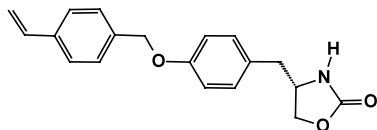


Giovanni Desimoni, Giuseppe Faita,* Alessandro Galbiati,
Dario Pasini,* Paolo Quadrelli and Fabio Rancati

Tetrahedron: Asymmetry 13 (2002) 333



$C_{19}H_{19}NO_3$

(4*S*)-[4-(4-Vinylbenzyloxy)benzyl]-1,3-oxazolidin-2-one

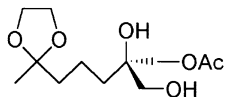
$[\alpha]_D = +51.9$ (*c* 0.73, $CHCl_3$)

Source of chirality: L-tyrosine

Absolute configuration: 4*S*

Robert Chênevert* and Dave Caron

Tetrahedron: Asymmetry 13 (2002) 339



$C_{12}H_{22}O_6$

(*R*)-2-(4-Acetoxyethyl-4,5-dihydroxypentyl)-2-methyl-1,3-dioxolane

E.e. = 90%

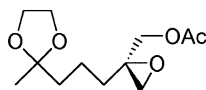
$[\alpha]_D^{23} = -2.6$ (*c* 2.3, acetone)

Source of chirality: enzymatic desymmetrization

Absolute configuration: *R*

Robert Chênevert* and Dave Caron

Tetrahedron: Asymmetry 13 (2002) 339



$C_{12}H_{20}O_5$

(*R*)-2-(4-Acetoxyethyl-4,5-epoxypentyl)-2-methyl-1,3-dioxolane

E.e. = 90%

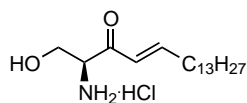
$[\alpha]_D^{23} = -6.0$ (*c* 1.84, acetone)

Source of chirality: enzymatic desymmetrization

Absolute configuration: *R*

Jae-Mok Lee, Hyun-Suk Lim and Sung-Kee Chung*

Tetrahedron: Asymmetry 13 (2002) 343



$C_{18}H_{36}ClNO_2$

(2*S*,4*E*)-2-Amino-3-oxo-octadecen-1-ol·HCl

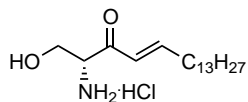
$[\alpha]_D^{25} +24.4$ (*c* 0.95, MeOH)

Source of chirality: L-serine

Absolute configuration: 2*S* (assigned by chemical correlation)

Jae-Mok Lee, Hyun-Suk Lim and Sung-Kee Chung*

Tetrahedron: Asymmetry 13 (2002) 343



C₁₈H₃₆ClNO₂

(2*R*,4*E*)-2-Amino-3-oxo-octadecen-1-ol·HCl

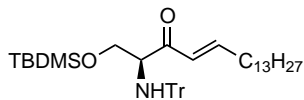
$[\alpha]_D^{25} -25.1$ (*c* 1.28, MeOH)

Source of chirality: D-serine

Absolute configuration: 2*R* (assigned by chemical correlation)

Jae-Mok Lee, Hyun-Suk Lim and Sung-Kee Chung*

Tetrahedron: Asymmetry 13 (2002) 343



C₄₃H₆₃NO₂Si

(2*S*,4*E*)-2-[*N*-(Trityl)amino]-1-*O*-*t*-butyldimethylsilyl-3-oxo-4-octadecene

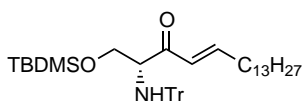
$[\alpha]_D^{25} +59.6$ (*c* 1.19, CHCl₃)

Source of chirality: L-serine

Absolute configuration: 2*S* (assigned by chemical correlation)

Jae-Mok Lee, Hyun-Suk Lim and Sung-Kee Chung*

Tetrahedron: Asymmetry 13 (2002) 343



C₄₃H₆₃NO₂Si

(2*R*,4*E*)-2-[*N*-(Trityl)amino]-1-*O*-*t*-butyldimethylsilyl-3-oxo-4-octadecene

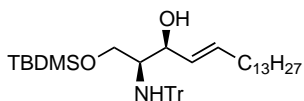
$[\alpha]_D^{25} -59.8$ (*c* 0.87, CHCl₃)

Source of chirality: D-serine

Absolute configuration: 2*R* (assigned by chemical correlation)

Jae-Mok Lee, Hyun-Suk Lim and Sung-Kee Chung*

Tetrahedron: Asymmetry 13 (2002) 343



C₄₃H₆₅NO₂Si

(2*S*,3*S*,4*E*)-2-[*N*-(Trityl)amino]-1-*O*-*t*-butyldimethylsilyl-4-octadecen-1,3-diol

E.e. >99% (on NMR)

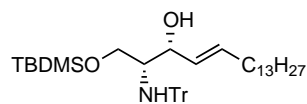
$[\alpha]_D^{25} -10.9$ (*c* 3.0, CHCl₃)

Source of chirality: L-serine

Absolute configuration: 2*S*,3*S* (assigned by chemical correlation)

Jae-Mok Lee, Hyun-Suk Lim and Sung-Kee Chung*

Tetrahedron: Asymmetry 13 (2002) 343



C₄₃H₆₅NO₂Si

(2*R*,3*R*,4*E*)-2-[*N*-(Trityl)amino]-1-*O*-*t*-butyldimethylsilyl-4-octadecen-1,3-diol

E.e. >99% (on NMR)

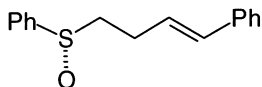
[α]_D²⁵ +10.15 (*c* 1.25, CHCl₃)

Source of chirality: D-serine

Absolute configuration: 2*R*,3*R* (assigned by chemical correlation)

Jacek Skarzewski,* Elżbieta Wojaczyńska and Ilona Turowska-Tyrk

Tetrahedron: Asymmetry 13 (2002) 369



C₁₆H₁₆SO

(-)-(S)-1-Phenyl-4-phenylsulfinylbut-1-ene

E.e. 67%, determined by ¹H NMR with Eu(hfc)₃

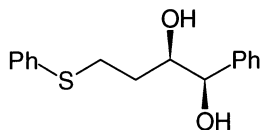
[α]_D -48 (*c* 1.0, CH₂Cl₂)

Source of chirality: enantioselective sulfoxidation

Absolute configuration: *S* (by chemical correlation)

Jacek Skarzewski,* Elżbieta Wojaczyńska and Ilona Turowska-Tyrk

Tetrahedron: Asymmetry 13 (2002) 369



C₁₆H₁₈SO₂

(+)-(R,R)-1-Phenyl-4-phenylsulfonylbutane-1,2-diol

E.e. 76%, determined by ¹H NMR with Eu(hfc)₃

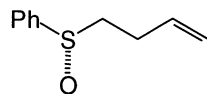
[α]_D +49 (*c* 0.60, CH₂Cl₂)

Source of chirality: asymmetric dihydroxylation with AD-mix β

Absolute configuration: *R* (by chemical correlation)

Jacek Skarzewski,* Elżbieta Wojaczyńska and Ilona Turowska-Tyrk

Tetrahedron: Asymmetry 13 (2002) 369



C₁₀H₁₂OS

(-)-(S)-4-(Phenylsulfinyl)but-1-ene

E.e. 70%, determined by ¹H NMR with Eu(hfc)₃

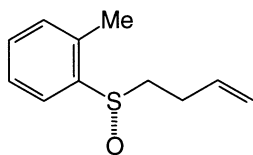
[α]_D -131 (*c* 1.0, CH₂Cl₂)

Source of chirality: enantioselective sulfoxidation

Absolute configuration: *S* (by chemical correlation)

Jacek Skarzewski,* Elżbieta Wojaczyńska and Ilona Turowska-Tyrk

Tetrahedron: Asymmetry 13 (2002) 369



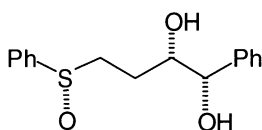
C₁₁H₁₄O₂S

(-)-(S)-4-(Tolylsulfinyl)but-1-ene

E.e. 85%, determined by ¹H NMR with Eu(hfc)₃
[α]_D -118 (c 1.0, CH₂Cl₂)
Source of chirality: enantioselective sulfoxidation
Absolute configuration: S (by chemical correlation)

Jacek Skarzewski,* Elżbieta Wojaczyńska and Ilona Turowska-Tyrk

Tetrahedron: Asymmetry 13 (2002) 369



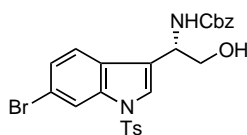
C₁₆H₁₈O₃S

(-)-(S,S,S)-1-Phenyl-4-phenylsulfinylbutane-1,2-diol

D.e. 100%, >98% e.e. determined by ¹H NMR
[α]_D -125 (c 0.34, CH₂Cl₂)
Source of chirality: enantioselective sulfoxidation and dihydroxylation
Absolute configuration: S,S,S (by X-ray crystallographic measurement)

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

Tetrahedron: Asymmetry 13 (2002) 383



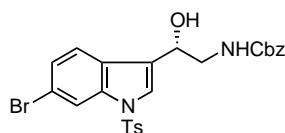
C₂₅H₂₃BrN₂O₅S

Phenylmethyl (1S)-N-[1-[6-bromo-1-[(4-methylphenyl)sulfonyl]-1H-indol-3-yl]-2-hydroxy]ethylcarbamate

E.e. = 80%
[α]_D²⁰ = +29 (c 0.59, CHCl₃)
Source of chirality: asymmetric synthesis
Absolute configuration: S

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

Tetrahedron: Asymmetry 13 (2002) 383



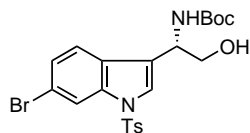
C₂₅H₂₃BrN₂O₅S

Phenylmethyl (1S)-N-[2-[6-bromo-1-(4-methylphenyl)sulfonyl]-1H-indol-3-yl]-2-hydroxy]ethylcarbamate

E.e. = 24%
[α]_D²⁰ = +8 (c 0.53, CHCl₃)
Source of chirality: asymmetric synthesis
Absolute configuration: S

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

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$C_{22}H_{25}BrN_2O_5S$

1,1-Dimethylethyl (1*S*)-*N*-[1-[6-bromo-1-[(4-methylphenyl)sulfonyl]-1*H*-indol-3-yl]-2-hydroxy]ethylcarbamate

E.e. = 94%

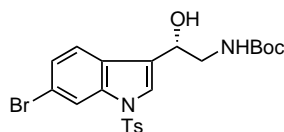
$[\alpha]_D^{20} = +47$ (*c* 0.38, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

Tetrahedron: Asymmetry 13 (2002) 383



$C_{22}H_{25}BrN_2O_5S$

1,1-Dimethylethyl (1*S*)-*N*-[2-[6-bromo-1-[(4-methylphenyl)sulfonyl]-1*H*-indol-3-yl]-2-hydroxy]ethylcarbamate

E.e. = 17%

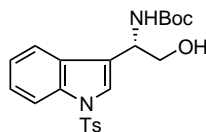
$[\alpha]_D^{20} = +9$ (*c* 0.30, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

Tetrahedron: Asymmetry 13 (2002) 383



$C_{22}H_{26}N_2O_5S$

1,1-Dimethylethyl (1*S*)-*N*-[1-[(4-methylphenyl)sulfonyl]-1*H*-indol-3-yl]-2-hydroxy]ethylcarbamate

E.e. = 86%

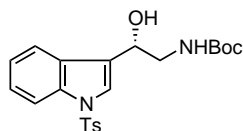
$[\alpha]_D^{20} = +38.6$ (*c* 1.25, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

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$C_{22}H_{26}N_2O_5S$

1,1-Dimethylethyl (1*S*)-*N*-[2-[(4-methylphenyl)sulfonyl]-1*H*-indol-3-yl]-2-hydroxy]ethylcarbamate

E.e. = 42%

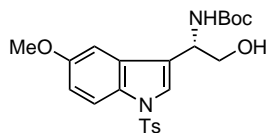
$[\alpha]_D^{20} = +11.8$ (*c* 1.20, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

Tetrahedron: Asymmetry 13 (2002) 383



$C_{23}H_{28}N_2O_6S$

1,1-Dimethylethyl (1S)-N-[1-[5-methoxy-1-[(4-methylphenyl)sulfonyl]-1H-indol-3-yl]-2-hydroxy]ethylcarbamate

E.e. = 75%

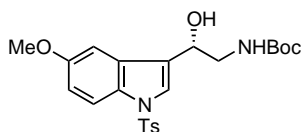
$[\alpha]_D^{20} = +22$ (c 0.85, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: S

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

Tetrahedron: Asymmetry 13 (2002) 383



$C_{23}H_{28}N_2O_6S$

1,1-Dimethylethyl (1S)-N-[2-[5-methoxy-1-[(4-methylphenyl)sulfonyl]-1H-indol-3-yl]-2-hydroxy]ethylcarbamate

E.e. = 3%

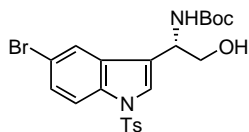
$[\alpha]_D^{20} = +2.5$ (c 1.675, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: S

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

Tetrahedron: Asymmetry 13 (2002) 383



$C_{22}H_{25}BrN_2O_5S$

1,1-Dimethylethyl (1S)-N-[1-[5-bromo-1-[(4-methylphenyl)sulfonyl]-1H-indol-3-yl]-2-hydroxy]ethylcarbamate

E.e. = 69%

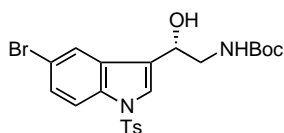
$[\alpha]_D^{20} = +7.8$ (c 1.90, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: S

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

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$C_{22}H_{25}BrN_2O_5S$

1,1-Dimethylethyl (1S)-N-[2-[5-bromo-1-[(4-methylphenyl)sulfonyl]-1H-indol-3-yl]-2-hydroxy]ethylcarbamate

E.e. = 12%

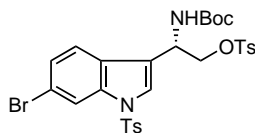
$[\alpha]_D^{20} = +4.8$ (c 1.50, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: S

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

Tetrahedron: Asymmetry 13 (2002) 383



1,1-Dimethylethyl (1*S*)-*N*-[1-[6-bromo-1-[(4-methylphenyl)sulfonyl]-1*H*-indol-3-yl]-2-[(4-methylphenyl)sulfonyl]oxy]ethylcarbamate

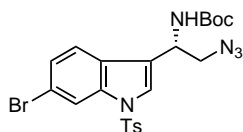
$[\alpha]_D^{20} = +15$ (*c* 0.32, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

Tetrahedron: Asymmetry 13 (2002) 383



1,1-Dimethylethyl (1*S*)-*N*-[1-[6-bromo-1-[(4-methylphenyl)sulfonyl]-1*H*-indol-3-yl]-2-azido]ethylcarbamate

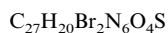
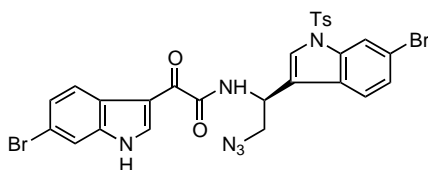
$[\alpha]_D^{20} = +4$ (*c* 1.67, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

Tetrahedron: Asymmetry 13 (2002) 383



(*S*)-6-Bromo-*N*-[2-azido-1-[(6-bromo-1-[(4-methylphenyl)sulfonyl]-1*H*-indol-3-yl]ethyl]- α -oxoindole-3-acetamide

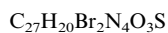
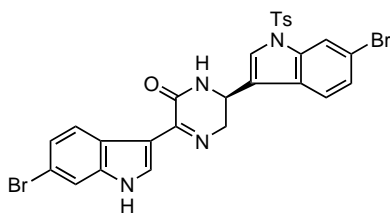
$[\alpha]_D^{20} = +45$ (*c* 0.40, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

Tetrahedron: Asymmetry 13 (2002) 383



(*S*)-3-(6-Bromo-1*H*-indol-3-yl)-6-[6-bromo-1-[(4-methylphenyl)sulfonyl]-1*H*-indol-3-yl]-5,6-dihydro-1*H*-pyrazin-2-one

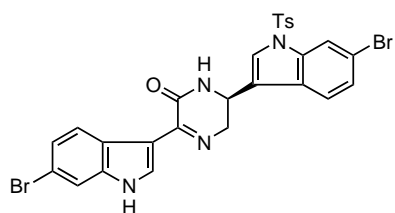
$[\alpha]_D^{20} = -27$ (*c* 0.5, acetone)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

Tetrahedron: Asymmetry 13 (2002) 383



$C_{20}H_{14}Br_2N_4O$

Hamacanthin A

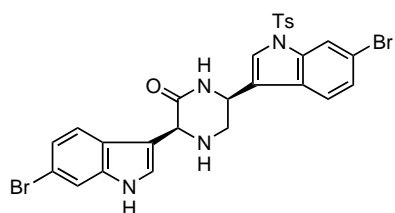
$[\alpha]_D^{20} = +82$ (c 0.135, CH_3OH)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

Tetrahedron: Asymmetry 13 (2002) 383



$C_{27}H_{22}Br_2N_4O_3S$

(3*S*,6*S*)-3-(6-Bromo-1*H*-indol-3-yl)-6-[6-bromo-1-(toluene-4-sulfonyl)-1*H*-indol-3-yl]-piperazin-2-one

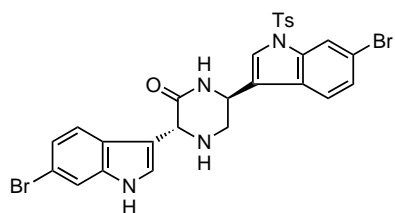
$[\alpha]_D^{20} = -35$ (c 1.50, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: 3*S*,6*S*

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

Tetrahedron: Asymmetry 13 (2002) 383



$C_{27}H_{22}Br_2N_4O_3S$

(3*R*,6*S*)-3-(6-Bromo-1*H*-indol-3-yl)-6-[6-bromo-1-(toluene-4-sulfonyl)-1*H*-indol-3-yl]-piperazin-2-one

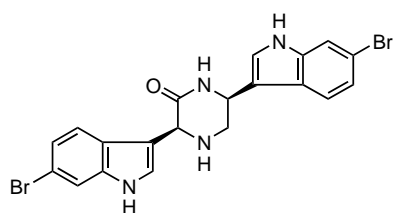
$[\alpha]_D^{20} = +16$ (c 0.42, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: 3*R*,6*S*

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

Tetrahedron: Asymmetry 13 (2002) 383



$C_{20}H_{16}Br_2N_4O$

(3*S*,6*S*)-3,6-Bis(6-bromo-1*H*-indol-3-yl)piperazin-2-one

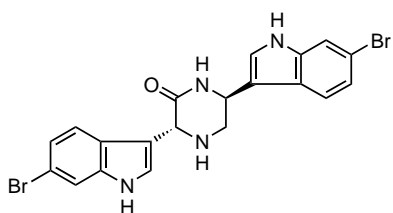
$[\alpha]_D^{20} = -8$ (c 0.17, CH_3OH)

Source of chirality: asymmetric synthesis

Absolute configuration: 3*S*,6*S*

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

Tetrahedron: Asymmetry 13 (2002) 383



$C_{20}H_{16}Br_2N_4O$

(3*R*,6*S*)-3,6-Bis(6-bromo-1*H*-indol-3-yl)piperazin-2-one

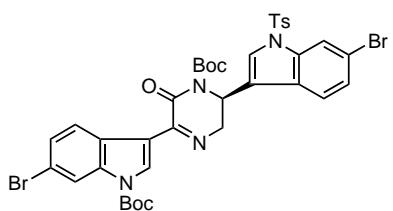
$[\alpha]_D^{20} = -6$ (*c* 0.275, $CH_3OH/acetone = 1:1$)

Source of chirality: asymmetric synthesis

Absolute configuration: 3*R*,6*S*

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

Tetrahedron: Asymmetry 13 (2002) 383



$C_{37}H_{36}Br_2N_4O_7S$

1,1-Dimethylethyl (6*S*)-3-[6-bromo-1-(*tert*-butyloxycarbonyl)-1*H*-indol-3-yl]-6-[6-bromo-1-(toluene-4-sulfonyl)-1*H*-indol-3-yl]-5,6-dihydro-2-oxo-1*H*-pyrazine-1-carboxylate

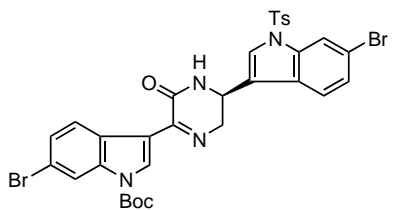
$[\alpha]_D^{20} = -70$ (*c* 0.68, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

Tetrahedron: Asymmetry 13 (2002) 383



$C_{32}H_{28}Br_2N_4O_5S$

(6*S*)-3-[6-Bromo-1-(*tert*-butyloxycarbonyl)-1*H*-indol-3-yl]-6-[6-bromo-1-(toluene-4-sulfonyl)-1*H*-indol-3-yl]-5,6-dihydro-1*H*-pyrazin-2-one

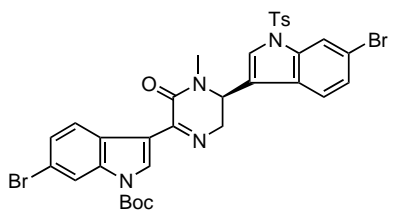
$[\alpha]_D^{20} = +94$ (*c* 0.64, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

Tetrahedron: Asymmetry 13 (2002) 383



$C_{33}H_{30}Br_2N_4O_5S$

(6*S*)-3-[6-Bromo-1-(*tert*-butyloxycarbonyl)-1*H*-indol-3-yl]-6-[6-bromo-1-(toluene-4-sulfonyl)-1*H*-indol-3-yl]-5,6-dihydro-1-methyl-1*H*-pyrazin-2-one

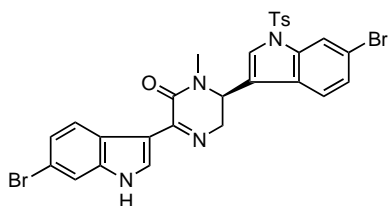
$[\alpha]_D^{20} = -26$ (*c* 0.55, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

Tetrahedron: Asymmetry 13 (2002) 383



$C_{28}H_{22}Br_2N_4O_3S$

(6*S*)-3-(6-Bromo-1*H*-indol-3-yl)-6-[6-bromo-1-(toluene-4-sulfonyl)-1*H*-indol-3-yl]-5,6-dihydro-1-methyl-1*H*-pyrazin-2-one

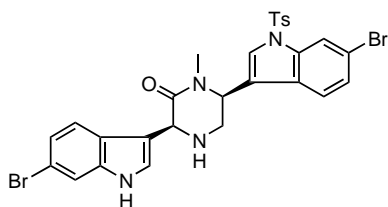
$[\alpha]_D^{20} = -115$ (*c* 0.74, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

Tetrahedron: Asymmetry 13 (2002) 383



$C_{28}H_{24}Br_2N_4O_3S$

(3*S*,6*S*)-3-(6-Bromo-1*H*-indol-3-yl)-6-[6-bromo-1-(toluene-4-sulfonyl)-1*H*-indol-3-yl]-1-methylpiperazin-2-one

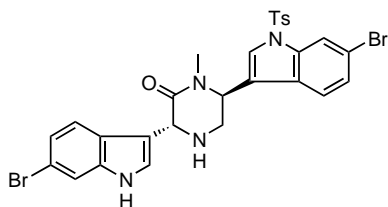
$[\alpha]_D^{20} = -49$ (*c* 0.77, CH_3Cl)

Source of chirality: asymmetric synthesis

Absolute configuration: 3*S*,6*S*

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

Tetrahedron: Asymmetry 13 (2002) 383



$C_{28}H_{24}Br_2N_4O_3S$

(3*R*,6*S*)-3-(6-Bromo-1*H*-indol-3-yl)-6-[6-bromo-1-(toluene-4-sulfonyl)-1*H*-indol-3-yl]-1-methylpiperazin-2-one

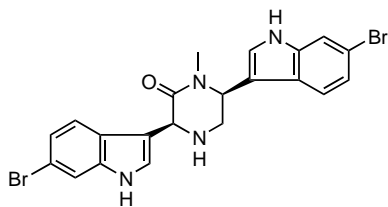
$[\alpha]_D^{20} = +12$ (*c* 0.20, $CH_3OH/acetone = 1:1$)

Source of chirality: asymmetric synthesis

Absolute configuration: 3*R*,6*S*

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

Tetrahedron: Asymmetry 13 (2002) 383



$C_{21}H_{18}Br_2N_4O$

(3*S*,6*S*)-3,6-Bis(6-bromo-1*H*-indol-3-yl)-1-methylpiperazin-2-one

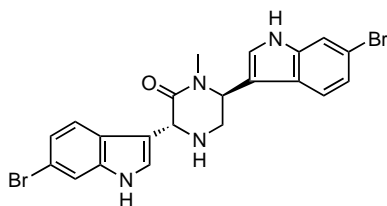
$[\alpha]_D^{20} = -29$ (*c* 0.37, $CH_3OH/acetone = 1:1$)

Source of chirality: asymmetric synthesis

Absolute configuration: 3*S*,6*S*

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

Tetrahedron: Asymmetry 13 (2002) 383



$C_{21}H_{18}Br_2N_4O$

(3*R*,6*S*)-3,6-Bis(6-bromo-1*H*-indol-3-yl)-1-methylpiperazin-2-one

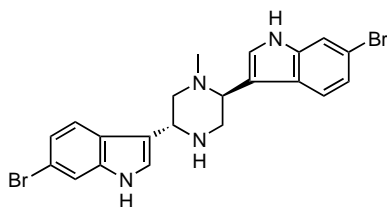
$[\alpha]_D^{20} = -32$ (*c* 0.20, CH_3OH)

Source of chirality: asymmetric synthesis

Absolute configuration: 3*R*,6*S*

Cai-Guang Yang, Jun Wang, Xiao-Xia Tang and Biao Jiang*

Tetrahedron: Asymmetry 13 (2002) 383



$C_{21}H_{20}Br_2N_4$

Dragmacidin A

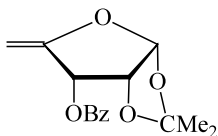
$[\alpha]_D^{20} = +4$ (*c* 0.20, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: 3*R*,6*S*

Rafael Robles,* Isidoro Izquierdo, Concepción Rodríguez,
María T. Plaza, Antonio J. Mota and Luís Álvarez de Cienfuegos

Tetrahedron: Asymmetry 13 (2002) 399



$C_{15}H_{16}O_5$

3-*O*-Benzoyl-5-deoxy-1,2-*O*-isopropylidene- α -*D*-erythro-pent-4-enofuranose

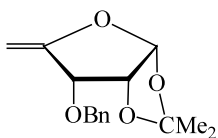
$[\alpha]_D +151.6$ (*c* 1.1, chloroform)

Source of chirality: *D*-xylose and stereoselective synthesis

Absolute configuration: 1*R*,2*R*,3*R* (assigned by NMR spectroscopy)

Rafael Robles,* Isidoro Izquierdo, Concepción Rodríguez,
María T. Plaza, Antonio J. Mota and Luís Álvarez de Cienfuegos

Tetrahedron: Asymmetry 13 (2002) 399



$C_{15}H_{19}O_4$

3-*O*-Benzyl-5-deoxy-1,2-*O*-isopropylidene- α -*D*-erythro-pent-4-enofuranose

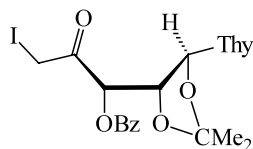
$[\alpha]_D +98.9$ (*c* 1.7, chloroform)

Source of chirality: *D*-xylose and stereoselective synthesis

Absolute configuration: 1*R*,2*R*,3*R* (assigned by NMR spectroscopy)

Rafael Robles,* Isidoro Izquierdo, Concepción Rodríguez,
María T. Plaza, Antonio J. Mota and Luís Álvarez de Cienfuegos

Tetrahedron: Asymmetry 13 (2002) 399



$C_{20}H_{21}N_2O_7I$

3'-(1'S,2'R,3'S)-3'-O-Benzoyl-5'-deoxy-5'-yodo-1,2-O-isopropylidene-4'-oxo-1'-yl-thymine

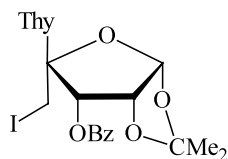
$[\alpha]_{405} -93.2$ (c 0.93, chloroform)

Source of chirality: D-xylose and stereoselective synthesis

Absolute configuration: 1'S,2'R,3'S (assigned by NMR spectroscopy)

Rafael Robles,* Isidoro Izquierdo, Concepción Rodríguez,
María T. Plaza, Antonio J. Mota and Luís Álvarez de Cienfuegos

Tetrahedron: Asymmetry 13 (2002) 399



$C_{20}H_{21}N_2O_7I$

3'-O-Benzoyl-5'-deoxy-5'-yodo-1',2'-O-isopropylidene- α -D-ribo-4'-yl-thymine

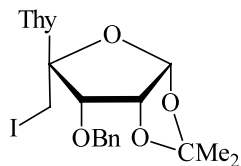
$[\alpha]_D +26.3$ (c 0.92, chloroform)

Source of chirality: D-xylose and stereoselective synthesis

Absolute configuration: 1'R,2'R,3'S,4'R (assigned by NMR spectroscopy)

Rafael Robles,* Isidoro Izquierdo, Concepción Rodríguez,
María T. Plaza, Antonio J. Mota and Luís Álvarez de Cienfuegos

Tetrahedron: Asymmetry 13 (2002) 399



$C_{20}H_{23}N_2O_6I$

3'-O-Benzyl-5'-deoxy-5'-yodo-1',2'-O-isopropylidene- α -D-ribo-4'-yl-thymine

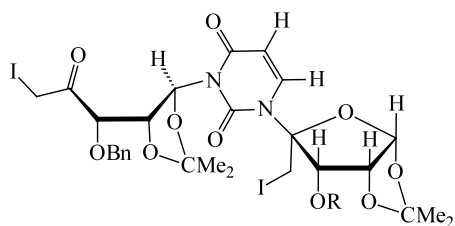
$[\alpha]_D -30.8$ (c 1.1, chloroform)

Source of chirality: D-xylose and stereoselective synthesis

Absolute configuration: 1'R,2'R,3'S,4'R (assigned by NMR spectroscopy)

Rafael Robles,* Isidoro Izquierdo, Concepción Rodríguez,
María T. Plaza, Antonio J. Mota and Luís Álvarez de Cienfuegos

Tetrahedron: Asymmetry 13 (2002) 399



$C_{34}H_{38}N_2O_{10}I_2$

1-[3'-O-Benzyl-5'-deoxy-5'-yodo-1',2'-O-isopropylidene- α -D-ribo-4'-yl]-3-(1''S,2''R,3''S)-3''-O-benzyl-5''-deoxy-5''-iodo-1'',2''-O-isopropylidene-4''-oxo-1''-yl)uracil

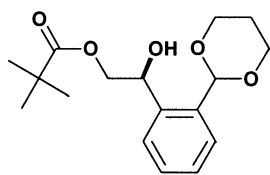
$[\alpha]_D +26.3$ (c 0.92, chloroform)

Source of chirality: D-xylose and stereoselective synthesis

Absolute configuration: 1'R,2'R,3'S,4'R,1''S,2''R,3''S (assigned by NMR spectroscopy)

Abdelmajid Selouane, Claude Vaccher, Pierre Villa, Denis Postel and Christophe Len*

Tetrahedron: Asymmetry 13 (2002) 407



$C_{17}H_{24}O_5$

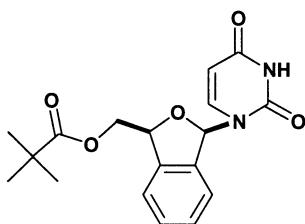
(*S*)-1-*O*-Pivaloyl-1-(2-(1,3-dioxan-2-yl)phenyl)ethan-1,2-diol

$[\alpha]_D^{22} +35.0$ (*c* 1.0, $CHCl_3$)

Source of chirality: stereoselective synthesis using AD-mix α

Abdelmajid Selouane, Claude Vaccher, Pierre Villa, Denis Postel and Christophe Len*

Tetrahedron: Asymmetry 13 (2002) 407



$C_{18}H_{20}N_2O_5$

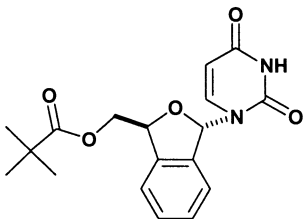
(1*R*,3*S*)-1-(3-Pivaloyloxymethyl-1,3-dihydrobenzo[*c*]furan-1-yl)uracil

$[\alpha]_D^{22} +24.0$ (*c* 1.0, $CHCl_3$)

Source of chirality: stereoselective synthesis using AD-mix α

Abdelmajid Selouane, Claude Vaccher, Pierre Villa, Denis Postel and Christophe Len*

Tetrahedron: Asymmetry 13 (2002) 407



$C_{18}H_{20}N_2O_5$

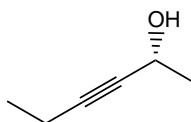
(1*S*,3*S*)-1-(3-Pivaloyloxymethyl-1,3-dihydrobenzo[*c*]furan-1-yl)uracil

$[\alpha]_D^{22} -104.2$ (*c* 1.0, $CHCl_3$)

Source of chirality: stereoselective synthesis using AD-mix α

Kaoru Nakamura* and Keishi Takenaka

Tetrahedron: Asymmetry 13 (2002) 415



$C_6H_{10}O$

3-Hexyn-2-ol

E.e. = 98%

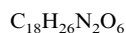
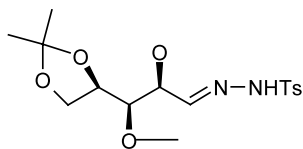
$[\alpha]_D^{25} = +27.2$ (*c* 0.58, Et_2O)

Source of chirality: lipase-catalyzed resolution

Absolute configuration: *R*

S. Chandrasekhar,* Abbas Raza and Mohamed Takhi

Tetrahedron: Asymmetry 13 (2002) 423



D-Xylose-(2*R*,3*R*,4*R*)-5-di-*O*-isopropylidene-[4-(methylphenyl)sulfonyl]hydrazone

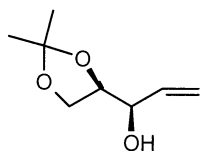
$[\alpha]_D^{25} = +48$ (*c* 0.6, CHCl₃)

Source of chirality: D-xylose

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

S. Chandrasekhar,* Abbas Raza and Mohamed Takhi

Tetrahedron: Asymmetry 13 (2002) 423



(3*R*)-Hydroxy-(4*R*)-5-isopropylidene-1-pentene

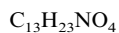
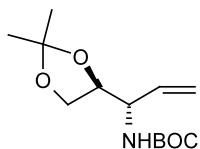
$[\alpha]_D^{25} = +6.2$ (*c* 1.0, CHCl₃)

Source of chirality: D-xylose

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

S. Chandrasekhar,* Abbas Raza and Mohamed Takhi

Tetrahedron: Asymmetry 13 (2002) 423



(3*S*)-[*tert*-Butoxycarbonyl]amino]-(4*R*)-5-isopropylidene-1-pentene

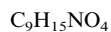
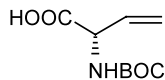
$[\alpha]_D^{25} = -35.3$ (*c* 1.0, CHCl₃)

Source of chirality: D-xylose

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

S. Chandrasekhar,* Abbas Raza and Mohamed Takhi

Tetrahedron: Asymmetry 13 (2002) 423



(2*S*)-[*N*-(*tert*-Butoxycarbonyl)amino]-3-pentenoic acid

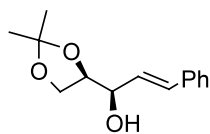
$[\alpha]_D^{25} = +2.6$ (*c* 1.5, MeOH)

Source of chirality: D-xylose

Absolute configuration: 2*S*

S. Chandrasekhar,* Abbas Raza and Mohamed Takhi

Tetrahedron: Asymmetry 13 (2002) 423



C₁₄H₁₈O₃

1-Phenyl-(3*R*)-hydroxy-(4*R*)-5-isopropylidene-1-pentene

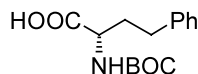
$[\alpha]_D^{25} = +21.2$ (*c* 0.5, CHCl₃)

Source of chirality: D-xylose

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

S. Chandrasekhar,* Abbas Raza and Mohamed Takhi

Tetrahedron: Asymmetry 13 (2002) 423



C₁₅H₁₉NO₄

(2*S*)-[(*tert*-Butoxycarbonyl)amino]-4-phenylbutanoic acid

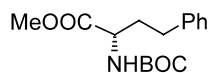
$[\alpha]_D^{25} = +5.8$ (*c* 1.0, EtOH)

Source of chirality: D-xylose

Absolute configuration: 2*S*

S. Chandrasekhar,* Abbas Raza and Mohamed Takhi

Tetrahedron: Asymmetry 13 (2002) 423



C₁₆H₂₁NO₄

(2*S*)-[*N*-(*tert*-Butoxycarbonyl)amino]-4-phenylmethyl butanoate

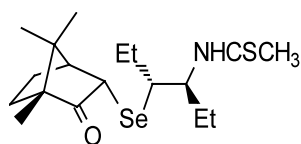
$[\alpha]_D^{25} = -13.1$ (*c* 1.0, MeOH)

Source of chirality: D-xylose

Absolute configuration: 2*S*

Marcello Tiecco,* Lorenzo Testaferri, Claudio Santi,
Cristina Tomassini, Francesca Marini, Luana Bagnoli and
Andrea Temperini

Tetrahedron: Asymmetry 13 (2002) 429



C₁₈H₃₁NOSSe

(3*R*,4*S*)-3-(Camphorseleno)-4-(thioacetamido)hexane

E.e. = 100%

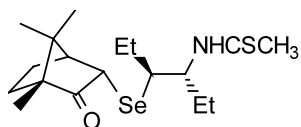
$[\alpha]_D^{20} = -97.2$ (*c* 3.0, CHCl₃)

Source of chirality: asymmetric synthesis

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

Marcello Tiecco,* Lorenzo Testaferri, Claudio Santi,
Cristina Tomassini, Francesca Marini, Luana Bagnoli and
Andrea Temperini

Tetrahedron: Asymmetry 13 (2002) 429



$C_{18}H_{31}NOSSe$

(3*S*,4*R*)-3-(Camphorseleno)-4-(thioacetamido)hexane

E.e. = 100%

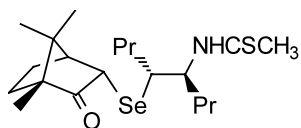
$[\alpha]_D^{21.6} = +87.9$ (*c* 1.5, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Marcello Tiecco,* Lorenzo Testaferri, Claudio Santi,
Cristina Tomassini, Francesca Marini, Luana Bagnoli and
Andrea Temperini

Tetrahedron: Asymmetry 13 (2002) 429



$C_{20}H_{35}NOSSe$

(4*R*,5*S*)-4-(Camphorseleno)-5-(thioacetamido)octane

E.e. = 100%

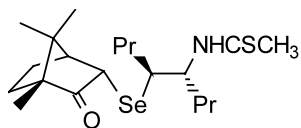
$[\alpha]_D^{22.7} = -122.1$ (*c* 4.65, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Marcello Tiecco,* Lorenzo Testaferri, Claudio Santi,
Cristina Tomassini, Francesca Marini, Luana Bagnoli and
Andrea Temperini

Tetrahedron: Asymmetry 13 (2002) 429



$C_{20}H_{35}NOSSe$

(4*S*,5*R*)-4-(Camphorseleno)-5-(thioacetamido)octane

E.e. = 100%

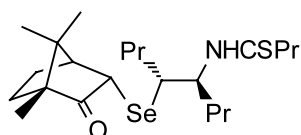
$[\alpha]_D^{23} = +113.2$ (*c* 4.05, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Marcello Tiecco,* Lorenzo Testaferri, Claudio Santi,
Cristina Tomassini, Francesca Marini, Luana Bagnoli and
Andrea Temperini

Tetrahedron: Asymmetry 13 (2002) 429



$C_{22}H_{39}NOSSe$

(4*R*,5*S*)-4-(Camphorseleno)-5-(thiobutyramido)octane

E.e. = 100%

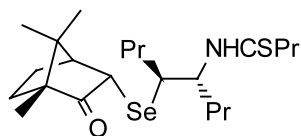
$[\alpha]_D^{20.2} = -109.9$ (*c* 1.1, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Marcello Tiecco,* Lorenzo Testaferri, Claudio Santi,
Cristina Tomassini, Francesca Marini, Luana Bagnoli and
Andrea Temperini

Tetrahedron: Asymmetry 13 (2002) 429



C₂₂H₃₉NOSSe

(4*S*,5*R*)-4-(Camphorseleno)-5-(thiobutyramido)octane

E.e. = 100%

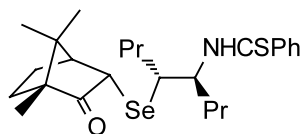
$[\alpha]_{\text{D}}^{24.4} = -51.4$ (*c* 0.59, CHCl₃)

Source of chirality: asymmetric synthesis

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

Marcello Tiecco,* Lorenzo Testaferri, Claudio Santi,
Cristina Tomassini, Francesca Marini, Luana Bagnoli and
Andrea Temperini

Tetrahedron: Asymmetry 13 (2002) 429



C₁₇H₂₇NOSSe

(4*R*,5*S*)-4-(Camphorseleno)-5-(thiobenzamido)octane

E.e. = 100%

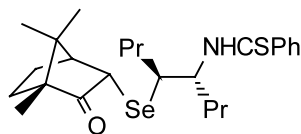
$[\alpha]_{\text{D}}^{20.3} = +82.0$ (*c* 1.4, CHCl₃)

Source of chirality: asymmetric synthesis

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

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C₁₇H₂₇NOSSe

(3*S*,4*R*)-3-(Camphorseleno)-4-(thiobenzamido)octane

E.e. = 100%

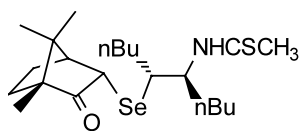
$[\alpha]_{\text{D}}^{24.9} = +3.0$ (*c* 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

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

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C₂₂H₃₉NOSSe

(5*R*,6*S*)-5-(Camphorseleno)-6-(thioacetamido)decane

E.e. = 100%

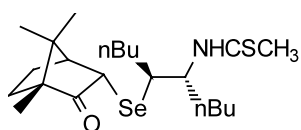
$[\alpha]_{\text{D}}^{21.3} = -46.6$ (*c* 5.0, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: 5*R*,6*S*

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$C_{22}H_{39}NOSSe$

(5*S*,6*R*)-5-(Camphorseleno)-6-(thioacetamido)decane

E.e. = 100%

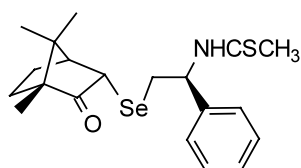
$[\alpha]_D^{22.9} = +66.2$ (*c* 4.0, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: 5*S*,6*R*

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$C_{20}H_{26}NOSSe$

(2*S*)-1-(Camphorseleno)-2-(thioacetamido)-2-phenylethane

E.e. = 100%

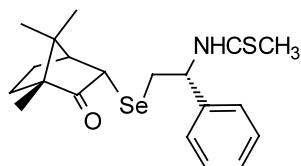
$[\alpha]_D^{22.6} = -39.0$ (*c* 2.7, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: 2*S*

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$C_{20}H_{26}NOSSe$

(2*R*)-1-(Camphorseleno)-2-(thioacetamido)-2-phenylethane

E.e. = 100%

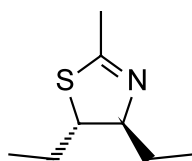
$[\alpha]_D^{21.8} = +30.6$ (*c* 2.1, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: 2*R*

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$C_8H_{15}NS$

(4*S*,5*S*)-4,5-Diethyl-2-methyl-4,5-dihydro-1,3-thiazole

E.e. = 100%

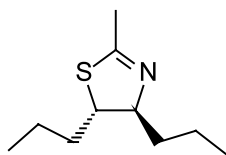
$[\alpha]_D^{15.4} = -76.4$ (*c* 0.4, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

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C₁₀H₁₉NS

(4*S*,5*S*)-2-Methyl-4,5-dipropyl-4,5-dihydro-1,3-thiazole

E.e. = 100%

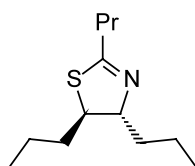
$[\alpha]_D^{24} = -258.0$ (*c* 0.9, CHCl₃)

Source of chirality: asymmetric synthesis

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

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C₁₂H₂₃NS

(4*R*,5*R*)-2,4,5-Tripropyl-4,5-dihydro-1,3-thiazole

E.e. = 100%

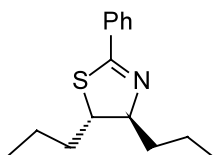
$[\alpha]_D^{20.0} = +59.2$ (*c* 0.5, CHCl₃)

Source of chirality: asymmetric synthesis

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

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C₁₅H₂₁NS

(4*S*,5*S*)-2-Phenyl-4,5-dipropyl-4,5-dihydro-1,3-thiazole

E.e. = 100%

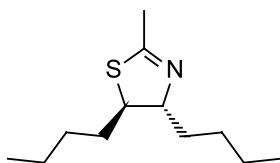
$[\alpha]_D^{24.7} = -127.0$ (*c* 0.35, CHCl₃)

Source of chirality: asymmetric synthesis

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

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C₁₂H₂₃NS

(4*R*,5*R*)-4,5-Dibutyl-2-methyl-4,5-dihydro-1,3-thiazole

E.e. = 100%

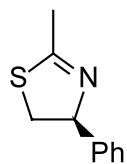
$[\alpha]_D^{16.3} = +62.7$ (*c* 2.0, CHCl₃)

Source of chirality: asymmetric synthesis

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

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C₁₀H₁₁NS

(4*S*)-2-Methyl-4-phenyl-4,5-dihydro-1,3-thiazole

E.e. = 100%

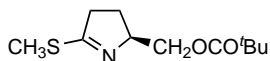
$[\alpha]_D^{21.3} = -21.2$ (c 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: 4*S*

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C₁₁H₁₉NO₂S

(*S*)-3,4-Dihydro-5-methylthio-2-pivaloyloxymethyl-2*H*-pyrrole

E.e. = 100%

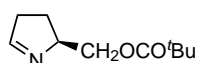
$[\alpha]_D^{20} = +22.6$ (c 10.6, CHCl₃)

Source of chirality: ethyl (*S*)-pyroglutamate

Absolute configuration: *S*

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C₁₀H₁₇NO₂

(*S*)-3,4-Dihydro-2-pivaloyloxymethyl-2*H*-pyrrole

E.e. = 100%

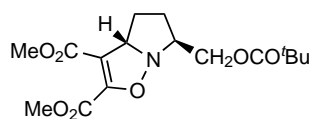
$[\alpha]_D^{20} = +64.4$ (c 6.7, CHCl₃)

Source of chirality: ethyl (*S*)-pyroglutamate

Absolute configuration: *S*

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C₁₆H₂₃NO₇

Dimethyl (3*aS*,6*S*)-3*a*,4,5,6-tetrahydro-6-pivaloyloxymethylpyrrolo[1,2-*b*]isoxazole-2,3-dicarboxylate

E.e. = 100%

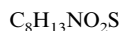
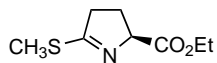
$[\alpha]_D^{20} = -167.5$ (c 7.5, CHCl₃)

Source of chirality: ethyl (*S*)-pyroglutamate

Absolute configuration: 3*aS*,6*S*

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Ethyl (*S*)-3,4-dihydro-5-methylthio-2*H*-pyrrole-2-carboxylate

E.e. = 100%

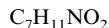
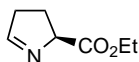
$[\alpha]_D^{20} = +80.6$ (*c* 6.0, $CHCl_3$)

Source of chirality: ethyl (*S*)-pyroglutamate

Absolute configuration: *S*

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Ethyl (*S*)-3,4-dihydro-2*H*-pyrrole-2-carboxylate

E.e. = 100%

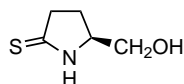
$[\alpha]_D^{20} = +14.1$ (*c* 8.5, $CHCl_3$)

Source of chirality: ethyl (*S*)-pyroglutamate

Absolute configuration: *S*

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(*S*)-4,5-Dihydro-5-hydroxymethylpyrrole-2(3*H*)-thione

E.e. = 100%

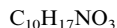
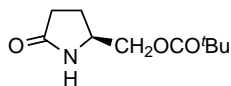
$[\alpha]_D^{20} = +13.4$ (*c* 1.9, $CHCl_3$)

Source of chirality: ethyl (*S*)-pyroglutamate

Absolute configuration: *S*

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(*S*)-4,5-Dihydro-5-pivaloyloxymethyl-2(3*H*)-pyrrolone

E.e. = 100%

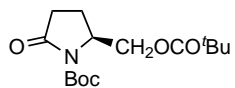
$[\alpha]_D^{20} = +32.0$ (*c* 5.2, $CHCl_3$)

Source of chirality: ethyl (*S*)-pyroglutamate

Absolute configuration: *S*

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$C_{15}H_{25}NO_5$

(*S*)-*N*-(*tert*-Butoxycarbonyl)-4,5-dihydro-5-pivaloyloxymethyl-2(3*H*)-pyrrolone

E.e. = 100%

$[\alpha]_D^{20} = -40.5$ (*c* 5.1, $CHCl_3$)

Source of chirality: ethyl (*S*)-pyroglutamate

Absolute configuration: *S*