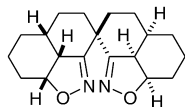


Stereochemistry abstracts

Kazuhiko Wakita, Gan B. Bajracharya, Midori A. Arai,
Shinobu Takizawa, Takeyuki Suzuki and Hiroaki Sasai*

Tetrahedron: Asymmetry 18 (2007) 372



$C_{19}H_{26}N_2O_2$

(*P,5aR,5a'R,8aR,8a'R,8bR,8b'R*)-4,4',5,5',5a,5'a,6,6',7,7',8,8',8a,8'a,8b,8'b-hexadecahydro-3,3'-spirobi[3*H*-naphtho[1,8-*cd*]-isoxazole]

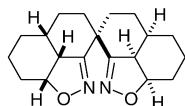
$E_e = >99\%$

$[\alpha]_D^{21} = +95.7$ (*c* 0.22, $CHCl_3$)

Absolute configuration: (*P,R,R,R,R,R,R*)

Kazuhiko Wakita, Gan B. Bajracharya, Midori A. Arai,
Shinobu Takizawa, Takeyuki Suzuki and Hiroaki Sasai*

Tetrahedron: Asymmetry 18 (2007) 372



$C_{19}H_{26}N_2O_2$

(*M,5aR,5a'R,8aR,8a'R,8bR,8b'R*)-4,4',5,5',5a,5'a,6,6',7,7',8,8',8a,8'a,8b,8'b-hexadecahydro-3,3'-spirobi[3*H*-naphtho[1,8-*cd*]-isoxazole]

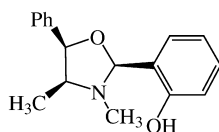
$E_e = >99\%$

$[\alpha]_D^{24} = +40.4$ (*c* 1.07, $CHCl_3$)

Absolute configuration: (*M,R,R,R,R,R,R*)

Raleigh W. Parrott, II and Shawn R. Hitchcock*

Tetrahedron: Asymmetry 18 (2007) 377



$C_{17}H_{19}NO_2$

(*2'S,4'S,5'R*)-2-(3',4'-Dimethyl-5'-phenyl-oxazolidin-2'-yl)-phenol

White solid

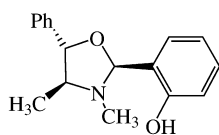
$[\alpha]_D^{26} = -32.3$ (*c* 0.62, $CHCl_3$)

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

Absolute configuration: (*2'S,4'S,5'R*)

Raleigh W. Parrott, II and Shawn R. Hitchcock*

Tetrahedron: Asymmetry 18 (2007) 377



$C_{17}H_{19}NO_2$

(*2'S,4'S,5'S*)-2-(3',4'-Dimethyl-5'-phenyl-oxazolidin-2'-yl)-phenol

White solid

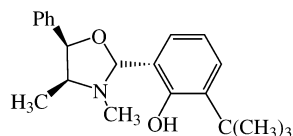
$[\alpha]_D^{26} = +71.6$ (*c* 0.64, $CHCl_3$)

Source of chirality: (*1S,2S*)-pseudoephedrine

Absolute configuration: (*2'S,4'S,5'S*)

Raleigh W. Parrott, II and Shawn R. Hitchcock*

Tetrahedron: Asymmetry 18 (2007) 377



C₂₁H₂₇NO₂

(2'*R*,4'*S*,5'*R*)-2-*tert*-Butyl-6-(3',4'-dimethyl-5'-phenyl-oxazolidin-2'-yl)-phenol

White solid

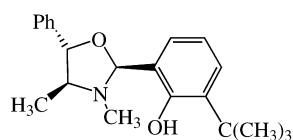
$[\alpha]_D^{26} = 12.0$ (*c* 0.64, CHCl₃)

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

Absolute configuration: (2'*R*,4'*S*,5'*R*)

Raleigh W. Parrott, II and Shawn R. Hitchcock*

Tetrahedron: Asymmetry 18 (2007) 377



C₂₁H₂₇NO₂

(2'*S*,4'*S*,5'*S*)-2-*tert*-Butyl-6-(3',4'-dimethyl-5'-phenyl-oxazolidin-2'-yl)-phenol

White solid

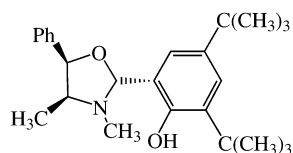
$[\alpha]_D^{26} = -188.6$ (*c* 0.64, CHCl₃)

Source of chirality: (1*S*,2*S*)-pseudoephedrine

Absolute configuration: (2'*S*,4'*S*,5'*S*)

Raleigh W. Parrott, II and Shawn R. Hitchcock*

Tetrahedron: Asymmetry 18 (2007) 377



C₂₅H₃₅NO₂

(2'*R*,4'*S*,5'*R*)-2,4-Di-*tert*-butyl-6-(3',4'-dimethyl-5'-phenyl-oxazolidin-2'-yl)-phenol

White solid

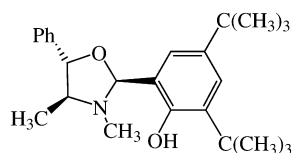
$[\alpha]_D^{26} = -22.6$ (*c* 0.60, CHCl₃)

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

Absolute configuration: (2'*R*,4'*S*,5'*R*)

Raleigh W. Parrott, II and Shawn R. Hitchcock*

Tetrahedron: Asymmetry 18 (2007) 377



C₂₅H₃₅NO₂

(2'*S*,4'*S*,5'*S*)-2,4-Di-*tert*-butyl-6-(3',4'-dimethyl-5'-phenyl-oxazolidin-2'-yl)-phenol

Yellow oil

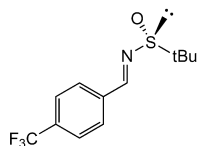
$[\alpha]_D^{26} = 40.0$ (*c* 0.65, CHCl₃)

Source of chirality: (1*S*,2*S*)-pseudoephedrine

Absolute configuration: (2'*S*,4'*S*,5'*S*)

Hisao Nemoto,* Hideki Moriguchi, Rujian Ma, Tomoyuki Kawamura,
Masaki Kamiya and Masayuki Shibuya

Tetrahedron: Asymmetry 18 (2007) 383



$C_9H_6F_3NOS$

(*R_S*)-2-Methyl-*N*-(4-trifluoromethylbenzylidene)propane-2-sulfinamide

Ee = 70%

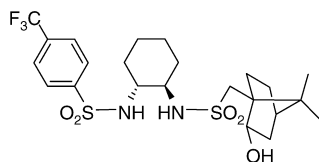
$[\alpha]_D^{22} = -78.2$ (c 1.0, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R_S*)

Vicente J. Forrat, Diego J. Ramón* and Miguel Yus*

Tetrahedron: Asymmetry 18 (2007) 400



$C_{23}H_{33}F_3N_2O_5S_2$

N-[2-(2-Hydroxy-7,7-dimethylbicyclo[2.2.1]hept-1-ylmethanesulfonylamino)cyclohexyl]-4-trifluoromethylbenzenesulfonamide

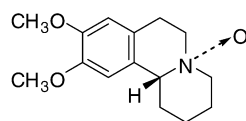
Ee = 100%

$[\alpha]_D^{25} = +1.0$ (c 1.3, $CHCl_3$)

Source of chirality: (+)-10-camphorsulfonyl chloride

Joanna Szawkało, Stefan J. Czarnocki, Anna Zawadzka,
Krystyna Wojtasiewicz, Andrzej Leniewski, Jan K. Maurin,
Zbigniew Czarnocki* and Józef Drabowicz*

Tetrahedron: Asymmetry 18 (2007) 406



$C_{15}H_{21}NO_3$

9,10-Dimethoxy-1,3,4,6,7,11b-hexahydro-2*H*-pyrido[2,1-*a*]isoquinoline *N*-oxide

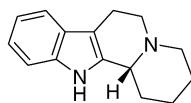
$[\alpha]_D^{23} = -14.3$ (c 1, $CHCl_3$)

Source of chirality: asymmetric transfer
hydrogenation

Absolute configuration: (*R*)

Joanna Szawkało, Stefan J. Czarnocki, Anna Zawadzka,
Krystyna Wojtasiewicz, Andrzej Leniewski, Jan K. Maurin,
Zbigniew Czarnocki* and Józef Drabowicz*

Tetrahedron: Asymmetry 18 (2007) 406



$C_{15}H_{18}N_2$

1,2,3,4,6,7,12,12b-Octahydro-indolo[2,3-*a*]quinolizine

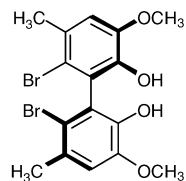
$[\alpha]_D^{23} = +82.7$ (c 1, CH_3OH) (98.5% ee)

Source of chirality: asymmetric transfer
hydrogenation

Absolute configuration: (*R*)

Davide Fabbri, Maria Antonietta Dettori, Giovanna Delogu,*
Alessandra Forni, Gianluigi Casalone, Giuseppe Palmieri,
Marina Pisano and Carla Rozzo

Tetrahedron: Asymmetry 18 (2007) 414



(aR)-(+)-2,2'-Dihydroxy-3,3'-dimethoxy-5,5'-dimethyl-6,6'-dibromo-1,1'-biphenyl

Ee = 99% [by 1H NMR of the corresponding diastereomer]

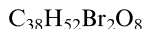
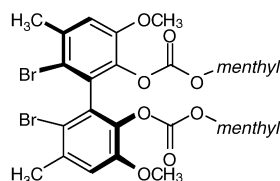
$[\alpha]_D^{20} = 13.1$ (c 0.5, $CHCl_3$); $[\alpha]_{365}^{20} = +103.0$ (c 0.5, $CHCl_3$)

Source of chirality: (-)-(1R,2S,5R)-menthyl chloroformate (ee 99%)

Absolute configuration: (R)

Davide Fabbri, Maria Antonietta Dettori, Giovanna Delogu,*
Alessandra Forni, Gianluigi Casalone, Giuseppe Palmieri,
Marina Pisano and Carla Rozzo

Tetrahedron: Asymmetry 18 (2007) 414



(aS,1R,1R',2S,2S',5R,5R')-(-)-3,3'-Dimethoxy-5,5'-dimethyl-6,6'-dibromo-[1,1'-biphenyl]-2,2'-diyl-O,O'-bis[5-methyl-2-(1-methyl-ethyl)-cyclohexyl]-carbonic ester

De = 99% [by 1H NMR]

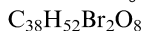
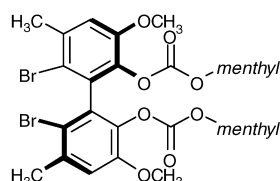
$[\alpha]_D^{20} = +38.7$ (c 1.0, $CHCl_3$)

Source of chirality: (-)-(1R,2S,5R)-menthyl chloroformate (ee 99%)

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

Davide Fabbri, Maria Antonietta Dettori, Giovanna Delogu,*
Alessandra Forni, Gianluigi Casalone, Giuseppe Palmieri,
Marina Pisano and Carla Rozzo

Tetrahedron: Asymmetry 18 (2007) 414



(aR,1R,1R',2S,2S',5R,5R')-(-)-3,3'-Dimethoxy-5,5'-dimethyl-6,6'-dibromo-[1,1'-biphenyl]-2,2'-diyl-O,O'-bis[5-methyl-2-(1-methyl-ethyl)-cyclohexyl]-carbonic ester

De = 99% [by 1H NMR]

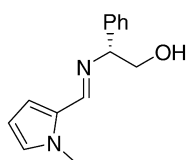
$[\alpha]_D^{20} = -72.9$ (c 1.0, $CHCl_3$)

Source of chirality: (-)-(1R,2S,5R)-menthyl chloroformate (ee 99%)

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

Clément Denhez, Jean-Luc Vasse, Dominique Harakat and
Jan Szymoniak*

Tetrahedron: Asymmetry 18 (2007) 424



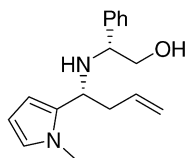
(R)-2-[(1-Methyl-1H-pyrrol-2-yl)methyleneamino]-2-phenylethanol

$[\alpha]_D = -28$ (c 0.3, CH_2Cl_2)

Source of chirality: (R)-phenylglycinol

Clément Denhez, Jean-Luc Vasse, Dominique Harakat and Jan Szymoniak*

Tetrahedron: Asymmetry 18 (2007) 424



$C_{17}H_{22}N_2O$

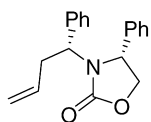
(*R*)-2-[(*R*)-1-(1-Methyl-1*H*-pyrrol-2-yl)but-3-enylamino]-2-phenylethanol

$[\alpha]_D = -44.5$ (*c* 0.9, CH_2Cl_2)

Source of chirality: (*R*)-phenylglycinol

Clément Denhez, Jean-Luc Vasse, Dominique Harakat and Jan Szymoniak*

Tetrahedron: Asymmetry 18 (2007) 424



$C_{19}H_{19}N_2O$

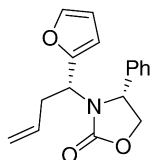
(*R*)-3-[(*R*)-1-Phenylbut-3-enyl]-4-phenyloxolidin-2-one

$[\alpha]_D = -11$ (*c* 1.2, CH_2Cl_2)

Source of chirality: (*R*)-phenylglycinol

Clément Denhez, Jean-Luc Vasse, Dominique Harakat and Jan Szymoniak*

Tetrahedron: Asymmetry 18 (2007) 424



$C_{17}H_{17}NO_3$

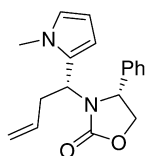
(*R*)-3-[(*R*)-1-(1-Furan-2-yl)but-3-enyl]-4-phenyloxolidin-2-one

$[\alpha]_D = -8.5$ (*c* 1, CH_2Cl_2)

Source of chirality: (*R*)-phenylglycinol

Clément Denhez, Jean-Luc Vasse, Dominique Harakat and Jan Szymoniak*

Tetrahedron: Asymmetry 18 (2007) 424



$C_{18}H_{20}N_2O_2$

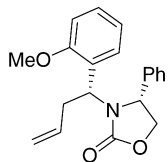
(*R*)-3-[(*R*)-1-(1-Methyl-1*H*-pyrrol-2-yl)but-3-enyl]-4-phenyloxolidin-2-one

$[\alpha]_D = -15.5$ (*c* 1, CH_2Cl_2)

Source of chirality: (*R*)-phenylglycinol

Clément Denhez, Jean-Luc Vasse, Dominique Harakat and Jan Szymoniak*

Tetrahedron: Asymmetry 18 (2007) 424



C₂₀H₂₁NO₃

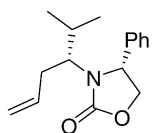
(*R*)-3-[(*R*)-1-(2-Methoxyphenyl)but-3-enyl]-4-phenyloxazolidin-2-one

$[\alpha]_D = -19$ (*c* 0.8, CH₂Cl₂)

Source of chirality: (*R*)-phenylglycinol

Clément Denhez, Jean-Luc Vasse, Dominique Harakat and Jan Szymoniak*

Tetrahedron: Asymmetry 18 (2007) 424



C₁₆H₂₁NO₂

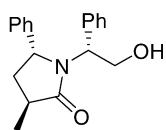
(*R*)-3-[(*R*)-1-(2-Methylhex-5-en-3-yl)]-4-phenyloxazolidin-2-one

$[\alpha]_D = -14$ (*c* 0.8, CH₂Cl₂)

Source of chirality: (*R*)-phenylglycinol

Clément Denhez, Jean-Luc Vasse, Dominique Harakat and Jan Szymoniak*

Tetrahedron: Asymmetry 18 (2007) 424



C₁₉H₂₁NO₂

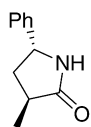
(3*R*,5*S*)-1-[(*R*)-2-Hydroxy-1-phenylethyl]-3-methyl-5-phenylpyrrolidin-2-one

$[\alpha]_D = -22.5$ (*c* 1.1, CH₂Cl₂)

Source of chirality: (*R*)-phenylglycinol

Clément Denhez, Jean-Luc Vasse, Dominique Harakat and Jan Szymoniak*

Tetrahedron: Asymmetry 18 (2007) 424



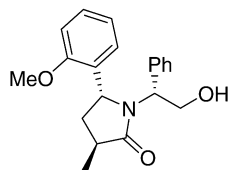
C₁₁H₁₃NO

(3*R*,5*S*)-3-Methyl-5-phenylpyrrolidin-2-one

$[\alpha]_D = +39$ (*c* 0.5, CH₂Cl₂)

Clément Denhez, Jean-Luc Vasse, Dominique Harakat and Jan Szymoniak*

Tetrahedron: Asymmetry 18 (2007) 424



$C_{20}H_{23}NO_3$

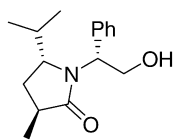
(3*R*,5*S*)-1-[(*R*)-2-Hydroxy-1-phenylethyl]-3-methyl-5-(2-methoxyphenyl)pyrrolidin-2-one

$[\alpha]_D = +93$ (*c* 0.2, CH_2Cl_2)

Source of chirality: (*R*)-phenylglycinol

Clément Denhez, Jean-Luc Vasse, Dominique Harakat and Jan Szymoniak*

Tetrahedron: Asymmetry 18 (2007) 424



$C_{16}H_{23}NO_2$

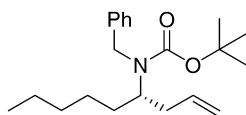
(3*R*,5*S*)-1-[(*R*)-2-Hydroxy-1-phenylethyl]-5-isopropyl-3-methylpyrrolidin-2-one

$[\alpha]_D = +24.5$ (*c* 0.3, CH_2Cl_2)

Source of chirality: (*R*)-phenylglycinol

Clément Denhez, Jean-Luc Vasse, Dominique Harakat and Jan Szymoniak*

Tetrahedron: Asymmetry 18 (2007) 424



$C_{21}H_{33}NO_2$

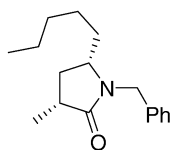
(*S*)-*tert*-Butyl benzyl(non-1-en-4-yl)carbamate

$[\alpha]_D = -11.9$ (*c* 1, CH_2Cl_2)

Source of chirality: (*R*)-phenylglycinol

Clément Denhez, Jean-Luc Vasse, Dominique Harakat and Jan Szymoniak*

Tetrahedron: Asymmetry 18 (2007) 424



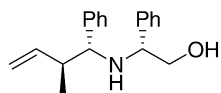
$C_{17}H_{25}NO$

(3*R*,5*S*)-1-Benzyl-3-methyl-5-pentylpyrrolidin-2-one

$[\alpha]_D = -22.5$ (*c* 0.5, CH_2Cl_2)

Clément Denhez, Jean-Luc Vasse, Dominique Harakat and Jan Szymoniak*

Tetrahedron: Asymmetry 18 (2007) 424



C₁₉H₂₃NO

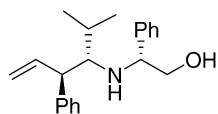
(*R*)-2-[(1*R*,2*S*)-2-Methyl-1-phenylbut-3-enylamino]-2-phenylethanol

[α]_D = -23 (*c* 1, CH₂Cl₂)

Source of chirality: (*R*)-phenylglycinol

Clément Denhez, Jean-Luc Vasse, Dominique Harakat and Jan Szymoniak*

Tetrahedron: Asymmetry 18 (2007) 424



C₂₁H₂₇NO

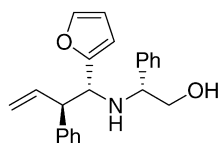
(*R*)-2-[(3*S*,4*R*)-2-Methyl-4-phenylhex-5-en-3-ylamino]-2-phenylethanol

[α]_D = -123 (*c* 0.5, CH₂Cl₂)

Source of chirality: (*R*)-phenylglycinol

Clément Denhez, Jean-Luc Vasse, Dominique Harakat and Jan Szymoniak*

Tetrahedron: Asymmetry 18 (2007) 424



C₂₂H₂₃NO₂

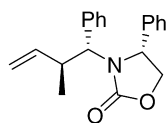
(*R*)-2-[(1*R*,2*R*)-1-(Furan-2-yl)-2-phenylbut-3-enylamino]-2-phenylethanol

[α]_D = -15 (*c* 0.45, CH₂Cl₂)

Source of chirality: (*R*)-phenylglycinol

Clément Denhez, Jean-Luc Vasse, Dominique Harakat and Jan Szymoniak*

Tetrahedron: Asymmetry 18 (2007) 424



C₂₀H₂₁NO₂

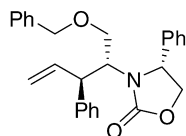
(*R*)-2-[(1*R*,2*S*)-1-Methyl-2-phenylbut-3-enyl]-4-phenyloxazolidin-2-one

[α]_D = -5.5 (*c* 1.4, CH₂Cl₂)

Source of chirality: (*R*)-phenylglycinol

Clément Denhez, Jean-Luc Vasse, Dominique Harakat and Jan Szymoniak*

Tetrahedron: Asymmetry 18 (2007) 424



$[\alpha]_D = -102$ (*c* 1.3, CH₂Cl₂)

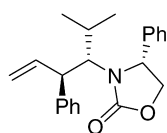
Source of chirality: (*R*)-phenylglycinol

C₂₇H₂₇NO₃

(*R*)-3-[(2*R*,3*R*)-1-benzyloxy-3-phenylpent-4-en-2-yl]-4-phenyloxazolidin-2-one

Clément Denhez, Jean-Luc Vasse, Dominique Harakat and Jan Szymoniak*

Tetrahedron: Asymmetry 18 (2007) 424



$[\alpha]_D^{25} = -219$ (*c* 1, CH₂Cl₂)

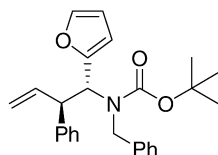
Source of chirality: (*R*)-phenylglycinol

C₂₇H₂₇NO₃

(*R*)-3-[(2*R*,3*R*)-1-benzyloxy-3-phenylpent-4-en-2-yl]-4-phenyloxazolidin-2-one

Clément Denhez, Jean-Luc Vasse, Dominique Harakat and Jan Szymoniak*

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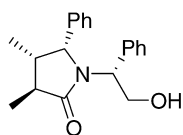
$[\alpha]_D = +62$ (*c* 1.1, CH₂Cl₂)

C₂₆H₂₉NO₃

(3*S*,4*R*,5*S*)-1-[(*R*)-2-hydroxy-1-phenylethyl]-3,4-dimethyl-5-phenylpyrrolidin-2-one

Clément Denhez, Jean-Luc Vasse, Dominique Harakat and Jan Szymoniak*

Tetrahedron: Asymmetry 18 (2007) 424



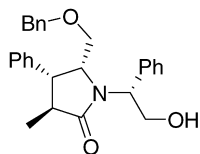
$[\alpha]_D = -38$ (*c* 1, CH₂Cl₂)

C₂₀H₂₃NO₂

(3*S*,4*S*,5*R*)-1-[(*R*)-2-hydroxy-1-phenylethyl]-3,4-dimethyl-5-phenyloxazolidin-2-one

Clément Denhez, Jean-Luc Vasse, Dominique Harakat and Jan Szymoniak*

Tetrahedron: Asymmetry 18 (2007) 424



$[\alpha]_D = -60$ (*c* 0.6, CH₂Cl₂)

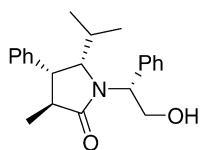
Source of chirality: (*R*)-phenylglycinol

C₂₇H₂₉NO₃

(3*S*,4*R*,5*R*)-5-Benzyloxymethyl-1-[(*R*)-2-hydroxy-1-phenylethyl]-3-methyl-4-phenylpyrrolidin-2-one

Clément Denhez, Jean-Luc Vasse, Dominique Harakat and Jan Szymoniak*

Tetrahedron: Asymmetry 18 (2007) 424



$[\alpha]_D = -75$ (*c* 0.4, CH₂Cl₂)

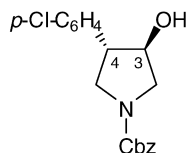
Source of chirality: (*R*)-phenylglycinol

C₂₂H₂₇NO₂

(3*S*,4*R*,5*S*)-1-[(*R*)-2-Hydroxy-1-phenylethyl]-5-isopropyl-3-methyl-4-phenylpyrrolidin-2-one

Ricardo de L. Barreto, Marcos J. S. Carpes, César C. Santana and Carlos R. D. Correia*

Tetrahedron: Asymmetry 18 (2007) 435



Ee = 96.9%

$[\alpha]_D^{20} = -19.0$ (*c* 3.0, CH₂Cl₂)

Source of chirality: SMB chromatography resolution

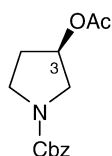
Absolute configuration: (3*R*,4*S*)

C₁₈H₁₈ClNO₃

(3*R*,4*S*)-Benzyl 3-hydroxy-4-(4-chlorophenyl)pyrrolidine-1-carboxylate

Ricardo de L. Barreto, Marcos J. S. Carpes, César C. Santana and Carlos R. D. Correia*

Tetrahedron: Asymmetry 18 (2007) 435



Ee = >99%

$[\alpha]_D^{20} = -13.5$ (*c* 1.48, CH₃OH)

Source of chirality: lipase resolution

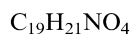
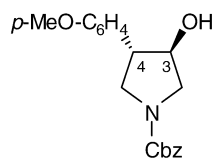
Absolute configuration: (3*R*)

C₁₄H₁₇NO₄

(*R*)-Benzyl 3-acetoxypyrrolidine-1-carboxylate

Ricardo de L. Barreto, Marcos J. S. Carpes, César C. Santana and
Carlos R. D. Correia*

Tetrahedron: Asymmetry 18 (2007) 435



(3*R*,4*S*)-Benzyl 3-hydroxy-4-(4-methoxyphenyl)pyrrolidine-1-carboxylate

Ee = 97.1%

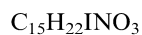
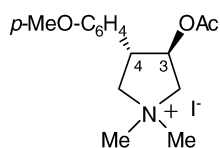
$[\alpha]_D^{20} = -6.7$ (*c* 1.2; CH_2Cl_2)

Source of chirality: lipase resolution

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

Ricardo de L. Barreto, Marcos J. S. Carpes, César C. Santana and
Carlos R. D. Correia*

Tetrahedron: Asymmetry 18 (2007) 435



(3*R*,4*S*)-3-Acetoxy-4-(4-methoxyphenyl)-1,1-dimethylpyrrolidinium iodide

Ee = 97.1%

$[\alpha]_D^{20} = +17.5$ (*c* 2.0, H_2O)

Source of chirality: lipase resolution

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