxy-(1*R*)-phenylethyl)-thiomorpholin-3-one

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

Nicolas Franceschini, Sophie Da Nascimento, Pascal Sonnet and Dominique Guillaume*

Tetrahedron: Asymmetry 14 (2003) 3401



C₁₁H₁₃NOS

(2*R*)-Benzylthiomorpholin-3-one

Ee = 99%

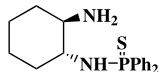
$[\alpha]_D^{18} = +33.9$ (c 0.05, EtOH)

Source of chirality: *N*-debenzylation of (2*R*)-benzyl-4-(2-hydroxy-(1'*R*)-phenylethyl)thiomorpholin-3-one

Absolute configuration: (2*R*)

Min Shi* and Wen Zhang

Tetrahedron: Asymmetry 14 (2003) 3407



C₁₈H₂₃N₂PS

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

E.e. = 100%

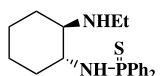
$[\alpha]_D^{20} = -22.8$ (c 0.072, CHCl₃)

Source of chirality: resolution

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

Min Shi* and Wen Zhang

Tetrahedron: Asymmetry 14 (2003) 3407



C₂₀H₂₇N₂PS

(1*R*,2*R*)-(-)-*N*-Ethyl-*N'*-diphenylthiophosphoryl-cyclohexane-1,2-diamine

E.e. = 100%

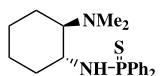
$[\alpha]_D^{20} = -53.5$ (c 0.095, CHCl₃)

Source of chirality: resolution

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

Min Shi* and Wen Zhang

Tetrahedron: Asymmetry 14 (2003) 3407



C₂₀H₂₇N₂PS

(1*R*,2*R*)-(-)-*N,N*-Dimethyl-*N'*-diphenylthiophosphoryl-cyclohexane-1,2-diamine

E.e. = 100%

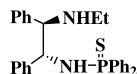
$[\alpha]_D^{20} = -31.1$ (c 2.2, CHCl₃)

Source of chirality: resolution

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

Min Shi* and Wen Zhang

Tetrahedron: Asymmetry 14 (2003) 3407



$C_{28}H_{29}N_2PS$

(1*R*,2*R*)-(-)-*N*-Ethyl-*N'*-diphenylthiophosphoryl-1,2-diphenylethane-1,2-diamine

E.e. = 100%

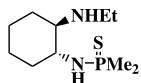
$[\alpha]_D^{20} = -7.1$ (*c* 1.55, $CHCl_3$)

Source of chirality: resolution

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

Min Shi* and Wen Zhang

Tetrahedron: Asymmetry 14 (2003) 3407



$C_{10}H_{23}N_2PS$

(1*R*,2*R*)-(-)-*N*-Ethyl-*N'*-Dimethylthiophosphoryl-cyclohexane-1,2-dimine

E.e. = 100%

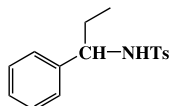
$[\alpha]_D^{20} = -138.4$ (*c* 0.6, $CHCl_3$)

Source of chirality: resolution

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

Min Shi* and Wen Zhang

Tetrahedron: Asymmetry 14 (2003) 3407



$C_{16}H_{19}NO_2S$

4-Methyl-*N*-(1-phenyl-propyl)-benzenesulfonamide

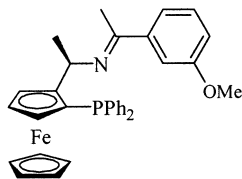
E.e. = 68%

$[\alpha]_D^{20} = -35.6$ (*c* 3.17, $CHCl_3$)

Absolute configuration: (*S*)

Xiangping Hu, Huilin Chen, Huicong Dai and Zhuo Zheng*

Tetrahedron: Asymmetry 14 (2003) 3415



$C_{33}H_{32}FeNOP$

(*R*)-*N*-[1-(3-Methoxyphenyl)ethylidene]-1-[(*S*)-2-(diphenylphosphino)ferrocenyl]ethylamine

E.e. =>98%

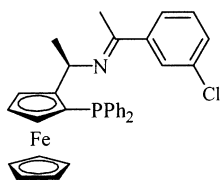
$[\alpha]_D^{25} = -351$ (*c* 0.10, $CHCl_3$)

Source of chirality: (*R*)-1-[(*S*)-2-(diphenylphosphino)ferrocenyl]ethylamine

Absolute configuration: central chirality: *R*, planar chirality: *S*

Xiangping Hu, Huilin Chen, Huicong Dai and Zhuo Zheng*

Tetrahedron: Asymmetry 14 (2003) 3415



$C_{32}H_{29}ClFeNP$

(*R*)-*N*-[1-(3-Chlorophenyl)ethylidene]-1-[(*S*)-2-(diphenylphosphino)ferrocenyl]ethylamine

E.e. =>98%

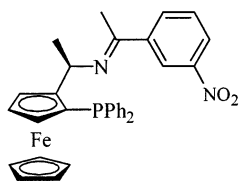
$[\alpha]_D^{25} = -366$ (*c* 0.13, $CHCl_3$)

Source of chirality: (*R*)-1-[(*S*)-2-(diphenylphosphino)ferrocenyl]ethylamine

Absolute configuration: central chirality: *R*, planar chirality: *S*

Xiangping Hu, Huilin Chen, Huicong Dai and Zhuo Zheng*

Tetrahedron: Asymmetry 14 (2003) 3415



$C_{32}H_{29}FeN_2O_2P$

(*R*)-*N*-[1-(3-Nitrophenyl)ethylidene]-1-[(*S*)-2-(diphenylphosphino)ferrocenyl]ethylamine

E.e. =>98%

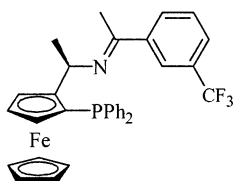
$[\alpha]_D^{25} = -381$ (*c* 0.13, $CHCl_3$)

Source of chirality: (*R*)-1-[(*S*)-2-(diphenylphosphino)ferrocenyl]ethylamine

Absolute configuration: central chirality: *R*, planar chirality: *S*

Xiangping Hu, Huilin Chen, Huicong Dai and Zhuo Zheng*

Tetrahedron: Asymmetry 14 (2003) 3415



$C_{33}H_{29}F_3FeNP$

(*R*)-*N*-[1-(3-Trifluoromethylphenyl)ethylidene]-1-[(*S*)-2-(diphenylphosphino)ferrocenyl]ethylamine

E.e. =>98%

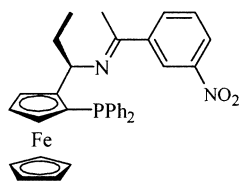
$[\alpha]_D^{25} = -348$ (*c* 0.11, $CHCl_3$)

Source of chirality: (*R*)-1-[(*S*)-2-(diphenylphosphino)ferrocenyl]ethylamine

Absolute configuration: central chirality: *R*, planar chirality: *S*

Xiangping Hu, Huilin Chen, Huicong Dai and Zhuo Zheng*

Tetrahedron: Asymmetry 14 (2003) 3415



$C_{33}H_{31}FeN_2O_2P$

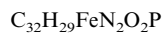
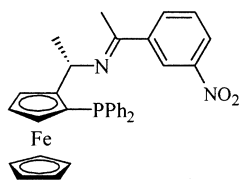
(*R*)-*N*-[1-(3-Nitrophenyl)ethylidene]-1-[(*S*)-2-(diphenylphosphino)ferrocenyl]propylamine

E.e. =>98%

$[\alpha]_D^{25} = -369$ (*c* 0.11, $CHCl_3$)

Source of chirality: (*R*)-1-[(*S*)-2-(diphenylphosphino)ferrocenyl]propylamine

Absolute configuration: central chirality: *R*, planar chirality: *S*



(*S*)-*N*-[1-((3-Nitrophenyl)ethylidene)-1-[(*S*)-2-(diphenylphosphino)ferrocenyl]ethylamine

E.e. =>98%

$[\alpha]_D^{25} = -31.2$ (*c* 0.076, $CHCl_3$)

Source of chirality: (*S*)-1-[(*S*)-2-(diphenylphosphino)ferrocenyl]ethylamine

Absolute configuration: central chirality: *S*, planar chirality: *S*