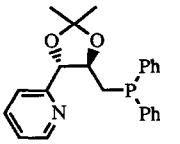
Giorgio Chelucci, M. Antonietta Cabras, Carlo Botteghi and M. Marchetti

Tetrahedron: Asymmetry **1994**, *5*, 299



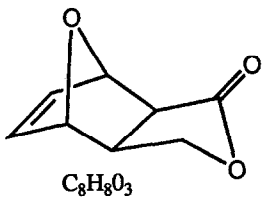
$C_{23}H_{24}NO_2P$

$[\alpha]^{25}_D$ -48.0 (*c* 7, $CHCl_3$)
Absolute configuration: 4S,5R
Prepared from L-(+)tartrate

(-)-(4S,5R)-4-(2-Pyridyl)-5-(diphenylphosphino)methyl-2,2-dimethyl-1,3-dioxolane

H. Luna, K. Prasad, O. Repic

Tetrahedron: Asymmetry **1994**, *5*, 303



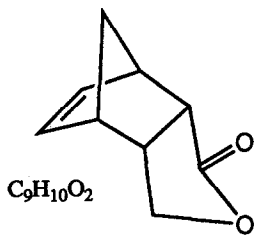
$C_8H_8O_3$

E.e.= 100% (by chiral HPLC)
$[\alpha]_D^{25}$ = +137.5 (0.6, CH_3OH)
Source of chrirality: Enantioselective microbial oxidation
Absolute Stereochemistry: 8R, 9S

(+)-[3aR-(3aα,4a,7a,7aα)]-tetrahydro-4,7-epoxyisofuran-1-(3H)-one

H. Luna, K. Prasad, O. Repic

Tetrahedron: Asymmetry **1994**, *5*, 303



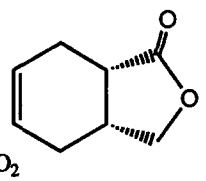
$C_9H_{10}O_2$

E.e.= >99.5% (by chiral HPLC)
$[\alpha]_D^{24}$ = +120.9 (0.65, CH_3OH)
Source of chrirality: Enantioselective microbial oxidation
Absolute Stereochemistry: 2S, 3R

(+)-(2S,3R)-cis-endo-3-(hydroxymethyl)bicyclo[2.2.1]hept-5-ene-2-carboxylic acid lactone

H. Luna, K. Prasad, O. Repic

Tetrahedron: Asymmetry **1994**, *5*, 303



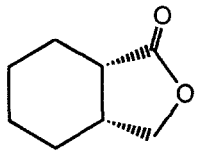
$C_8H_{10}O_2$

E.e.= 99.6% (by chiral HPLC)
$[\alpha]_D^{25}$ = - 67.5 (2, CH_3OH)
Source of chrirality: Enantioselective microbial oxidation

(3aR-cis)-3a,4,7,7a-tetrahydro-1(3H)isobenzofuranone

H. Luna, K. Prasad, O. Repic

Tetrahedron: Asymmetry **1994,** *5,* 303



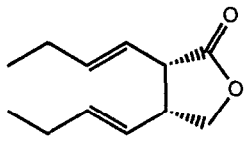
$C_8H_{12}O_2$

(1S,2R)-cis-3-oxabicyclo[4.3.0]nona-2-one

E.e.= 60% (by chiral HPLC)
$[\alpha]_D^{25}$ = +36.2 (1.3, CH_3OH)
Source of chrirality: Enantioselective microbial oxidation

H. Luna, K. Prasad, O. Repic

Tetrahedron: Asymmetry **1994,** *5,* 303



$C_{12}H_{18}O_2$

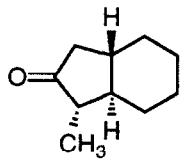
cis-(3S,4R,1'E)-3,4-bis(1'-butenyl)tetrahydro-2-furanone

E.e.= 55% (by chiral GC)

Source of chirality: Enantioselective microbial oxidation

Jaume Castro, Albert Moyano, Miquel A. Pericàs, Antoni Riera and Andrew E. Greene

Tetrahedron: Asymmetry **1994,** *5,* 307



$C_{10}H_{16}O$
7-Methylbicyclo[4.3.0]nonan-8-one

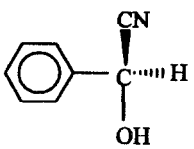
E.e. > 98% [by nmr]
$[\alpha]_D^{25}$ = +82.0 (c 0.9, pentane)
CD: $[\theta]_{300}$ = +8444 (c 0.18, pentane)

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

Absolute configuration 1*S*,6*R*,7*S* [CD]

E. Kiljunen and L.T. Kanerva

Tetrahedron: Asymmetry **1994,** *5,* 311

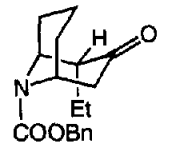


C_8H_7NO
(*S*)-α-Hydroxybenzeneacetonitrile

E.e. = 90 % (by chiral GLC)
$[\alpha]_D^{25}$ = -42 (c = 0.85, $CHCl_3$)
Source of chirality: *Sorghum bicolor* shoots
Absolute configuration: *S*

O. Muraoka, K. Okumura, T. Maeda, G. Tanabe and T. Momose

Tetrahedron: Asymmetry **1994,** *5,* 317



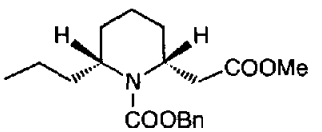
$C_{18}H_{23}O_3N$

E. e. = 94% [by HPLC analysis with a Chiralpak AS column]
$[\alpha]_D^{26}$ = +62.7 (c 1.01, $CHCl_3$)
Souce of chirality : asymmetric deprotonation
Absolute configuration : 1S, 2S, 5R

9-Benzyloxycarbonyl-2-ethyl-9-azabicyclo[3.3.1]nonan-3-one

O. Muraoka, K. Okumura, T. Maeda, G. Tanabe and T. Momose

Tetrahedron: Asymmetry **1994,** *5,* 317



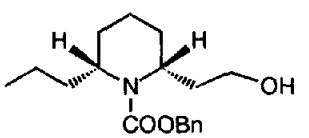
$C_{19}H_{25}O_4N$

E. e. = 94% [by HPLC analysis with a Chiralpak AS column]
$[\alpha]_D^{24}$ = -32.9 (c 0.76, $CHCl_3$)
Souce of chirality : asymmetric deprotonation
Absolute configuration : 2R, 6R

Methyl 1-benzyloxycarbonyl-6-propylpiperidine-2-acetate

O. Muraoka, K. Okumura, T. Maeda, G. Tanabe and T. Momose

Tetrahedron: Asymmetry **1994,** *5,* 317



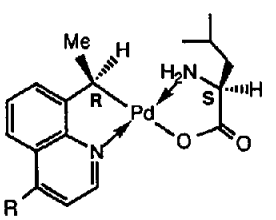
$C_{18}H_{25}O_3N$

E. e. = 94% [by HPLC analysis with a Chiralpak AS column]
$[\alpha]_D^{24}$ = +3.46 (c 1.11, $CHCl_3$)
Souce of chirality : asymmetric deprotonation
Absolute configuration : 2R, 6R

1-Benzyloxycarbonyl-2-(2-hydroxyethyl)-6-propylpiperidine

J. Spencer, M. Pfeffer, F. Maassarani, A. DeCian and J. Fischer

Tetrahedron: Asymmetry **1994,** *5,* 321

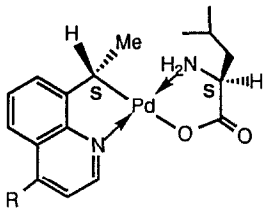


R = Me; $C_{18}H_{24}N_2O_2Pd$
R = H; $C_{17}H_{22}N_2O_2Pd$

d.e. = 95% (by ^1H NMR).
Source of chirality: fractional precipitation of (*R,S*)-(*S,S*) complex.
Absolute Configuration: (*R,S*)

J. Spencer, M. Pfeffer, F. Maassarani, A. DeCian and J. Fischer

Tetrahedron: Asymmetry **1994**, *5*, 321

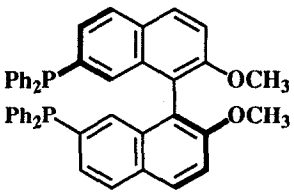


R = Me; $C_{18}H_{24}N_2O_2Pd$
R = H; $C_{17}H_{22}N_2O_2Pd$

d.e.> 80% (by ^{1}H NMR).
Source of chirality: fractional precipitation of (*R,S*)-(*S,S*) complex.
Absolute Configuration: (*S,S*) by X-ray diffraction of R = Me complex.

T. Horiuchi, T. Ohta, M. Stephan and H. Takaya

Tetrahedron: Asymmetry **1994**, *5*, 325



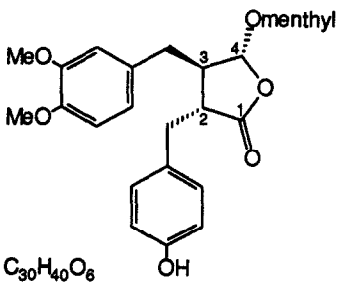
$C_{46}H_{36}O_2P_2$

(*S*)-(+)-7,7'-Bis(diphenylphosphino)-2,2'-dimethoxy-1,1'-binaphthyl

$[\alpha]_D^{23}$ +110.3 (*c* 0.58, $CHCl_3$)
Source of chirality: optical resolution
Absolute configuration: S

A. Pelter, R. S. Ward and A. Abd-el-Ghani

Tetrahedron: Asymmetry **1994**, *5*, 329



$C_{30}H_{40}O_6$

D.E. 100% by n.m.r.

Source of chirality : synthesis from (-)-menthol

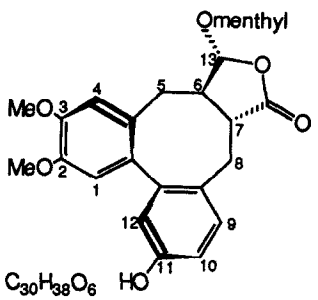
Absolute configuration : 2R,3R,4R

(assigned by correlation with, and X-ray analysis of, related compound)

$[\alpha]_D^{22}$ = -145.8 (c = 0.402, $CHCl_3$)

A. Pelter, R. S. Ward and A. Abd-el-Ghani

Tetrahedron: Asymmetry **1994**, *5*, 329



$C_{30}H_{38}O_6$

D.E. 100% by n.m.r.

Source of chirality : synthesis from (-)-menthol

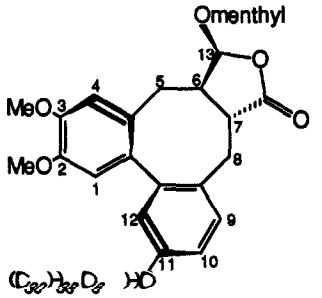
Absolute configuration : 6R,7R,13R,1a/12aS

(assigned by correlation of specific rotation and ^{13}C n.m.r. with literature)

$[\alpha]_D^{22}$ = +186.9 (c = 0.312, $CHCl_3$)

A. Pelter, R. S. Ward and A. Abd-el-Ghani

Tetrahedron: Asymmetry **1994**, *5*, 329



D.E. 100% by n.m.r.

Source of chirality : synthesis from (-)-menthol

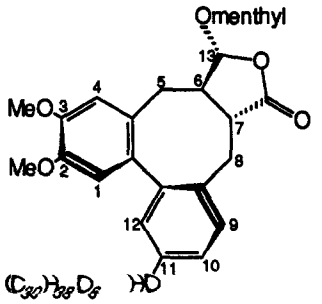
Absolute configuration : 6R,7R,13S,1a/12aS

(assigned by correlation of specific rotation and ^{13}C n.m.r. with literature)

$[\alpha]_D^{22}$ = +84.3 (c = 0.325, $CHCl_3$)

A. Pelter, R. S. Ward and A. Abd-el-Ghani

Tetrahedron: Asymmetry **1994**, *5*, 329



D.E. 100% by n.m.r.

Source of chirality : synthesis from (-)-menthol

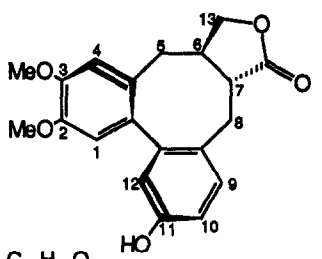
Absolute configuration : 6R,7R,13R,1a/12aR

(assigned by correlation of specific rotation and ^{13}C n.m.r. with literature)

$[\alpha]_D^{22}$ = -136.1 (c = 1.00, $CHCl_3$)

A. Pelter, R. S. Ward and A. Abd-el-Ghani

Tetrahedron: Asymmetry **1994**, *5*, 329



$C_{20}H_{20}O_5$

D.E. 100% by n.m.r.

Source of chirality : synthesis from (-)-menthol

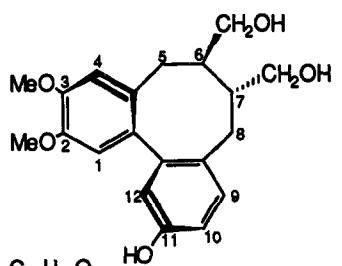
Absolute configuration : 6R,7R,1a/12aS

(assigned by correlation of specific rotation and ^{13}C n.m.r. with literature)

$[\alpha]_D^{22}$ = +108.8 (c = 0.25, $CHCl_3$)

A. Pelter, R. S. Ward and A. Abd-el-Ghani

Tetrahedron: Asymmetry **1994**, *5*, 329



$C_{20}H_{24}O_5$

D.E. 100% by n.m.r.

Source of chirality : synthesis from (-)-menthol

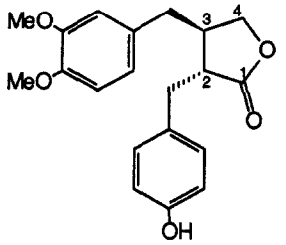
Absolute configuration : 6R,7R,1a/12aS

(assigned by correlation of specific rotation and ^{13}C n.m.r. with literature)

$[\alpha]_D^{22}$ = +63.2 (c = 0.25, EtOH)

A. Pelter, R. S. Ward and A. Abd-el-Ghani

Tetrahedron: Asymmetry **1994,** *5,* 329



D.E. 100% by n.m.r.

Source of chirality : synthesis from (-)-menthol

Absolute configuration : 2R,3R

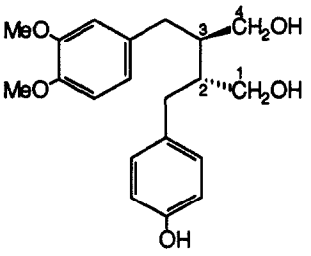
(assigned by correlation with, and X-ray analysis of, related compound)

$C_{20}H_{22}O_5$

$[\alpha]_D^{22}$ = -29.5 (c = 0.27, $CHCl_3$)

A. Pelter, R. S. Ward and A. Abd-el-Ghani

Tetrahedron: Asymmetry **1994,** *5,* 329



D.E. 100% by n.m.r.

Source of chirality : synthesis from (-)-menthol

Absolute configuration : 2R,3R

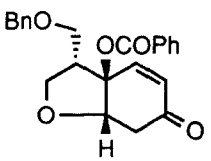
(assigned by correlation with, and X-ray analysis of, related compound)

$C_{20}H_{26}O_5$

$[\alpha]_D^{22}$ = -32.1 (c = 0.14, $CHCl_3$)

H. Fujioka, S. Kitagaki, N. Ohno, H. Kitagawa, Y. Kita and K. Matsumoto

Tetrahedron: Asymmetry **1994,** *5,* 333



$[\alpha]_D^{20}$ +159 (c=0.44, $CHCl_3$)

CD [λ_{ext} ($\Delta\varepsilon$)] (MeOH) : 235 (+41.4), 215 (-0.6)

Source of chirality: natural and asymm. synth. (alkylation)

Absolute configuration 1R,6S,9S

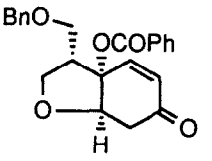
(assigned by rel. X-Ray and CD study)

$C_{23}H_{22}O_5$

1-Benzoyloxy-9-benzyloxymethyl-*cis*-7-oxabicyclo[4,3,0]non-2-en-4-one

H. Fujioka, S. Kitagaki, N. Ohno, H. Kitagawa, Y. Kita and K. Matsumoto

Tetrahedron: Asymmetry **1994,** *5,* 333



$[\alpha]_D^{20}$ -99.6 (c=0.83, $CHCl_3$)

CD [λ_{ext} ($\Delta\varepsilon$)] (MeOH) : 240 (-30.0), 220 (+8.2)

Source of chirality: natural and asymm. synth. (alkylation)

Absolute configuration 1S,6R,9S

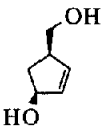
(assigned by rel. X-Ray and CD study)

$C_{23}H_{22}O_5$

1-Benzoyloxy-9-benzyloxymethyl-*cis*-7-oxabicyclo[4,3,0]non-2-en-4-one

David M. Hodgson, Jason Withcrington and Brian A. Moloney

Tetrahedron: Asymmetry **1994**, *5*, 337



$C_6H_{10}O_2$

4-Hydroxymethyl-cyclopent-2-en-1-ol

E.e.=95% [by nmr of bis (+)-MPTA derivative]

$[\alpha]_D^{20}$=+46.7(c 1.55,CH_2Cl_2)

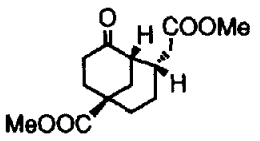
Source of Chirality: Desymmetrisation of *meso*-epoxide using dilithiated 1R,2S-norephedrine

Absolute configuration 1S,4R

(assigned by comparison of sign of $[\alpha]_D$ of monotritylated alcohol with lit.)

Françoise Dumas, Véronique Maine, Christian Cavé, Jean d'Angelo, Angèle Chiaroni, Claude Riche

Tetrahedron: Asymmetry **1994**, *5*, 339



$C_{14}H_{20}O_5$

(1-Carbomethoxy-4-oxo-bicyclo-[3,3,1]-nonan-6-yl)-acetic acid methyl ester

E. e. = 90 % [by nmr with $Eu(hfc)_3$]

$[\alpha]_D^{20}$ = + 6.1 (c 3.5, MeOH)

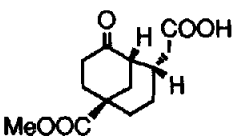
Source of chirality: asymm. synth. (Michael)

Absolute configuration 1S, 5S, 6S

(assigned by chem. corr.)

Françoise Dumas, Véronique Maine, Christian Cavé, Jean d'Angelo, Angèle Chiaroni, Claude Riche

Tetrahedron: Asymmetry **1994**, *5*, 339



$C_{13}H_{18}O_5$

(1-Carbomethoxy-4-oxo-bicyclo-[3,3,1]-nonan-6-yl)-acetic acid

E. e. = 90 %

$[\alpha]_D^{20}$ = + 13.0 (c 2.3, MeCN)

mp 122 °C

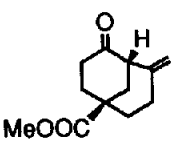
Source of chirality: asymm. synth. (Michael)

Absolute configuration 1S, 5S, 6S

(assigned by rel. X-ray, and CD spectr. of synth. intermed.)

Françoise Dumas, Véronique Maine, Christian Cavé, Jean d'Angelo, Angèle Chiaroni, Claude Riche

Tetrahedron: Asymmetry **1994**, *5*, 339



$C_{12}H_{16}O_3$

1-Carbomethoxy-6-methylene-bicyclo-[3,3,1]-nonan-4-one

E. e. = 90 %

$[\alpha]_D^{20}$ = + 64.0 (c 1.12, MeCN)

CD: $\Delta\varepsilon_{318}$ -33.6 (MeOH)

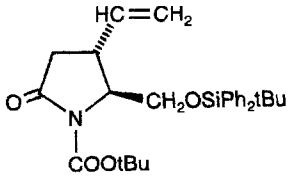
Source of chirality: asymm. synth. (Michael)

Absolute configuration 1S, 5S

(assigned by CD spectr.)

C. Herdeis, H. P. Hubmann, H. Lotter

Tetrahedron: Asymmetry **1994,** *5,* 351



$C_{28}H_{37}NO_4Si$

E.e. = > 98 % derived from S-pyroglutamic acid

$[\alpha]_D^{20}$ = -23 (c = 0.21, $CHCl_3$)

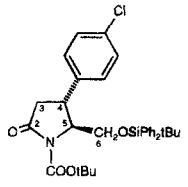
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 4R,5S

4R,5S-1-t-Butoxycarbonyl-5-t-butyldiphenylsiloxymethyl-4-vinylpyrrolidine-2-one

C. Herdeis, H. P. Hubmann, H. Lotter

Tetrahedron: Asymmetry **1994,** *5,* 351



$C_{32}H_{38}ClNO_4Si$

E.e. = > 98 % derived from S-pyroglutamic acid

$[\alpha]_D^{20}$ = -26.5 (c = 0.266, $CHCl_3$)

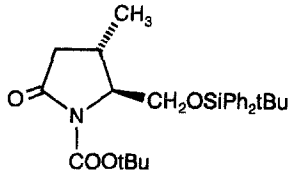
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 4R,5S

4R,5S-1-t-Butoxycarbonyl-5-t-butyldiphenylsiloxymethyl-4-(4-chlorphenylpyrrolidine-2-one

C. Herdeis, H. P. Hubmann, H. Lotter

Tetrahedron: Asymmetry **1994,** *5,* 351



$C_{27}H_{37}NO_4Si$

E.e. = > 98 % derived from S-pyroglutamic acid

$[\alpha]_D^{20}$ = -33 (c = 0.4, $CHCl_3$)

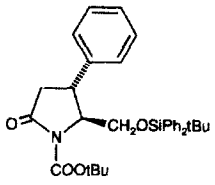
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 4S,5S

2S,5S-1-t-Butoxycarbonyl-5-t-butyldiphenylsiloxymethyl-4-methylpyrrolidine-2-one

C. Herdeis, H. P. Hubmann, H. Lotter

Tetrahedron: Asymmetry **1994,** *5,* 351



$C_{32}H_{39}NO_4Si$

E.e. = > 98 % derived from S-pyroglutamic acid

$[\alpha]_D^{20}$ = -27 (c = 0.23, $CHCl_3$)

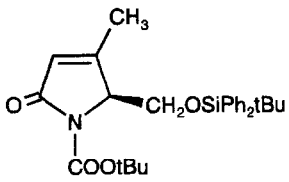
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 4R,5S

4R,5S-1-t-Butoxycarbonyl-5-t-butyldiphenylsiloxymethyl-4-phenylpyrrolidine-2-one

C. Herdeis, H. P. Hubmann, H. Lotter

Tetrahedron: Asymmetry **1994,** *5*, 351



$C_{27}H_{35}NO_4Si$

E.e. = > 98 % derived from S-pyroglutamic acid

$[\alpha]_D^{20}$ = -96 (c = 0.214, $CHCl_3$)

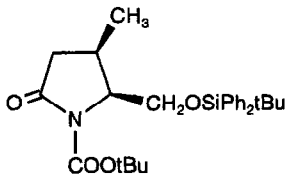
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 5S

5S-1-t-Butoxycarbonyl-5-t-butyldiphenylsiloxymethyl-4-methyl-1,5-dihydro-2H-pyrrol-2-one

C. Herdeis, H. P. Hubmann, H. Lotter

Tetrahedron: Asymmetry **1994,** *5*, 351



$C_{27}H_{37}NO_4Si$

E.e. = > 98 % derived from S-pyroglutamic acid

$[\alpha]_D^{20}$ = -32 (c = 0.316, $CHCl_3$)

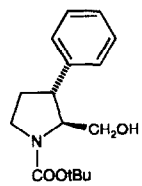
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 4R,5S

4R,5S-1-t-Butoxycarbonyl-5-t-butyldiphenylsiloxymethyl-4-methylpyrrolidine-2-one

C. Herdeis, H. P. Hubmann, H. Lotter

Tetrahedron: Asymmetry **1994,** *5*, 351



$C_{11}H_{21}NO_3$

E.e. = > 98 % derived from S-pyroglutamic acid

$[\alpha]_D^{20}$ = -13 (c = 1.04, $CHCl_3$)

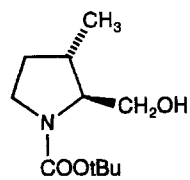
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2S,3R

2S,3R-1-t-Butoxycarbonyl-2-hydroxymethyl-3-phenylpyrrolidine

C. Herdeis, H. P. Hubmann, H. Lotter

Tetrahedron: Asymmetry **1994,** *5*, 351



$C_{11}H_{21}NO_3$

E.e. = > 98 % derived from S-pyroglutamic acid

$[\alpha]_D^{20}$ = -35 (c = 0.266, $CHCl_3$)

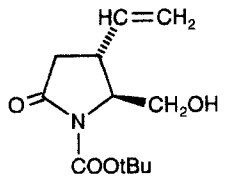
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2S,3S

2S,3S-1-t-Butoxycarbonyl-2-hydroxymethyl-3-methylpyrrolidine

C. Herdeis, H. P. Hubmann, H. Lotter

Tetrahedron: Asymmetry **1994,** *5,* 351



$C_{12}H_{19}NO_4$

E.e. = > 98 % derived from S-pyroglutamic acid

$[\alpha]_D^{20}$ = -44 (c = 0.2781, $CHCl_3$)

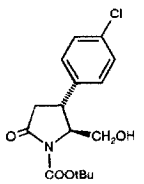
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 4R,5S

4R,5S-1-t-Butoxycarbonyl-5-hydroxymethylmethyl-4-vinylpyrrolidine-2-one

C. Herdeis, H. P. Hubmann, H. Lotter

Tetrahedron: Asymmetry **1994,** *5,* 351



$C_{16}H_{20}ClNO_4$

E.e. = > 98 % derived from S-pyroglutamic acid

$[\alpha]_D^{20}$ = -43 (c = 0.073, $CHCl_3$)

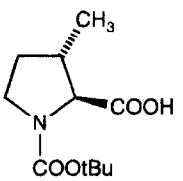
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 4R,5S

4R,5S-1-t-Butoxycarbonyl-4-(4-chlorphenyl)-5-hydroxymethylpyrrolidine-2-one

C. Herdeis, H. P. Hubmann, H. Lotter

Tetrahedron: Asymmetry **1994,** *5,* 351



$C_{11}H_{19}NO_4$

E.e. = > 98 % derived from S-pyroglutamic acid

$[\alpha]_D^{20}$ = -57.7 (c = 0.208, $CHCl_3$)

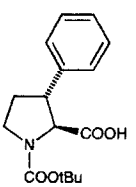
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2S,3S

2S,3S-1-t-Butoxycarbonyl-3-methylpyrrolidine-2-carboxylic acid

C. Herdeis, H. P. Hubmann, H. Lotter

Tetrahedron: Asymmetry **1994,** *5,* 351



$C_{16}H_{21}NO_4$

E.e. = > 98 % derived from S-pyroglutamic acid

$[\alpha]_D^{20}$ = 67.8 (c = 0.2, acetone)

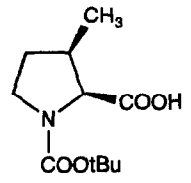
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2S,3R

2S,3R-1-t-Butoxycarbonyl-3-phenylpyrrolidine-2-carboxylic acid

C. Herdeis, H. P. Hubmann, H. Lotter

Tetrahedron: Asymmetry **1994,** *5,* 351



$C_{11}H_{19}NO_4$

E.e. = > 98 % derived from S-pyroglutamic acid

$[\alpha]_D^{20}$ = 14.6 (c = 0.24, $CHCl_3$)

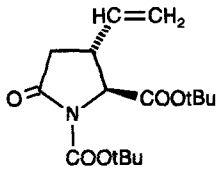
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2S,3R

2S,3R-1-t-Butoxycarbonyl-3-methylpyrrolidine-2-carboxylic acid

C. Herdeis, H. P. Hubmann, H. Lotter

Tetrahedron: Asymmetry **1994,** *5,* 351



$C_{12}H_{19}NO_4$

E.e. = > 98 % derived from S-pyroglutamic acid

$[\alpha]_D^{20}$ = -8 (c = 0.89, acetone)

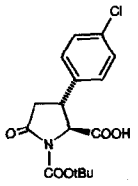
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2S,3R

2S,3R-1-t-Butoxycarbonyl-5-oxo-3-vinylpyrrolidine-2-t-butyl-carboxylate

C. Herdeis, H. P. Hubmann, H. Lotter

Tetrahedron: Asymmetry **1994,** *5,* 351



$C_{16}H_{18}ClNO_6$

E.e. = > 98 % derived from S-pyroglutamic acid

$[\alpha]_D^{20}$ = 33.7 (c = 0.162, $CHCl_3$)

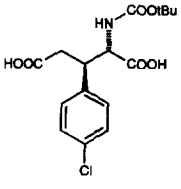
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2S,3R

2S,3R-1-t-Butoxycarbonyl-3-(4-chlorphenyl)-5-oxopyrrolidine-2-carboxylic acid

C. Herdeis, H. P. Hubmann, H. Lotter

Tetrahedron: Asymmetry **1994,** *5,* 351



$C_{16}H_{20}ClNO_6$

E.e. = > 98 % derived from S-pyroglutamic acid

$[\alpha]_D^{20}$ = 3 (c = 0.164, acetone)

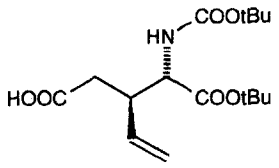
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2S,3R

2S,3R-2-t-Butoxycarbonylamino-3-(4-chlorphenyl)-pentane-1,5-dicarboxylic acid

C. Herdeis, H. P. Hubmann, H. Lotter

Tetrahedron: Asymmetry **1994,** *5,* 351



$C_{16}H_{27}NO_6$

E.e. = > 98 % derived from S-pyroglutamic acid

$[\alpha]_D^{20}$ = 3 (c = 0.4, EtOAc)

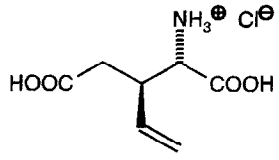
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2S,3R

2S,3R-N-t-Butoxycarbonyl-3-vinyl-α-t-butylglutamate

C. Herdeis, H. P. Hubmann, H. Lotter

Tetrahedron: Asymmetry **1994,** *5,* 351



$C_7H_{12}NO_4Cl$

E.e. = > 98 % derived from S-pyroglutamic acid

$[\alpha]_D^{20}$ = 13 (c = 0.27, H_2O)

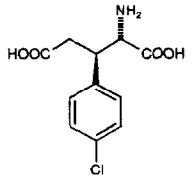
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2S,3R

2S,3R-3-Vinyl-glutamic acid hydrochloride

C. Herdeis, H. P. Hubmann, H. Lotter

Tetrahedron: Asymmetry **1994,** *5,* 351



$C_{11}H_{12}ClNO_4$

E.e. = > 98 % derived from S-pyroglutamic acid

$[\alpha]_D^{20}$ = -1 (c = 0.2, 1M HCl)

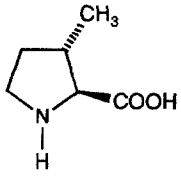
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2S,3R

2S,3R-2-Amino-3-(4-chlorphenyl)-pentane-1,5-dicarboxylic acid

C. Herdeis, H. P. Hubmann, H. Lotter

Tetrahedron: Asymmetry **1994,** *5,* 351



$C_6H_{11}NO_2$

E.e. = > 98 % derived from S-pyroglutamic acid

$[\alpha]_D^{20}$ = -30 (c = 0.27, H_2O)

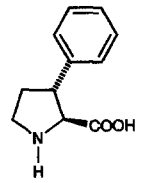
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2S,3S

2S,3S-3-Methylproline

C. Herdeis, H. P. Hubmann, H. Lotter

Tetrahedron: Asymmetry **1994**, *5*, 351



$C_{11}H_{13}NO_2$

2S,3R-3-Phenylproline

E.e. = > 98 % derived from S-pyroglutamic acid

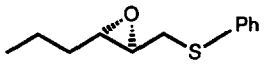
$[\alpha]_D^{20}$ = 65 (c = 0.2, 1M HCl)

Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2S,3R

A.D. Westwell and C.M Rayner

Tetrahedron: Asymmetry **1994**, *5*, 355



$(C_{12}H_{16}OS$

1-(Phenylthio)-2,3-epoxyhexane

E.e. >96% [by $Eu(hfc)_3$ on acetate of alcohol precursor]

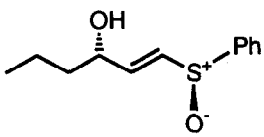
$[\alpha]_D^{20}$ -25.6 (c 0.41, EtOH)

Source of chirality: Sharpless asymmetric epoxidation

Absolute configuration 2*S*, 3*S*

A.D. Westwell and C.M Rayner

Tetrahedron: Asymmetry **1994**, *5*, 355



$C_{12}H_{16}O_2S$

(*E*)-1-(Phenylsulfinyl)-hex-1-en-3-ol

11:1 E:Z

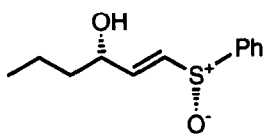
$[\alpha]_D^{20}$ -71.2 (c 0.37, EtOH)

Source of chirality: Sharpless asymmetric epoxidation, kinetic resolution *via* sulfoxonium salt

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

A.D. Westwell and C.M Rayner

Tetrahedron: Asymmetry **1994**, *5*, 355



$C_{12}H_{16}O_2S$

(*E*)-1-(Phenylsulfinyl)-hex-1-en-3-ol

17:1 E:Z

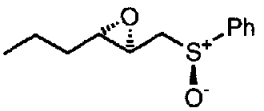
$[\alpha]_D^{20}$ +112.1 (c 0.61, EtOH)

Source of chirality: Sharpless asymmetric epoxidation

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

A.D. Westwell and C.M Rayner

Tetrahedron: Asymmetry **1994,** *5,* 355



E.e. >96% [by $Eu(hfc)_3$ on acetate of alcohol precursor]

$[\alpha]_D^{20}$ -196.8 (c 0.25, EtOH)

$C_{12}H_{16}O_2S$

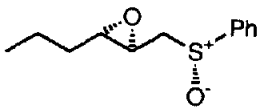
Source of chirality: Sharpless asymmetric epoxidation, kinetic resolution *via* sulfoxonium salt

1-(Phenylsulfinyl)-2,3-epoxyhexane

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

A.D. Westwell and C.M Rayner

Tetrahedron: Asymmetry **1994,** *5,* 355



E.e. >96% [by $Eu(hfc)_3$ on acetate of alcohol precursor]

$[\alpha]_D^{20}$ +46.8 (c 0.22, EtOH)

$C_{12}H_{16}O_2S$

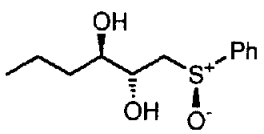
Source of chirality: Sharpless asymmetric epoxidation

1-(Phenylsulfinyl)-2,3-epoxyhexane

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

A.D. Westwell and C.M Rayner

Tetrahedron: Asymmetry **1994,** *5,* 355



E.e. >96% [by $Eu(hfc)_3$ on acetate of alcohol precursor, relative stereochemistry confirmed by X-ray crystallography]

$[\alpha]_D^{20}$ -174.6 (c 0.63, EtOH)

$C_{12}H_{18}O_3S$

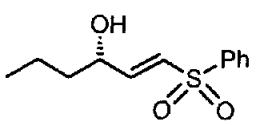
Source of chirality: Sharpless asymmetric epoxidation, kinetic resolution *via* sulfoxonium salt

1-(Phenylsulfinyl)-hexan-2,3-diol

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

A.D. Westwell and C.M Rayner

Tetrahedron: Asymmetry **1994,** *5,* 355



E.e. >96% [by $Eu(hfc)_3$ on acetate of alcohol precursor]

$[\alpha]_D^{20}$+31.9 (c 0.82, EtOH)

$C_{12}H_{16}OS$

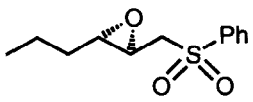
Source of chirality: Sharpless asymmetric epoxidation

(*E*)-1-(Phenylsulfonyl)-hex-1-en-3-ol

Absolute configuration 3*S*

A.D. Westwell and C.M Rayner

Tetrahedron: Asymmetry **1994,** *5,* 355



E.e. >96% [by $Eu(hfc)_3$ on acetate of alcohol precursor]

$[\alpha]_D^{20}$ -21.8 (c 0.95, EtOH)

$C_{12}H_{16}O_2S$

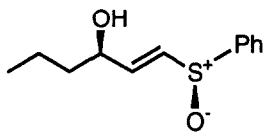
Source of chirality: Sharpless asymmetric epoxidation

(*E*)-1-(Phenylsulfonyl)-2,3-epoxyhexane

Absolute configuration 2*S*, 3*S*

A.D. Westwell and C.M Rayner

Tetrahedron: Asymmetry **1994,** *5,* 355



>95% E isomer

$[\alpha]_D^{20}$-111.2 (c 1.37, EtOH)

$C_{12}H_{16}O_2S$

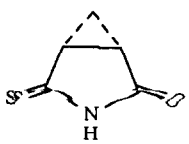
Source of chirality: Sharpless asymmetric epoxidation, kinetic resolution *via* sulfoxonium salt

(*E*)-1-(Phenylsulfinyl)-hex-1-en-3-ol

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

M. J. Milewska and T. Połoński

Tetrahedron: Asymmetry **1994,** *5,* 359



E.e. > 97% (by ^{13}C-NMR with $Eu(hfc)_3$)

$[\alpha]_{578}^{22}$ + 20.1 (*c* 1 in C_6H_6)

Source of chirality :
(1S, 2R)-1,2-cyclopropanedicarboxylic monoisopropyl ester

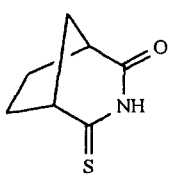
C_5H_5NOS

(1S, 5R)-4-Thioxo-3-aza-bicyclo[3.1.0]hexan-2-one

Absolute configuration: 1S, 5R

M. J. Milewska and T. Połoński

Tetrahedron: Asymmetry **1994,** *5,* 359



E.e. > 97% (by ^1H-NMR with $Eu(hfc)_3$)

$[\alpha]_{578}^{20}$ - 179 (*c* 1.4 in C_6H_6)

Source of chirality :
(1S, 3R)-3-Carbamoylcyclopentanecarboxylic acid

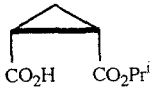
C_7H_9NOS

(1S, 5R)-4-Thioxo-3-aza-bicyclo[3.2.1]octan-2-one

Absolute configuration: 1S, 5R

M. J. Milewska and T. Połoński

Tetrahedron: Asymmetry **1994,** *5,* 359



$C_8H_{12}O_4$

(1S, 2R) - 1,2 - Cyclopropane-dicarboxylic monoisopropyl ester

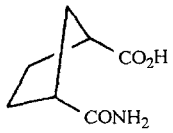
E.e. > 97% (by ^{1}H-NMR of (S)-1-phenylethylamide)

$[\alpha]_D^{22}$ - 9.7 (*c* 10 in $CHCl_3$)

Source of chirality :
separation of diastereoisomeric salts with quinine.
Absolute configuration: 1S, 2R
(assigned by chemical conversion into
(R)-*trans*-1,2-cyclopropanodicarboxylic acid)

M. J. Milewska and T. Połoński

Tetrahedron: Asymmetry **1994,** *5,* 359



$C_7H_{11}NO_3$

(1S, 3R)-3-Carbamoylcyclo-pentanecarboxylic acid

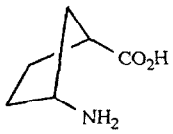
E.e. > 97% (by ^{1}H-NMR of (S)-1-phenylethylamide)

$[\alpha]_{578}^{21}$ + 6.4 (*c* 3 in EtOH)

Source of chirality :
separation of diastereoisomeric salts with
(S)-1-phenylethylamine
Absolute configuration: 1S, 3R
(assigned by chemical conversion into
(1S, 3R)-3-aminocyclopentanecarboxylic acid)

M. J. Milewska and T. Połoński

Tetrahedron: Asymmetry **1994,** *5,* 359



$C_6H_{11}NO_2$

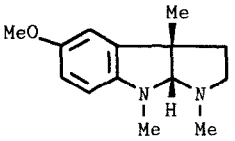
(1S, 3R)-3-Aminocyclo-pentanecarboxylic acid

$[\alpha]_{578}^{21}$ + 7.0 (*c* 2 in H_2O)

Source of chirality :
(1S, 3R)-Carbamoylcyclopentane carboxylic acid
Absolute configuration: 1S, 3R

M.Pallavicini*, E.Valoti*, L.Villa and I.Resta

Tetrahedron: Asymmetry **1994,** *5,* 363



$C_{14}H_{20}N_2O$

(-)-Esermethole

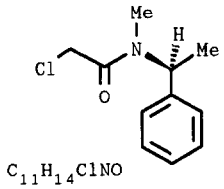
$[\alpha]_D^{20}$ = - 137.5 (c 0.35, benzene)

e.e. 99.6% (determined by chiral HPLC analysis)

Source of chirality: (3S,1'S)-N-methyl-N-(1'-phenylethyl)-1,3-dimethyl-5-methoxyoxindol-3-ilacetamide, obtained by asymmetric alkylation of racemic 1,3-dimethyl-5-methoxy-oxindole with (S)-N-methyl-N-(1-phenylethyl)chloroacetamide.

M.Pallavicini*, E.Valoti*, L.Villa and I.Resta

Tetrahedron: Asymmetry **1994,** *5,* 363



$C_{11}H_{14}ClNO$

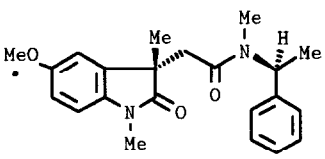
(S)-N-methyl-N-(1-phenylethyl)chloroacetamide

$[\alpha]_D^{20}$ = - 178 (c 1, EtOH)

Source of chirality: (S)-(1-phenylethyl)amine

M.Pallavicini*, E.Valoti*, L.Villa and I.Resta

Tetrahedron: Asymmetry **1994,** *5,* 363



$C_{22}H_{26}N_2O_3$

(3S,1'S)-N-methyl-N-(1'-phenylethyl)-1,3-dimethyl-5-methoxyindol-3-ilacetamide

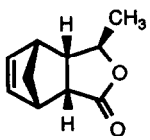
$[\alpha]_D^{20}$ = - 138 (c 1.8, EtOH)

99.6% d.e. (determined by HPLC)

Source of chirality: asymmetric alkylation of racemic 1,3-dimethyl-5-methoxyoxindole with (S)-N-methyl-N-(1-phenylethyl)chloroacetamide

Zhiyu Chen, Rosa M. Ortuño

Tetrahedron: Asymmetry **1994,** *5,* 371



$C_{10}H_{12}O_2$

5-Methyl-4-oxatricyclo[5.2.1.$0^{2,6}$]dec-8-en-3-one

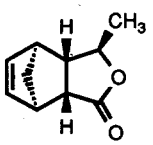
$[\alpha]_D$ = -74.8 (c 2.9, $CHCl_3$)

Source of chirality: D-Ribonolactone, asymmetric Diels-Alder reaction

Absolute configuration: 1*S*,2*R*,5*R*,6*S*,7*R*

Zhiyu Chen, Rosa M. Ortuño

Tetrahedron: Asymmetry **1994,** *5,* 371



$C_{10}H_{12}O_2$

5-Methyl-4-oxatricyclo[5.2.1.$0^{2,6}$]dec-8-en-3-one

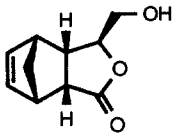
$[\alpha]_D$ = -95.7 (c 1.0, $CHCl_3$)

Source of chirality: D-Ribonolactone, asymmetric Diels-Alder reaction

Absolute configuration: 1*R*,2*R*,5*R*,6*S*,7*S*

Zhiyu Chen, Rosa M. Ortuño

Tetrahedron: Asymmetry **1994,** *5,* 371



$[\alpha]_D$ = -48.9 (c 1.1, $CHCl_3$)

Source of chirality: D-Mannitol, asymmetric Diels-Alder reaction

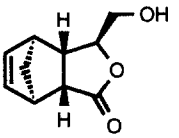
Absolute configuration: 1*S*,2*R*,5*S*,6*S*,7*R*

$C_{10}H_{12}O_3$

5-Hydroxymethyl-4-oxatricyclo[5.2.1.$0^{2,6}$]dec-8-en-3-one

Zhiyu Chen, Rosa M. Ortuño

Tetrahedron: Asymmetry **1994,** *5,* 371



$[\alpha]_D$ = -68.7 (c 0.6, $CHCl_3$)

Source of chirality: D-Mannitol, asymmetric Diels-Alder reaction.

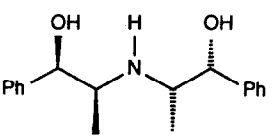
Absolute configuration: 1*R*,2*R*,5*S*,6*S*,7*S*

$C_{10}H_{12}O_3$

5-Hydroxymethyl-4-oxatricyclo[5.2.1.$0^{2,6}$]dec-8-en-3-one

E.F.J. de Vries, J. Brussee, C.G. Kruse and A. van der Gen.

Tetrahedron: Asymmetry **1994,** *5,* 377



D.e > 96% (^{1}H NMR)

$[\alpha]^{20}_D$ +8 (c=1, $CHCl_3$)

Source of chirality: (*R*)-(+)-α-[(*t*-butyldimethylsilyl)oxy]-benzeneacetonitril (asymm. synth.)

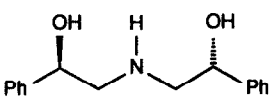
Absolute configuration: 1R,2S,1'R,2'S

$C_{18}H_{23}NO_2$

Bis[(1*R*,2*S*)-1-hydroxy-1-phenylpropan-2-yl]amine

E.F.J. de Vries, J. Brussee, C.G. Kruse and A. van der Gen.

Tetrahedron: Asymmetry **1994,** *5,* 377



$[\alpha]^{20}_D$ -75 (c=1, $CHCl_3$)

Source of chirality: (*R*)-(+)-α-[(*t*-butyldimethylsilyl)oxy]-benzeneacetonitril (asymm. synth.)

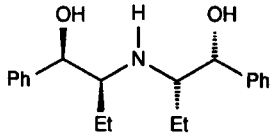
Absolute configuration: 1R,1'R

$C_{16}H_{19}NO_2$

Bis[(*R*)-1-hydroxy-1-phenylethan-2-yl]amine

E.F.J. de Vries, J. Brussee, C.G. Kruse and A. van der Gen.

Tetrahedron: Asymmetry **1994,** *5,* 377



D.e > 96% (^{1}H NMR)

$[\alpha]^{20}_D$ +4 (c=1, $CHCl_3$)

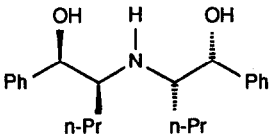
Source of chirality: (*R*)-(+)-α-[(*t*-butyldimethylsilyl)oxy]-benzeneacetonitril (asymm. synth.)

Absolute configuration: 1R,2S,1'R,2'S

$C_{20}H_{27}NO_2$
Bis[(1*R*,2*S*)-1-hydroxy-1-phenylbutan-2-yl]amine

E.F.J. de Vries, J. Brussee, C.G. Kruse and A. van der Gen.

Tetrahedron: Asymmetry **1994,** *5,* 377



D.e > 96% (^{1}H NMR)

$[\alpha]^{20}_D$ -9 (c=1, $CHCl_3$)

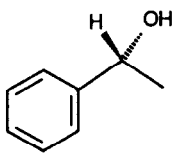
Source of chirality: (*R*)-(+)-α-[(*t*-butyldimethylsilyl)oxy]-benzeneacetonitril (asymm. synth.)

Absolute configuration: 1R,2S,1'R,2'S

$C_{22}H_{31}NO_2$
Bis[(1*R*,2*S*)-1-hydroxy-1-phenylpentan-2-yl]amine

E.F.J. de Vries, J. Brussee, C.G. Kruse and A. van der Gen.

Tetrahedron: Asymmetry **1994,** *5,* 377



E.e = 82% (HPLC)

$[\alpha]^{20}_D$ +45 (c=1, $CHCl_3$)

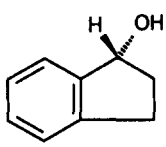
Source of chirality: Asymm. synth.

Absolute configuration: R

$C_8H_{10}O$
(*R*)-1-Phenylethanol

E.F.J. de Vries, J. Brussee, C.G. Kruse and A. van der Gen.

Tetrahedron: Asymmetry **1994,** *5,* 377



E.e = 94% (HPLC)

$[\alpha]^{20}_D$ -29 (c=1, $CHCl_3$)

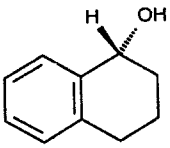
Source of chirality: Asymm. synth.

Absolute configuration: R

$C_9H_{10}O$
(*R*)-1-Indanol

E.F.J. de Vries, J. Brussee, C.G. Kruse and A. van der Gen.

Tetrahedron: Asymmetry **1994,** *5,* 377



E.e = 87% (HPLC)

$[\alpha]^{20}_{D}$ -28 (c=1, $CHCl_3$)

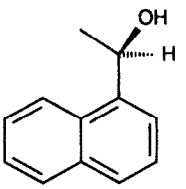
Source of chirality: Asymm. synth.

Absolute configuration: R

$C_{10}H_{12}O$
(*R*)-1,2,3,4-Tetrahydro-1-naphtol

E.F.J. de Vries, J. Brussee, C.G. Kruse and A. van der Gen.

Tetrahedron: Asymmetry **1994,** *5,* 377



E.e = 71% (HPLC)

$[\alpha]^{20}_{D}$ +49 (c=1, $CHCl_3$)

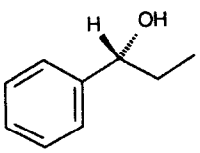
Source of chirality: Asymm. synth.

Absolute configuration: R

$C_{12}H_{12}O$
(*R*)-1-(1-Naphtyl)ethanol

E.F.J. de Vries, J. Brussee, C.G. Kruse and A. van der Gen.

Tetrahedron: Asymmetry **1994,** *5,* 377



E.e = 72% (HPLC)

$[\alpha]^{20}_{D}$ +35 (c=1, $CHCl_3$)

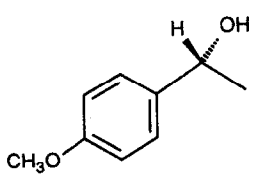
Source of chirality: Asymm. synth.

Absolute configuration: R

$C_9H_{12}O$
(*R*)-1-Phenylpropanol

E.F.J. de Vries, J. Brussee, C.G. Kruse and A. van der Gen.

Tetrahedron: Asymmetry **1994,** *5,* 377



E.e = 86% (HPLC)

$[\alpha]^{20}_{D}$ +45 (c=1, $CHCl_3$)

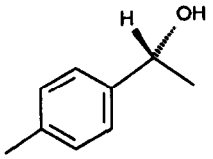
Source of chirality: Asymm. synth.

Absolute configuration: R

$C_9H_{12}O_2$
(*R*)-1-(4-Methoxyphenyl)ethanol

E.F.J. de Vries, J. Brussee, C.G. Kruse and A. van der Gen.

Tetrahedron: Asymmetry **1994,** *5,* 377



E.e = 76% (HPLC)

$[\alpha]^{20}_{D}$ +39 (c=1, $CHCl_3$)

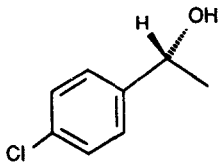
Source of chirality: Asymm. synth.

Absolute configuration: R

$C_9H_{12}O$
(*R*)-1-(4-Methylphenyl)ethanol

E.F.J. de Vries, J. Brussee, C.G. Kruse and A. van der Gen.

Tetrahedron: Asymmetry **1994,** *5,* 377



E.e = 70% (HPLC)

$[\alpha]^{20}_{D}$ +30 (c=1, $CHCl_3$)

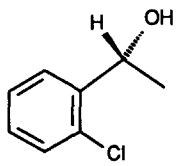
Source of chirality: Asymm. synth.

Absolute configuration: R

C_8H_9ClO
(*R*)-1-(4-Chlorophenyl)ethanol

E.F.J. de Vries, J. Brussee, C.G. Kruse and A. van der Gen.

Tetrahedron: Asymmetry **1994,** *5,* 377



E.e = 67% (HPLC)

$[\alpha]^{20}_{D}$ +41 (c=1, $CHCl_3$)

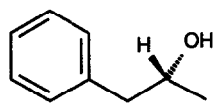
Source of chirality: Asymm. synth.

Absolute configuration: R

C_8H_9ClO
(*R*)-1-(2-Chlorophenyl)ethanol

E.F.J. de Vries, J. Brussee, C.G. Kruse and A. van der Gen.

Tetrahedron: Asymmetry **1994,** *5,* 377



E.e = 24% (HPLC)

$[\alpha]^{20}_{D}$ -8 (c=1, $CHCl_3$)

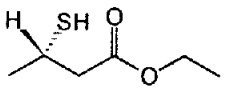
Source of chirality: Asymm. synth.

Absolute configuration: R

$C_9H_{12}O$
(*R*)-1-Phenyl-2-propanol

Jens Kærgaard Nielsen and Jørgen Øgaard Madsen

Tetrahedron: Asymmetry **1994,** *5,* 403



$C_6H_{12}SO_2$

(S)-Ethyl 3-mercaptobutanoate

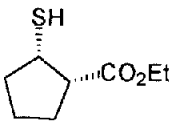
E.e. = 92% (by GC analysis of thiocarbamates derived from (R)-1-phenylethyl isocyanate)

Source of chirality: baker's yeast reduction of ethyl 3-thioxobutanoate

Absolute configuration: S (R-enantiomer prepared from (S)-ethyl 3-hydroxybutanoate by a Mitsunobu-Volante reaction).

Jens Kærgaard Nielsen and Jørgen Øgaard Madsen

Tetrahedron: Asymmetry **1994,** *5,* 403



$C_8H_{14}SO_2$

(1S,2S)-Ethyl 2-mercapto-1-cyclopentanecarboxylate

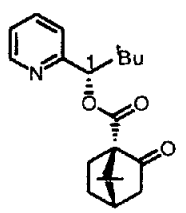
E.e. = 81% (by GC analysis of thiocarbamates derived from (R)-1-phenylethyl isocyanate)

Source of chirality: baker's yeast reduction of ethyl 2-thioxo-1-cyclopentane-carboxylate.

Absolute configuration: 1S,2S (by synthesis from (1R,2S)-ethyl 2- hydroxy-1-cyclopentanecarboxylate via tosylate and iodide)

M. Ishizaki, K. Fujita, M. Shimamoto, and O. Hoshino

Tetrahedron: Asymmetry **1994,** *5,* 411



$C_{20}H_{27}NO_3$

(S)-(-)-2,2-Dimethyl-1-(2'-pyridyl)propyl D-Ketopinate

E.e.=100% (Detremined by HPLC analysis)

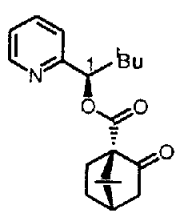
$[\alpha]_D^{24}$ -14.2 (c 1, $CHCl_3$)

Source of chirality: diastereomeric separation

Absolute configuration 1S

M. Ishizaki, K. Fujita, M. Shimamoto, and O. Hoshino

Tetrahedron: Asymmetry **1994,** *5,* 411



$C_{20}H_{27}NO_3$

(R)-(+)-2,2-Dimethyl-1-(2'-pyridyl)propyl D-Ketopinate

E.e.=100% (Detremined by HPLC analysis)

$[\alpha]_D^{26}$ 60.6 (c 1, $CHCl_3$)

Source of chirality: diastereomeric separation

Absolute configuration 1R

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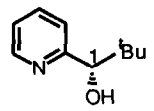
Tetrahedron: Asymmetry **1994,** *5,* 411



E.e.=100% (Detremined by HPLC analysis)

$[\alpha]_D^{28}$ -47.8 (c 1, EtOH)

Source of chirality: asymmetric synthesis

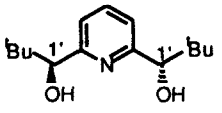
Absolute configuration 1S

$C_{10}H_{15}NO$

(S)-(-)-Dimethyl-1-(2'-pyridyl)propanol

M. Ishizaki, K. Fujita, M. Shimamoto, and O. Hoshino

Tetrahedron: Asymmetry **1994,** *5,* 411



E.e.=100% (Detremined by HPLC analysis)

$[\alpha]_D^{25}$ -40.5 (c 1, EtOH)

Source of chirality: asymmetric reduction

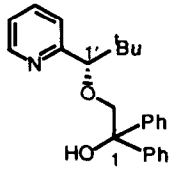
Absolute configuration 1'S

$C_{15}H_{25}NO_2$

(S,S)-(-)-2,6-Bis(1'-hydroxy-2',2'-dimethylpropyl)pyridine

M. Ishizaki, K. Fujita, M. Shimamoto, and O. Hoshino

Tetrahedron: Asymmetry **1994,** *5,* 411



E.e.=100%

$[\alpha]_D^{28}$ -58.8 (c 0.88, EtOH)

Source of chirality: asymmetric synthesis

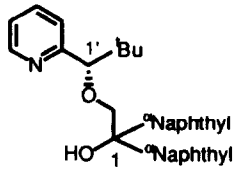
Absolute configuration 1'S

$C_{24}H_{27}NO_2$

(S)-(-)-2-[2',2'-Dimethyl-1'-(2''-pyridyl)propoxy]-1,1-diphenylethanol

M. Ishizaki, K. Fujita, M. Shimamoto, and O. Hoshino

Tetrahedron: Asymmetry **1994,** *5,* 411



E.e.=100%

$[\alpha]_D^{28}$ -48.0 (c 0.8, EtOH)

Source of chirality: asymmetric synthesis

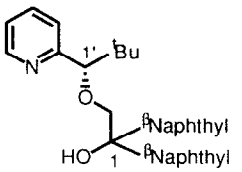
Absolute configuration 1'S

$C_{32}H_{31}NO_2$

(S)-(-)-2-[2',2'-Dimethyl-1'-(2''-pyridyl)propoxy]-1,1-di(α-naphthyl)ethanol

M. Ishizaki, K. Fujita, M. Shimamoto, and O. Hoshino

Tetrahedron: Asymmetry **1994,** *5,* 411



E.e.=100%

$[\alpha]_D^{29}$ -5.4 (c 0.80, EtOH)

Source of chirality: asymmetric synthesis

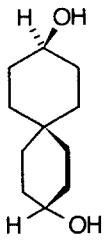
Absolute configuration 1'S

$C_{32}H_{31}NO_2$

(S)-(-)-2-[2',2'-Dimethyl-1'-(2"-pyridyl)propoxy]-1,1-di(β-naphthyl)ethanol

G. Voß and H. Gerlach

Tetrahedron: Asymmetry **1994,** *5,* 425



E.e. ≥ 99% [by ^{13}C NMR of its (+)-bis(1*R*,4*S*)-camphanoate]

$[\alpha]_D$ = +14.3 (c = 1.20 in MeOH)

Source of chirality: resolution of racemate via diastereomeric bis(1*R*,4*S*)-camphanoates

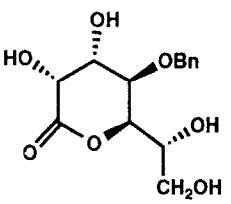
Absolute configuration: a*R* [assigned by CD of its (-)-bis(4-methoxybenzoate)]

$C_{11}H_{20}O_2$

(*aR*)-(+)-Spiro[5.5]undecane-3,9-diol

C. J. F. Bichard, J. R. Wheatley and G. W. J. Fleet

Tetrahedron: Asymmetry **1994,** *5,* 431



E.e. = 100%

$[\alpha]_D^{20}$ = +78.0 (*c*, 1.01 in MeOH)

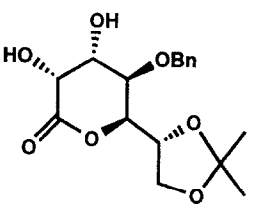
4-*O*-Benzyl-**D**-*glycero*-**D**-*gulo*-heptono-1,5-lactone

$C_{14}H_{18}O_7$

Source of chirality: **D**-glucose as starting material

C. J. F. Bichard, J. R. Wheatley and G. W. J. Fleet

Tetrahedron: Asymmetry **1994,** *5,* 431



E.e. = 100%

$[\alpha]_D^{20}$ = +59.0 (*c*, 1.03 in $CHCl_3$)

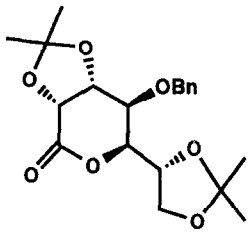
4-*O*-Benzyl-6,7-*O*-isopropylidene-**D**-*glycero*-**D**-*gulo*-heptono-1,5-lactone

$C_{17}H_{22}O_7$

Source of chirality: **D**-glucose as starting material

C. J. F. Bichard, J. R. Wheatley and G. W. J. Fleet

Tetrahedron: Asymmetry **1994,** *5,* 431



E.e. = 100%

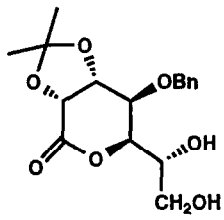
$[\alpha]_D^{20}$ = +39.6 (*c*, 1.02 in $CHCl_3$)

4-*O*-Benzyl-2,3:6,7-di-*O*-isopropylidene-**D**-*glycero*-**D**-*gulo*-heptono-1,5-lactone
$C_{20}H_{26}O_7$

Source of chirality: **D**-glucose as starting material

C. J. F. Bichard, J. R. Wheatley and G. W. J. Fleet

Tetrahedron: Asymmetry **1994,** *5,* 431



E.e. = 100%

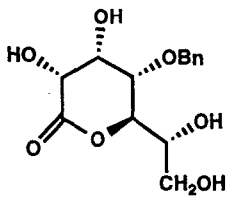
$[\alpha]_D^{20}$ = +26.2 (*c*, 0.99 in $CHCl_3$)

4-*O*-Benzyl-2,3-*O*-isopropylidene-**D**-*glycero*-**D**-*gulo*-heptono-1,5-lactone
$C_{17}H_{22}O_7$

Source of chirality: **D**-glucose as starting material

C. J. F. Bichard, J. R. Wheatley and G. W. J. Fleet

Tetrahedron: Asymmetry **1994,** *5,* 431



E.e. = 100%

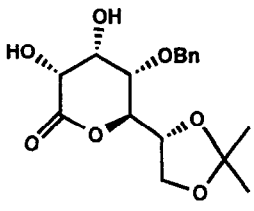
$[\alpha]_D^{25}$ = +40.0 (*c*, 1.3 in DMF)

4-*O*-Benzyl-**D**-*glycero*-**D**-*allo*-heptono-1,5-lactone
$C_{14}H_{18}O_7$

Source of chirality: **D**-glucose as starting material

C. J. F. Bichard, J. R. Wheatley and G. W. J. Fleet

Tetrahedron: Asymmetry **1994,** *5,* 431



E.e. = 100%

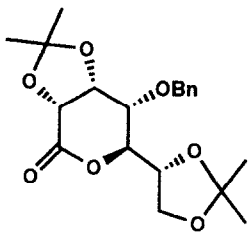
$[\alpha]_D^{25}$ = +26.9 (*c*, 1.05 in $CHCl_3$)

4-*O*-Benzyl-6,7-*O*-isopropylidene-**D**-*glycero*-**D**-*allo*-heptono-1,5-lactone
$C_{17}H_{22}O_7$

Source of chirality: **D**-glucose as starting material

C. J. F. Bichard, J. R. Wheatley and G. W. J. Fleet

Tetrahedron: Asymmetry **1994,** *5,* 431



E.e. = 100%

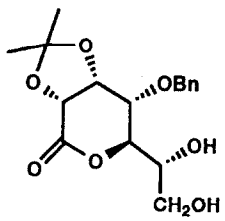
$[\alpha]_D^{20}$ = +111.9 (*c*, 1.05 in $CHCl_3$)

4-*O*-Benzyl-2,3:6,7-di-*O*-isopropylidene-**D**-*glycero*-**D**-*allo*-heptono-1,5-lactone
$C_{20}H_{26}O_7$

Source of chirality: **D**-glucose as starting material

C. J. F. Bichard, J. R. Wheatley and G. W. J. Fleet

Tetrahedron: Asymmetry **1994,** *5,* 431



E.e. = 100%

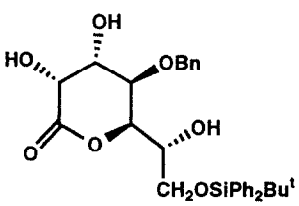
$[\alpha]_D^{25}$ = +84.0 (*c*, 1.05 in CH_3CN)

4-*O*-Benzyl-2,3-*O*-isopropylidene-**D**-*glycero*-**D**-*allo*-heptono-1,5-lactone
$C_{17}H_{22}O_7$

Source of chirality: **D**-glucose as starting material

C. J. F. Bichard, J. R. Wheatley and G. W. J. Fleet

Tetrahedron: Asymmetry **1994,** *5,* 431



E.e. = 100%

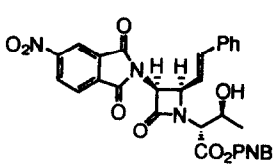
$[\alpha]_D^{20}$ = +41.6 (*c*, 0.31 in $CHCl_3$)

4-*O*-Benzyl-7-*O*-*tert*-butyldiphenylsilyl-**D**-*glycero*-**D**-*gulo*-heptono-1,5-lactone
$C_{30}H_{36}O_7Si$

Source of chirality: **D**-glucose as starting material

Hidetsugu Tsubouchi,* Koichi Tsuji, Koichi Yasumura, Nobuhito Tada, Shinji Nishitani, Jun-ichi Minamikawa, and Hiroshi Ishikawa,

Tetrahedron: Asymmetry **1994,** *5,* 441



(3S,4R)-1-[(R)-1-[[(p-Nitrobenzyl)oxy]carbonyl]-(S)-2-hydroxypropyl]-3-(4-nitrophthalimido)-4-styrylazetidin-2-one
Formula: $C_{30}H_{24}N_4O_{10}$

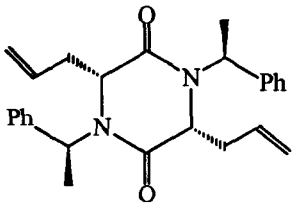
$[\alpha]_D^{28}$ -67 (c 0.194, $CHCl_3$)

Source of chirality : Asymmetric annelation

Absolute configuration : 3S,4R

Gianni PORZI and Sergio SANDRI

Tetrahedron: Asymmetry **1994,** *5,* 453

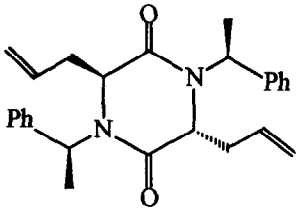


mp 85°C
$[\alpha]_D$ = -235.9 (c=1.74, $CHCl_3$)
Source of chirality : (*S*)-1-phenethylamine
Absolute configuration (3*R*,6*R*) assigned by ^{1}H-NMR
$C_{26}H_{30}N_2O_2$

(3*R*,6*R*)-1,4-*N*,*N*-((*S*)-1-Phenethyl)-3,6-bis-(2-propenyl) piperazine-2,5-dione

Gianni PORZI and Sergio SANDRI

Tetrahedron: Asymmetry **1994,** *5,* 453

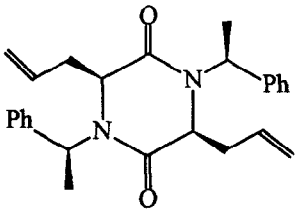


$[\alpha]_D$ = -122.2 (c=2.25, $CHCl_3$)
Source of chirality : (*S*)-1-phenethylamine
Absolute configuration (3*R*,6*S*) assigned by ^{1}H-NMR
$C_{26}H_{30}N_2O_2$

(3*R*,6*S*)-1,4-*N*,*N*-((*S*)-1-Phenethyl)-3,6-bis-(2-propenyl) piperazine-2,5-dione

Gianni PORZI and Sergio SANDRI

Tetrahedron: Asymmetry **1994,** *5,* 453

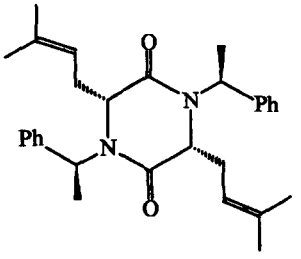


$[\alpha]_D$ = -77.9 (c=3.06, $CHCl_3$)
Source of chirality : (*S*)-1-phenethylamine
Absolute configuration (3*S*,6*S*) assigned by ^{1}H-NMR
$C_{26}H_{30}N_2O_2$

(3*S*,6*S*)-1,4-*N*,*N*-((*S*)-1-Phenethyl)-3,6-bis-(2-propenyl) piperazine-2,5-dione

Gianni PORZI and Sergio SANDRI

Tetrahedron: Asymmetry **1994,** *5,* 453

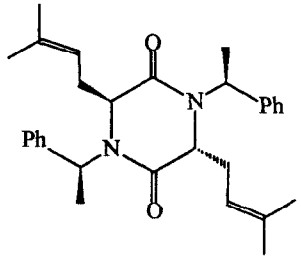


mp 59°C
$[\alpha]_D$ = -291.2 (1.2, $CHCl_3$)
Source of chirality : (S)-1-phenethylamine
Absolute configuration (3R,6R) assigned by ^{1}H-NMR
$C_{30}H_{38}N_2O_2$

(3R,6R)-1,4-N,N-((S)-1-Phenethyl)-3,6-bis-(3-methyl-2-butenyl)-piperazine-2,5-dione

Gianni PORZI and Sergio SANDRI

Tetrahedron: Asymmetry **1994,** *5,* 453

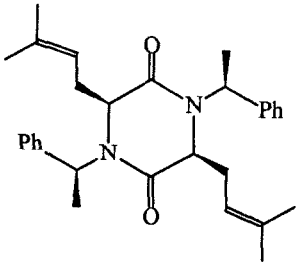


mp 129°C
$[\alpha]_D$ = -170.9 (2.0, $CHCl_3$)
Source of chirality : (S)-1-phenethylamine
Absolute configuration (3R,6S) assigned by ^{1}H-NMR
$C_{30}H_{38}N_2O_2$

(3R,6S)-1,4-N,N-((S)-1-Phenethyl)-3,6-bis-(3-methyl-2-butenyl)-piperazine-2,5-dione

Gianni PORZI and Sergio SANDRI

Tetrahedron: Asymmetry **1994,** *5,* 453

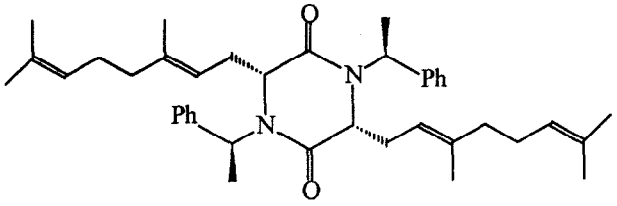


$[\alpha]_D$ = -29.9 (1.79, $CHCl_3$)
Source of chirality : (S)-1-phenethylamine
Absolute configuration (3S,6S) assigned by ^{1}H-NMR
$C_{30}H_{38}N_2O_2$

(3S,6S)-1,4-N,N-((S)-1-Phenethyl)-3,6-bis-(3-methyl-2-butenyl)-piperazine-2,5-dione

Gianni PORZI and Sergio SANDRI

Tetrahedron: Asymmetry **1994,** *5,* 453

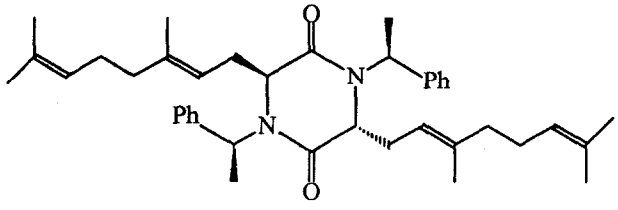


$[\alpha]_D$ = -232.4 (c=2.35, $CHCl_3$)
Source of chirality : (*S*)-1-phenethylamine
Absolute configuration (3*R*,6*R*) assigned
by ^{1}H-NMR
$C_{40}H_{54}N_2O_2$

(3*R*,6*R*)-1,4-*N*,*N*-((*S*)-1-Phenethyl)-3,6-bis-(3,7-dimethyl-(2E,6E)-octadienyl) piperazine-2,5-dione

Gianni PORZI and Sergio SANDRI

Tetrahedron: Asymmetry **1994,** *5,* 453

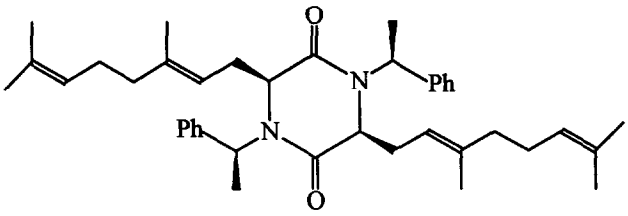


$[\alpha]_D$ = -119.5 (c=1.7, $CHCl_3$)
Source of chirality : (*S*)-1-phenethylamine
Absolute configuration (3*R*,6*S*) assigned
by ^{1}H-NMR
$C_{40}H_{54}N_2O_2$

(3*R*,6*S*)-1,4-*N*,*N*-((*S*)-1-Phenethyl)-3,6-bis-(3,7-dimethyl-(2E,6E)-octadienyl) piperazine-2,5-dione

Gianni PORZI and Sergio SANDRI

Tetrahedron: Asymmetry **1994**, *5*, 453

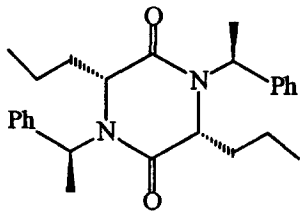


$[\alpha]_D$ = 4.9.(c=2.7, $CHCl_3$)
Source of chirality : (*S*)-1-phenethylamine
Absolute configuration (3*S*,6*S*) assigned by ^{1}H-NMR
$C_{40}H_{54}N_2O_2$

(3*S*,6*S*)-1,4-*N*,*N*-((*S*)-1-Phenethyl)-3,6-bis-(3,7-dimethyl-(2*E*,6*E*)-octadienyl) piperazine-2,5-dione

Gianni PORZI and Sergio SANDRI

Tetrahedron: Asymmetry **1994**, *5*, 453

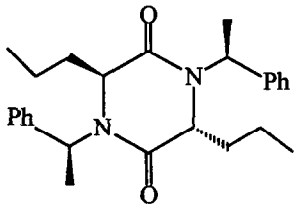


$[\alpha]_D$ = -220.9 (c=2.08, $CHCl_3$)
Source of chirality : (*S*)-1-phenethylamine
Absolute configuration (3*R*,6*R*) assigned by ^{1}H-NMR
$C_{26}H_{34}N_2O_2$

(3*R*,6*R*)-1,4-*N*,*N*-((*S*)-1-Phenethyl)-3,6-(dipropyl) piperazine-2,5-dione

Gianni PORZI and Sergio SANDRI

Tetrahedron: Asymmetry **1994**, *5*, 453

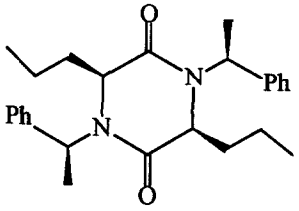


mp 125°C
$[\alpha]_D$ = -145 (c=2.23, $CHCl_3$)
Source of chirality : (*S*)-1-phenethylamine
Absolute configuration (3*R*,6*S*) assigned by ^{1}H-NMR
$C_{26}H_{34}N_2O_2$

(3*R*,6*S*)-1,4-*N*,*N*-((*S*)-1-Phenethyl)-3,6-(dipropyl) piperazine-2,5-dione

Gianni PORZI and Sergio SANDRI

Tetrahedron: Asymmetry **1994**, *5*, 453

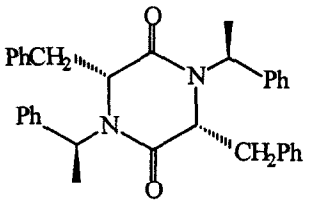


$[\alpha]_D$ = -151 (c=1.86, $CHCl_3$)
Source of chirality : (*S*)-1-fenethylamine
Absolute configuration (3*S*,6S) assigned by ^{1}H-NMR
$C_{26}H_{34}N_2O_2$

(3*S*,6*S*)-1,4-*N*,*N*-((*S*)-1-Phenethyl)-3,6-(dipropyl) piperazine-2,5-dione

Gianni PORZI and Sergio SANDRI

Tetrahedron: Asymmetry **1994,** *5,* 453

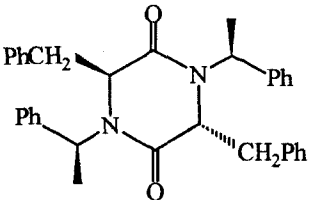


mp 102°C
$[\alpha]_D$ = -155.2 (c=1.3, $CHCl_3$)
Source of chirality : (*S*)-1-phenethylamine
Absolute configuration (3*R*,6*R*) assigned by ^{1}H-NMR
$C_{34}H_{34}N_2O_2$

(3*R*,6*R*)-1,4-*N*,*N*-((*S*)-1-Phenethyl)-3,6-(dibenzyl) piperazine-2,5-dione

Gianni PORZI and Sergio SANDRI

Tetrahedron: Asymmetry **1994,** *5,* 453

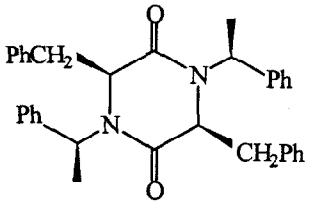


mp 145°C
$[\alpha]_D$ = -202.1 (c=2.04, $CHCl_3$)
Source of chirality : (*S*)-1-phenethylamine
Absolute configuration (3*R*,6*S*) assigned by ^{1}H-NMR
$C_{34}H_{34}N_2O_2$

(3*R*,6*S*)-1,4-*N*,*N*-((*S*)-1-Phenethyl)-3,6-(dibenzyl) piperazine-2,5-dione

Gianni PORZI and Sergio SANDRI

Tetrahedron: Asymmetry **1994,** *5,* 453

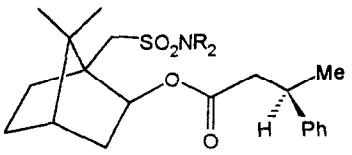


mp 99°C
$[\alpha]_D$ = -31.2 (c=2.4, $CHCl_3$)
Source of chirality : (*S*)-1-phenethylamine
Absolute configuration (3*S*,6*S*) assigned by ^{1}H-NMR
$C_{34}H_{34}N_2O_2$

(3*S*,6*S*)-1,4-*N*,*N*-((*S*)-1-Phenethyl)-3,6-(dibenzyl) piperazine-2,5-dione

S. Fioravanti, M. A. Loreto, L. Pellacani, F. Sabbatini, P. A. Tardella

Tetrahedron: Asymmetry **1994,** *5,* 473



$[\alpha]_D$ = +22.5 (c 1.5, EtOH)

Source of chirality: natural

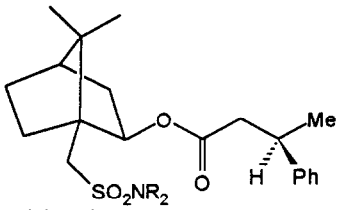
Absolute configuration: 1R,2S,4S,3'R

R = Cyclohexyl

$C_{32}H_{49}NO_4S$
10-(*N*,*N*-Dicyclohexylaminosulphonyl)born-2-yl 3-phenylbutanoate

S. Fioravanti, M. A. Loreto, L. Pellacani, F. Sabbatini, P. A. Tardella

Tetrahedron: Asymmetry **1994,** *5,* 473



R = Cyclohexyl

$[\alpha]_D$ = -25.3 (c 2.2, EtOH)

Source of chirality: natural

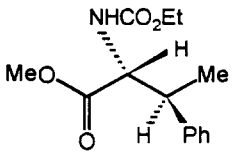
Absolute configuration: 1S,2R,4R,3'R

$C_{32}H_{49}NO_4S$

10-(*N,N*-Dicyclohexylaminosulphonyl)born-2-yl 3-phenylbutanoate

S. Fioravanti, M. A. Loreto, L. Pellacani, F. Sabbatini, P. A. Tardella

Tetrahedron: Asymmetry **1994,** *5,* 473



$[\alpha]_D$ = +11 (c 1.0, EtOH)

Source of chirality: natural and asymm. synth.

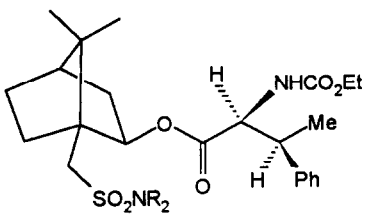
Absolute configuration: 2R,3S

$C_{14}H_{19}NO_4$

Methyl *N*-(ethoxycarbonyl)-β-methylphenylalaninate

S. Fioravanti, M. A. Loreto, L. Pellacani, F. Sabbatini, P. A. Tardella

Tetrahedron: Asymmetry **1994,** *5,* 473



R = Cyclohexyl

$[\alpha]_D$ = -31.1 (c 4.5, EtOH)

Source of chirality: natural and asymm. synth.

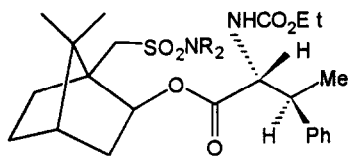
Absolute configuration: 1S,2R,4R,2'S,3'S

$C_{35}H_{54}N_2O_6S$

10-(*N,N*-Dicyclohexylaminosulphonyl)born-2-yl *N*-(ethoxycarbonyl)-β-methylphenylalaninate

S. Fioravanti, M. A. Loreto, L. Pellacani, F. Sabbatini, P. A. Tardella

Tetrahedron: Asymmetry **1994,** *5,* 473



R = Cyclohexyl

$[\alpha]_D$ = +23.6 (c 4.4, EtOH)

Source of chirality: natural and asymm. synth.

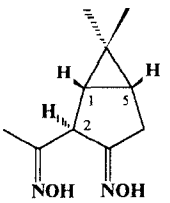
Absolute configuration: 1R,2S,4S,2'R,3'S

$C_{35}H_{54}N_2O_6S$

10-(*N,N*-Dicyclohexylaminosulphonyl)born-2-yl (2*R*,3*S*)-*N*-(ethoxycarbonyl)-β-methylphenylalaninate

S. A. Popov, A. Yu. Denisov, Yu. V. Gatilov, I. Yu. Bagryanskaya, and A. V. Tkachev*

Tetrahedron: Asymmetry **1994,** *5,* 479



E.e. = 100%

$[\alpha]_{578}^{23}$ = +49.2 (*c* 2.0, EtOH)

Source of chirality: natural (+)-3-carene as starting material

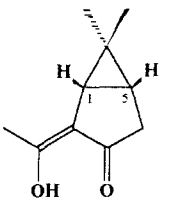
Absolute configuration: 1R,2R,5R

$C_{10}H_{16}N_2O_2$

6,6-Dimethyl-3-hydroxyimino-2-(1-hydroxyiminoethyl)-bicyclo[3.1.0]hexane

S. A. Popov, A. Yu. Denisov, Yu. V. Gatilov, I. Yu. Bagryanskaya, and A. V. Tkachev*

Tetrahedron: Asymmetry **1994,** *5,* 479



E.e. = 100%

$[\alpha]_{578}^{22}$ = -108 (*c* 5.66, $CHCl_3$)

Source of chirality: natural (+)-3-carene as starting material

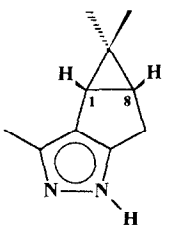
Absolute configuration: 1R,5R

$C_{10}H_{14}O_2$

6,6-Dimethyl-2-(1-hydroxyethylidene)-bicyclo[3.1.0]hexan-3-one

S. A. Popov, A. Yu. Denisov, Yu. V. Gatilov, I. Yu. Bagryanskaya, and A. V. Tkachev*

Tetrahedron: Asymmetry **1994,** *5,* 479



E.e. = 100%

$[\alpha]_{578}^{20}$ = +48.0 (*c* 4.66, $CHCl_3$)

Source of chirality: natural (+)-3-carene as starting material

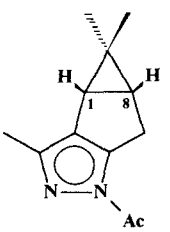
Absolute configuration: 1S,8R

$C_{10}H_{14}N_2$

3,9,9-Trimethyl-4,5-diazatricyclo[6.1.0.$0^{2,6}$]non-2(6),3-diene

S. A. Popov, A. Yu. Denisov, Yu. V. Gatilov, I. Yu. Bagryanskaya, and A. V. Tkachev*

Tetrahedron: Asymmetry **1994,** *5,* 479



E.e. = 100%

$[\alpha]_{578}^{20}$ = +219 (*c* 1.70, $CHCl_3$)

Source of chirality: natural (+)-3-carene as starting material

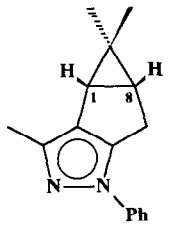
Absolute configuration: 1S,8R

$C_{12}H_{16}N_2O$

5-Acetyl-3,9,9-trimethyl-4,5-diazatricyclo[6.1.0.$0^{2,6}$]non-2(6),3-diene

S. A. Popov, A. Yu. Denisov, Yu. V. Gatilov, I. Yu. Bagryanskaya, and A. V. Tkachev*

Tetrahedron: Asymmetry **1994,** *5,* 479



E.e. = 100%

$[\alpha]_{578}^{21}$ = +149 (*c* 1.07, $CHCl_3$)

Source of chirality: natural (+)-3-carene as starting material

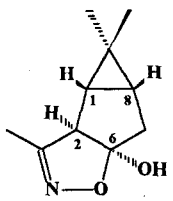
Absolute configuration: 1S,8R

$C_{16}H_{18}N_2$

5-Phenyl-3,9,9-trimethyl-4,5-diazatricyclo[6.1.0.$0^{2,6}$]non-2(6),3-diene

S. A. Popov, A. Yu. Denisov, Yu. V. Gatilov, I. Yu. Bagryanskaya, and A. V. Tkachev*

Tetrahedron: Asymmetry **1994,** *5,* 479



E.e. = 100%

$[\alpha]_{578}^{21}$ = -87.0 (*c* 6.44, $CHCl_3$)

Source of chirality: natural (+)-3-carene as starting material

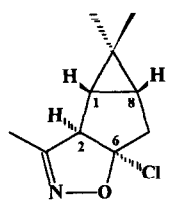
Absolute configuration: 1R,2R,6R,8R

$C_{10}H_{15}NO_2$

6-Hydroxy-3,9,9-trimethyl-5-oxa-4-azatricyclo[6.1.0.$0^{2,6}$]non-3-ene

S. A. Popov, A. Yu. Denisov, Yu. V. Gatilov, I. Yu. Bagryanskaya, and A. V. Tkachev*

Tetrahedron: Asymmetry **1994,** *5,* 479



E.e. = 100%

$[\alpha]_{578}^{21}$ = -226 (*c* 2.10, $CHCl_3$)

Source of chirality: natural (+)-3-carene as starting material

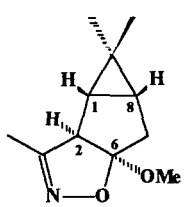
Absolute configuration: 1R,2R,6S,8R

$C_{10}H_{14}ClNO$

6-Chloro-3,9,9-trimethyl-5-oxa-4-azatricyclo[6.1.0.$0^{2,6}$]non-3-ene

S. A. Popov, A. Yu. Denisov, Yu. V. Gatilov, I. Yu. Bagryanskaya, and A. V. Tkachev*

Tetrahedron: Asymmetry **1994,** *5,* 479



E.e. = 100%

$[\alpha]_{578}^{21}$ = -121 (*c* 5.38, $CHCl_3$)

Source of chirality: natural (+)-3-carene as starting material

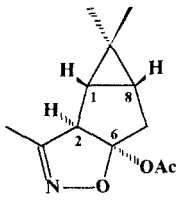
Absolute configuration: 1R,2R,6R,8R

$C_{11}H_{17}NO_2$

6-Methoxy-3,9,9-trimethyl-5-oxa-4-azatricyclo[6.1.0.$0^{2,6}$]non-3-ene

S. A. Popov, A. Yu. Denisov, Yu. V. Gatilov, I. Yu. Bagryanskaya, and A. V. Tkachev*

Tetrahedron: Asymmetry **1994,** *5,* 479



E.e. = 100%

$[\alpha]_{578}^{21}$ = -176 (*c* 5.26, $CHCl_3$)

Source of chirality: natural (+)-3-carene as starting material

Absolute configuration: 1R,2R,6R,8R

$C_{12}H_{17}NO_3$

6-Acetoxy-3,9,9-trimethyl-5-oxa-4-azatricyclo[6.1.0.$0^{2,6}$]non-3-ene

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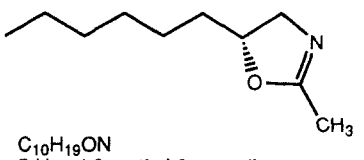
J. Umezawa, O. Takahashi, K. Furuhashi, H. Nohira

Tetrahedron: Asymmetry **1994,** *5,* 491



$[\alpha]_D^{25}$ = +45 (c 1.0, $CHCl_3$)

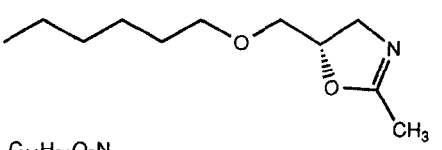
Source of chirality: epoxide produced by a microbial reaction

Absolute configuration R
(derived from 91%ee-(R)-1,2-epoxyoctane)

$C_{10}H_{19}ON$
5-Hexyl-2-methyl-2-oxazoline

J. Umezawa, O. Takahashi, K. Furuhashi, H. Nohira

Tetrahedron: Asymmetry **1994,** *5,* 491



$[\alpha]_D^{25}$ = +38 (c 1.0, $CHCl_3$)

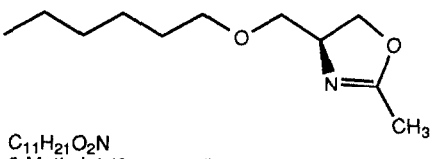
Source of chirality: epoxide produced by a microbial reaction

Absolute configuration S
(derived from 90%ee-(R)-glycidyl hexyl ether)

$C_{11}H_{21}O_2N$
2-Methyl-5-(2-oxaoctyl)-2-oxazoline

J. Umezawa, O. Takahashi, K. Furuhashi, H. Nohira

Tetrahedron: Asymmetry **1994,** *5,* 491



E.e. = 89 % [by HPLC for 3,5-dinitrobenzoyl derivative of the corresponding amino alcohol]

$[\alpha]_D^{25}$ = -60 (c 1.0, $CHCl_3$)

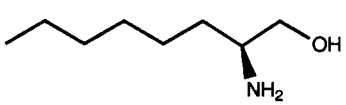
Source of chirality: epoxide produced by a microbial reaction

Absolute configuration S
(assigned based on reaction similarity)

$C_{11}H_{21}O_2N$
2-Methyl-4-(2-oxaoctyl)-2-oxazoline

J. Umezawa, O. Takahashi, K. Furuhashi, H. Nohira

Tetrahedron: Asymmetry **1994**, *5*, 491



$C_8H_{19}ON$
2-Amino-1-octanol

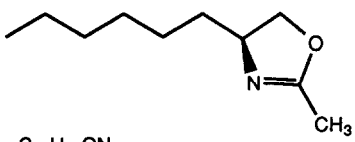
E.e. = 91 % [by HPLC of 3,5-dinitrobenzoyl derivative]
$[\alpha]_D^{25}$ = +8.5 (c 1.0, benzene)

Source of chirality: oxazoline prepared from optically active epoxide

Absolute configuration S
(derived from (S)-4-hexyl-2-methyl-2-oxazoline)

J. Umezawa, O. Takahashi, K. Furuhashi, H. Nohira

Tetrahedron: Asymmetry **1994**, *5*, 491



$C_{10}H_{19}ON$
4-Hexyl-2-methyl-2-oxazoline

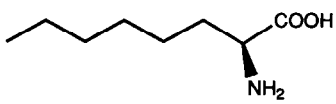
E.e. = 91 % [by HPLC for 3,5-dinitrobenzoyl derivative
of the corresponding amino alcohol]
$[\alpha]_D^{25}$ = -85 (c 1.0, $CHCl_3$)

Source of chirality: epoxide produced by a microbial reaction

Absolute configuration S
(assigned by its optical rotation)

J. Umezawa, O. Takahashi, K. Furuhashi, H. Nohira

Tetrahedron: Asymmetry **1994**, *5*, 491



$C_8H_{17}O_2N$
2-Aminooctanoic acid

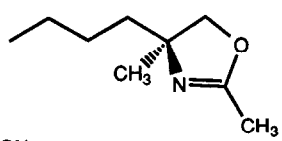
E.e. = 100 % [by HPLC]
$[\alpha]_D^{25}$ = +21 (c 0.3, 1N HCl)

Source of chirality: oxazoline prepared from optically active epoxide

Absolute configuration S
(determined by elution order in HPLC)

J. Umezawa, O. Takahashi, K. Furuhashi, H. Nohira

Tetrahedron: Asymmetry **1994**, *5*, 491



$C_9H_{17}ON$
4-Butyl-2,4-dimethyl-2-oxazoline

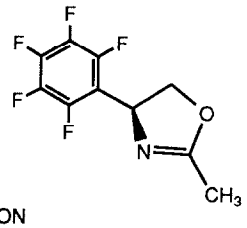
E.e. = 88 % [by HPLC for 3,5-dinitrobenzoyl derivative
of the corresponding amino alcohol]
$[\alpha]_D^{25}$ = -18 (c 1.0, $CHCl_3$)

Source of chirality: epoxide produced by a microbial reaction

Absolute configuration S
(assigned based on reaction similarity)

J. Umezawa, O. Takahashi, K. Furuhashi, H. Nohira

Tetrahedron: Asymmetry **1994,** *5,* 491



$C_{10}H_6F_5ON$
2-Methyl-4-pentafluorophenyl-2-oxazoline

E.e. = 23 % [by HPLC for the corresponding amino alcohol]
$[\alpha]_D^{25}$ = -57 (c 1.0, $CHCl_3$)

Source of chirality: epoxide produced by a microbial reaction

Absolute configuration S
(assigned based on reaction similarity)