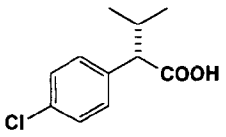
A.Q. Mi, Z.Y. Wang and Y.Z. Jiang

Tetrahedron: Asymmetry **1993**, *4*, 1957



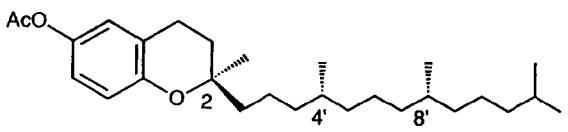
$C_{11}H_{13}ClO_2$

α-isopropyl-4-chlorophenylacetic acid

$[\alpha]_D^{20}$ = +23.6 (c 0.68, benzene)
E.e. = 46.2%
Absolute configuration: S

E.Mizuguchi, M.Takemoto, and K.Achiwa

Tetrahedron: Asymmetry **1993**, *4*, 1961

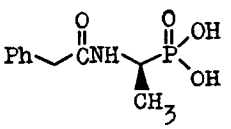


$C_{28}H_{46}O_3$
(2*R*,4'*R*,8'*R*)-tocol acetate

E.e.= >99%[by HPLC using Daicel Chiralcel OD-H]
$[\alpha]_D^{20}$ +4.1 (*c* 0.6 EtOH)
Source of chirality: enzyme-catalyzed hydrolysis of tocol acetate
Absolute configuration: 2*R*, 4'*R*, 8'*R*

V.A.Solodenko,M.Y.Belik,S.V.Galushko,V.P.Kukhar, E.V.Kozlova,D.A.Mironenko and V.K.Svedas

Tetrahedron: Asymmetry **1993**, *4*, 1965



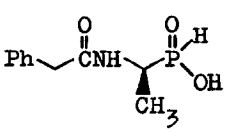
$C_{10}H_{14}NO_4P$

E.e.>99% [by conversion into (S)-1-aminoethylphosphonic acid with e.e.>99%]
$[\alpha]_D^{20}$ = +38.0 (c 0.5, H_2O)
Source of chirality: enzymatic resolution of racemate
Absolute configuration 1S (assigned by hydrolysis resulting in (S)-1-aminoethylphosphonic acid)

1-(N-Phenylacetylamino)ethylphosphonic acid

V.A.Solodenko,M.Y.Belik,S.V.Galushko,V.P.Kukhar, E.V.Kozlova,D.A.Mironenko,V.K.Svedas

Tetrahedron: Asymmetry **1993**, *4*, 1965



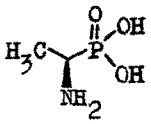
$C_{10}H_{14}NO_3P$

E.e.>99% [by conversion into (S)-1-aminoethylphosphonous acid with e.e.>99%]
$[\alpha]_D^{20}$ = +74.0 (c 0.5, H_2O)
Source of chirality: enzymatic resolution of racemate
Absolute configuration 1S (assigned by hydrolysis resulting in (S)-1-aminoethylphosphonous acid)

1-(N-Phenylacetylamino)ethylphosphonous acid

V.A.Solodenko,M.Y.Belik,S.V.Galushko,V.P.Kukhar, E.V.Kozlova,D.A.Mironenko and V.K.Svedas

Tetrahedron: Asymmetry **1993**, *4*, 1965



$C_2H_8NO_3P$

E.e.>99% (by HPLC after pre-column derivatization with o-phthalaldehyde and N-acetyl-L-cysteine)

$[\alpha]_D^{20}$ = -17.0 (c 0.5, 1N NaOH)

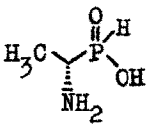
Source of chirality: enzymatic resolution of racemate

Absolute configuration 1R (assignment is based on the known chiroptical properties of this compound)

1-Aminoethylphosphonic acid

V.A.Solodenko,M.Y.Belik,S.V.Galushko,V.P.Kukhar, E.V.Kozlova,D.A.Mironenko and V.K.Svedas

Tetrahedron: Asymmetry **1993**, *4*, 1965



$C_2H_8NO_2P$

E.e.>99% (by HPLC after pre-column derivatization with o-phthalaldehyde and N-acetyl-L-cysteine)

$[\alpha]_D^{20}$ = +6.8 (c 0.5, H_2O)

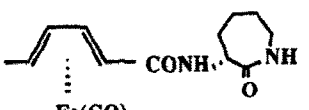
Source of chirality: enzymatic resolution of racemate

Absolute configuration 1S (assignment is based on the known chiroptical properties of this compound)

1-Aminoethylphosphonous acid

S. Nakanishi,* H. Yamamoto, Y. Otsuji, H. Nakazumi

Tetrahedron: Asymmetry **1993**, *4*, 1969



$C_{15}H_{18}N_2O_5Fe$

$[\alpha]_D^{20}$=+225.0(c 1.0, CH_3OH)

Source of chirality : (3R)-3-Amino-hexahydro-2H-azepin-2-one

Absolute configuration 2S, 5R, 3'R

(2S,5R,3'R)-Tricarbonyl[N-(hexahydro-2H-2-one-azepin-3-yl)-η^4-2,4-hexadienamide]iron

S. Nakanishi,* H. Yamamoto, Y. Otsuji, H. Nakazumi

Tetrahedron: Asymmetry **1993**, *4*, 1969

$C_{15}H_{18}N_2O_5Fe$

$[\alpha]_D^{20}$=+228.0(c 0.8, CH_3OH)

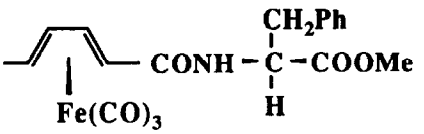
Source of chirality : (3S)-3-Amino-hexahydro-2H-azepin-2-one

Absolute configuration 2S, 5R, 3'S

(2S,5R,3'S)-Tricarbonyl[N-(hexahydro-2H-2-one-azepin-3-yl)-η^4-2,4-hexadienamide]iron

S. Nakanishi,* H. Yamamoto, Y. Otsuji, H. Nakazumi

Tetrahedron: Asymmetry **1993,** *4*, 1969



$C_{19}H_{19}NO_6Fe$

$[\alpha]_D^{20}$=-111.0(c 0.8, CH_3OH)

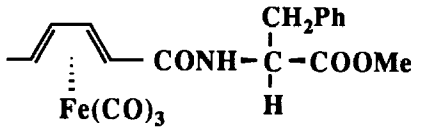
Source of chirality : (S)-Phenylalanine methyl ester

Absolute configuration 2R, 5S, 1'S

(2R,5S,1'S)-Tricarbonyl[N-(1-(methoxycarbonyl)-2-phenylethyl)-η^4-2,4-hexadienamide]iron

S. Nakanishi,* H. Yamamoto, Y. Otsuji, H. Nakazumi

Tetrahedron: Asymmetry **1993,** *4*, 1969



$C_{19}H_{19}NO_6Fe$

$[\alpha]_D^{20}$=+78.0(c 0.7, CH_3OH)

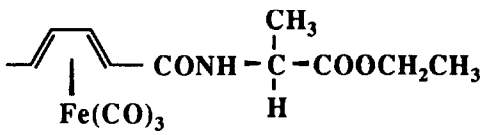
Source of chirality : (S)-Phenylalanine methyl ester

Absolute configuration 2S, 5R, 1'S

(2S,5R,1'S)-Tricarbonyl[N-(1-(methoxycarbonyl)-2-phenylethyl)-η^4-2,4-hexadienamide]iron

S. Nakanishi,* H. Yamamoto, Y. Otsuji, H. Nakazumi

Tetrahedron: Asymmetry **1993,** *4*, 1969



$C_{14}H_{17}NO_6Fe$

$[\alpha]_D^{20}$=-18.5(c 0.7, CH_3OH)

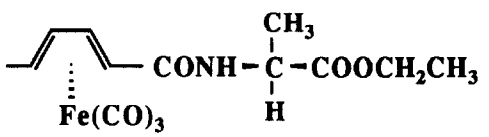
Source of chirality : (S)-Alanine methyl ester

Absolute configuration 2R, 5S, 1'S

(2R,5S,1'S)-Tricarbonyl[N-(1-(ethoxycarbonyl)ethyl)-η^4-2,4-hexadienamide]iron

S. Nakanishi,* H. Yamamoto, Y. Otsuji, H. Nakazumi

Tetrahedron: Asymmetry **1993,** *4*, 1969



$C_{14}H_{17}NO_6Fe$

$[\alpha]_D^{20}$=+11.4(c 0.7, CH_3OH)

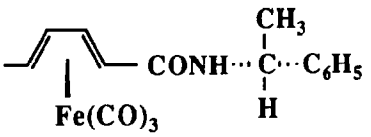
Source of chirality : (S)-Alanine methyl ester

Absolute configuration 2S, 5R, 1'S

(2S,5R,1'S)-Tricarbonyl[N-(1-(ethoxycarbonyl)ethyl)-η^4-2,4-hexadienamide]iron

S. Nakanishi,* H. Yamamoto, Y. Otsuji, H. Nakazumi

Tetrahedron: Asymmetry **1993,** *4*, 1969



$C_{17}H_{17}NO_4Fe$

(2R,5S,1'R)-Tricarbonyl[N-(1-phenylethyl)-η^4-2,4-hexadienamide]iron

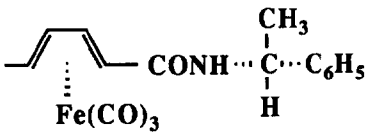
$[\alpha]_D^{20}$=-98.9(c 0.8, CH_3OH)

Source of chirality : (R)-1-Phenylethyl-amine

Absolute configuration 2R, 5S, 1'R

S. Nakanishi,* H. Yamamoto, Y. Otsuji, H. Nakazumi

Tetrahedron: Asymmetry **1993,** *4*, 1969



$C_{17}H_{17}NO_4Fe$

(2S,5R,1'R)-Tricarbonyl[N-(1-phenylethyl)-η^4-2,4-hexadienamide]iron

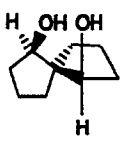
$[\alpha]_D^{20}$=+111.0(c 0.7, CH_3OH)

Source of chirality : (R)-1-Phenylethyl-amine

Absolute configuration 2S, 5R, 1'R

James A. Nieman, Masood Parvez and Brian A. Keay

Tetrahedron: Asymmetry **1993,** *4*, 1973



$C_9H_{16}O_2$

(-)-1R,5R,6R-spiro[4.4]nonane-1,6-diol

E.e.= 100% (by NMR with Pra-OPT®)

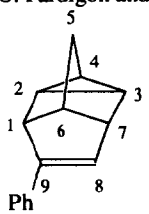
$[\alpha_o]_D^{23}$ = -101.4 (c 0.11, 0.1 dm, abs. EtOH)

Source of chirality: resolution via a ketal of (1R)-(+)-camphor

Absolute configuration: 1R,5R,6R (rotation sign correlated with literature value)

O. Pardigon and G. Buono*.

Tetrahedron: Asymmetry **1993,** *4*, 1977

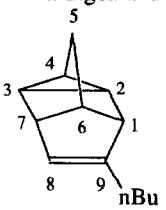


E.e. > 97% [by ^{19}F and ^1H of the (*R*)-MTPA or (*S*)-o-FPLA ester]
Source of chirality : (2*R*,5*S*)-2-phenyl-1,3,2-oxazaphospholidine, (*S*)-(+)-ValNOP, (*S*)-(+)-ProliNOP
$[\alpha]_D^{20}$ = + 58.1 (c=1,0 CH_2Cl_2)
Absolute configuration : (1S,2S,3S,4S,6R,7R)

$C_{15}H_{14}$: (1S,2S,3S,4S,6R,7R)-9-Phenyl tetracyclo[4.3.0.0^{2,4}.0^{3,7}]non-8-ene

O. Pardigon and G. Buono*.

Tetrahedron: Asymmetry **1993,** *4*, 1977

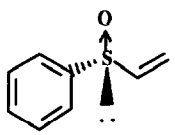


E.e. > 97% [by ^{19}F and ^{1}H of the (*R*)-MTPA or (*S*)-o-FPLA ester]
Source of chirality : (*S*)-(+)-ValNOP, (*S*)-(+)-ProliNOP
$[\alpha]_D^{20}$ = - 0.8 (c=1,0 CH_2Cl_2);
$[\alpha]_{407}^{20}$ = - 22.2 (c=5,0 CH_2Cl_2)
Absolute configuration : (1R,2R,3R,4R,6S,7S)

$C_{13}H_{18}$: (1R,2R,3R,4R,6S,7S)-9-*n*-Butyl tetracyclo[4.3.0.0^{2,4}.0^{3,7}]non-8-ene

F. Secundo, G. Carrea, S. Dallavalle, G.Franzosi

Tetrahedron: Asymmetry **1993,** *4*, 1981



C_8H_8OS
phenyl vinyl sulfoxide

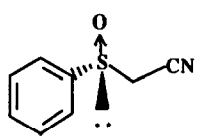
E.e. = 99% (by chiral HPLC with Chiralcel OD column)

Source of chirality: Cyclohexanone monooxigenase

Absolute configuration: R

F. Secundo, G. Carrea, S. Dallavalle, G.Franzosi

Tetrahedron: Asymmetry **1993,** *4*, 1981



C_8H_7NOS
cyanomethyl phenyl sulfoxide

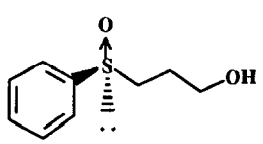
E.e. = 92% (by chiral HPLC with Chiralcel OD column)

Source of chirality: Cyclohexanone monooxigenase

Absolute configuration: R

F. Secundo, G. Carrea, S. Dallavalle, G.Franzosi

Tetrahedron: Asymmetry **1993,** *4*, 1981



$C_9H_{12}O_2S$
3-hydroxypropyl phenyl sulfoxide

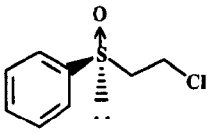
E.e. = 85% (by chiral HPLC with Chiralcel OD column)

Source of chirality: Cyclohexanone monooxigenase

Absolute configuration:S

F. Secundo, G. Carrea, S. Dallavalle, G.Franzosi

Tetrahedron: Asymmetry **1993,** *4*, 1981



C_8H_9ClOS

2-chloroethyl phenyl sulfoxide

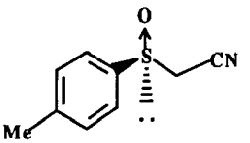
E.e. = 93% (by chiral HPLC with Chiralcel OB column)

Source of chirality: Cyclohexanone monooxigenase

Absolute configuration:S

F. Secundo, G. Carrea, S. Dallavalle, G.Franzosi

Tetrahedron: Asymmetry **1993,** *4*, 1981



C_9H_9NOS

cyanomethyl p-tolyl sulfoxide

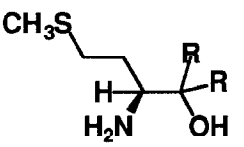
E.e. = 98% (by chiral HPLC with Chiralcel OD column)

Source of chirality: Cyclohexanone monooxigenase

Absolute configuration: S

Th. Mehler, J. Martens*

Tetrahedron: Asymmetry **1993,** *4*, 1983



$C_{19}H_{25}NO_3S$ (R = *p*-C_6H_4-OCH_3)

(*S*)-2-amino-1-di(4-methoxyphenyl)-4-(methylmercapto)-1-butanol

E.e. under investigation

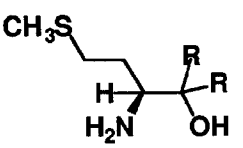
$[\alpha]_D^{20} = -95.5$ (c = 0.48, $CHCl_3$)

Source of chirality: (*S*)-methionine

Absolute configuration S

Th. Mehler, J. Martens*

Tetrahedron: Asymmetry **1993,** *4*, 1983



$C_{19}H_{25}NOS$ (R = *p*-C_6H_4-CH_3)

(*S*)-2-amino-1-di(4-methylphenyl)-4-(methylmercapto)-1-butanol

E.e. under investigation

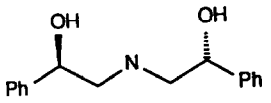
$[\alpha]_D^{20} = -83.5$ (c = 0.65, $CHCl_3$)

Source of chirality: (*S*)-methionine

Absolute configuration S

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

Tetrahedron: Asymmetry **1993**, *4*, 1987



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

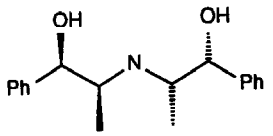
Source of chirality: (R)-(+)-α-[(*t*-butyldimethylsilyl)oxy]-benzeneacetonitrile (asymm. synth.)

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 **1993**, *4*, 1987



D.e.= 92% (^{1}H NMR)

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

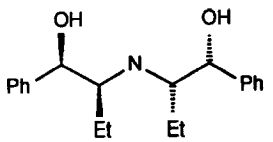
Source of chirality: (R)-(+)-α-[(*t*-butyldimethylsilyl)oxy]-benzeneacetonitrile (asymm. synth.)

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

$C_{18}H_{23}NO_2$
Bis[(1R,2S)-1-hydroxy-1-phenylpropan-2-yl]amine

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

Tetrahedron: Asymmetry **1993**, *4*, 1987



D.e.= 90% (^{1}H NMR)

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

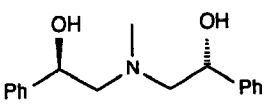
Source of chirality: (R)-(+)-α-[(*t*-butyldimethylsilyl)oxy]-benzeneacetonitrile (asymm. synth.)

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

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

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

Tetrahedron: Asymmetry **1993**, *4*, 1987



$[\alpha]_D^{20}$ -98 (c=1, $CHCl_3$)

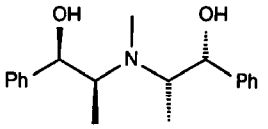
Source of chirality: (R)-(+)-α-[(*t*-butyldimethylsilyl)oxy]-benzeneacetonitrile (asymm. synth.)

Absolute configuration: 1R,1'R

$C_{17}H_{21}NO_2$
N,N-Bis[(R)-1-hydroxy-1-phenylethan-2-yl]methylamine

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

Tetrahedron: Asymmetry **1993**, *4*, 1987



D.e.= 93% (^{1}H NMR)

$[\alpha]_D^{20}$ -74 (c=1, $CHCl_3$)

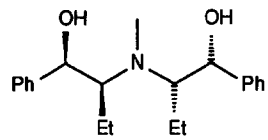
Source of chirality: (R)-(+)-α-[(*t*-butyldimethylsilyl)oxy]-benzeneacetonitrile (asymm. synth.)

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

$C_{19}H_{25}NO_2$
N,N-Bis[(1R,2S)-1-hydroxy-1-phenylpropan-2-yl]methylamine

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

Tetrahedron: Asymmetry **1993**, *4*, 1987



D.e.= 91% (^{1}H NMR)

$[\alpha]_D^{20}$ -38 (c=1, $CHCl_3$)

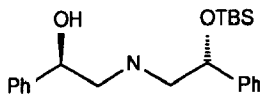
Source of chirality: (R)-(+)-α-[(*t*-butyldimethylsilyl)oxy]-benzeneacetonitrile (asymm. synth.)

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

$C_{21}H_{29}NO_2$
N,N-Bis[(1R,2S)-1-hydroxy-1-phenylbutan-2-yl]methylamine

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

Tetrahedron: Asymmetry **1993**, *4*, 1987



$[\alpha]_D^{20}$ -60 (c=1, $CHCl_3$)

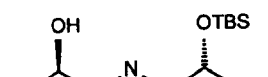
Source of chirality: (R)-(+)-α-[(*t*-butyldimethylsilyl)oxy]-benzeneacetonitrile (asymm. synth.)

Absolute configuration: 1R,1'R

$C_{22}H_{33}NO_2Si$
[(R)-1-[(*t*-Butyldimethylsilyl)oxy]-1-phenylethan-2-yl]
[(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 **1993**, *4*, 1987



D.e.= 98% (^{1}H NMR)

$[\alpha]_D^{20}$ -21 (c=1, $CHCl_3$)

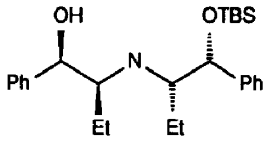
Source of chirality: (R)-(+)-α-[(*t*-butyldimethylsilyl)oxy]-benzeneacetonitrile (asymm. synth.)

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

$C_{34}H_{57}NO_2Si$
[(1R,2S)-1-[(*t*-Butyldimethylsilyl)oxy]-1-phenylpropan-2-yl]
[(1R,2S)-1-hydroxy-1-phenylpropan-2-yl]amine

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

Tetrahedron: Asymmetry **1993**, *4*, 1987



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

$[\alpha]_D^{20}$ -33 (c=1, $CHCl_3$)

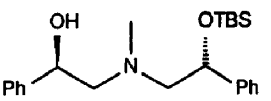
Source of chirality: (R)-(+)-α-[(*t*-butyldimethylsilyl)oxy]-benzeneacetonitrile (asymm. synth.)

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

$C_{26}H_{41}NO_2Si$
[(1R,2S)-1-[(*t*-Butyldimethylsilyl)oxy]-1-phenylbutan-2-yl]
[(1R,2S)-1-hydroxy-1-phenylbutan-2-yl]amine

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

Tetrahedron: Asymmetry **1993**, *4*, 1987



$[\alpha]_D^{20}$ -36 (c=1, $CHCl_3$)

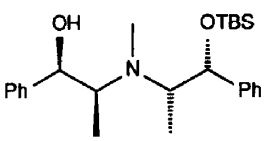
Source of chirality: (R)-(+)-α-[(*t*-butyldimethylsilyl)oxy]-benzeneacetonitrile (asymm. synth.)

Absolute configuration: 1R,1'R

$C_{25}H_{35}NO_2Si$
N-[(R)-1-[(*t*-Butyldimethylsilyl)oxy]-1-phenylethan-2-yl]-
N-[(R)-1-hydroxy-1-phenylethan-2-yl]methylamine

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

Tetrahedron: Asymmetry **1993**, *4*, 1987



D.e.= 98% (^{1}H NMR)

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

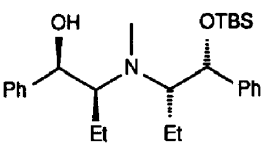
Source of chirality: (R)-(+)-α-[(*t*-butyldimethylsilyl)oxy]-benzeneacetonitrile (asymm. synth.)

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

$C_{25}H_{39}NO_2Si$
N-[(1R,2S)-1-[(*t*-Butyldimethylsilyl)oxy]-1-phenylpropan-2-yl]-
N-[(1R,2S)-1-hydroxy-1-phenylpropan-2-yl]methylamine

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

Tetrahedron: Asymmetry **1993**, *4*, 1987



D.e.= 97% (^{1}H NMR)

$[\alpha]_D^{20}$ -60 (c=1, $CHCl_3$)

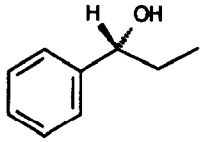
Source of chirality: (R)-(+)-α-[(*t*-butyldimethylsilyl)oxy]-benzeneacetonitrile (asymm. synth.)

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

$C_{29}H_{43}NO_2Si$
N-[(1R,2S)-1-[(*t*-Butyldimethylsilyl)oxy]-1-phenylbutan-2-yl]-
N-[(1R,2S)-1-hydroxy-1-phenylbutan-2-yl]methylamine

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

Tetrahedron: Asymmetry **1993**, *4*, 1987



E.e.= 85% (HPLC, CHIRALCEL OD)

$[\alpha]_D^{20}$ +38 (c=1, $CHCl_3$)

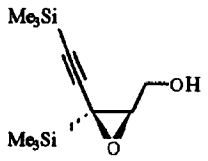
Source of chirality: Asymm. synth.

Absolute configuration: R

$C_9H_{12}O$
1-Phenylpropanol

D. Grandjean, P. Pale,* J. Chuche

Tetrahedron: Asymmetry **1993**, *4*, 1991



Ee ≥ 99% (assumed from optically pure starting material and checked by ^1H NMR in the presence of chiral shift reagent)

$[a]_D^{22}$ = +8.2 (C 0.43, CH_2Cl_2)

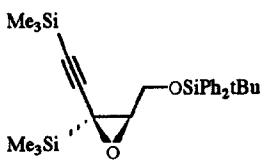
Source of chirality : optically pure starting (2*S*, 3*R*)- 4-butyryloxy-2,3-epoxybutan-1-ol

$C_{11}H_{22}O_2Si_2$

(2*R* 3*R*)-3,5-bis(trimethylsilyl)-2,3-epoxybut-4-yn-1-ol

D. Grandjean, P. Pale,* J. Chuche

Tetrahedron: Asymmetry **1993**, *4*, 1991



Ee ≥ 99% (assumed from optically pure starting material and checked by ^1H NMR in the presence of chiral shift reagent)

$[a]_D^{22}$ = +4.5 (C 0.54, CH_2Cl_2)

Source of chirality : optically pure starting (2*S*, 3*R*)- 4-butyryloxy-2,3-epoxybutan-1-ol

$C_{27}H_{39}O_2Si_3$

(2*R* 3*R*)-1-*ter*butyldiphenylsilyloxy-3,5-bis(trimethylsilyl)-2,3-epoxybut-4-yne

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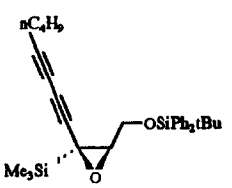
D. Grandjean, P. Pale,* J. Chuche

Tetrahedron: Asymmetry **1993**, *4*, 1991



Ee ≥ 99% (assumed from optically pure starting material and checked by ^1H NMR in the presence of chiral shift reagent)

$[a]_D^{22}$ = -1.8 (C 0.22, CH_2Cl_2)

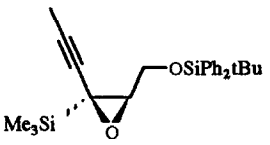
Source of chirality : optically pure starting (2*S*, 3*R*)- 4-butyryloxy-2,3-epoxybutan-1-ol

$C_{30}H_{40}O_2Si_2$

(2*R* 3*R*)-1-*ter*butyldiphenylsilyloxy-3-trimethylsilyl-2,3-epoxyundeca-4,6-diyne

D. Grandjean, P. Pale,* J. Chuche

Tetrahedron: Asymmetry **1993,** *4*, 1991



Ee ≥ 99% (assumed from optically pure starting material and checked by ^1H NMR in the presence of chiral shift reagent)

$[a]_D^{22}$ = -2.7 (C 0.12, CH_2Cl_2)

Source of chirality : optically pure starting (2*S*, 3*R*)- 4-butyryloxy-2,3-epoxybutan-1-ol

$C_{25}H_{34}O_2Si_2$

(2*R* 3*R*)-1-*ter*butyldiphenylsilyloxy-3-trimethylsilyl-2,3-epoxyhex-4-yne

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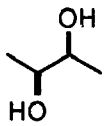
G. Caron and R. J. Kazlauskas

Tetrahedron: Asymmetry **1993,** *4*, 1995



E.e. >99% [by GC on Chiraldex G-TA]

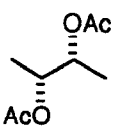
Source of chirality: enzyme-catalyzed resolution

Absolute configuration: 2S,3S
(assigned by comparison to authentic sample)

$C_4H_{10}O_2$
trans-2,3-Butanediol

G. Caron and R. J. Kazlauskas

Tetrahedron: Asymmetry **1993,** *4*, 1995



E.e. 96% [by GC on Chiraldex G-TA]

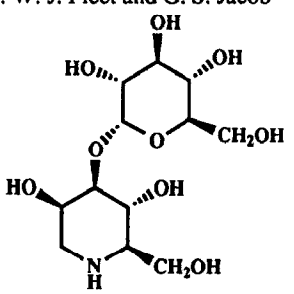
Source of chirality: enzyme-catalyzed resolution.

Absolute configuration: 2R,3R
(assigned by comparison to authentic sample)

$C_8H_{14}O_4$
trans-2,3-Diacetoxybutane

H. Ardron, T. D. Butters, F. M. Platt, M. R. Wormald, R. A. Dwek, G. W. J. Fleet and G. S. Jacob

Tetrahedron: Asymmetry **1993,** *4*, 2011



E.e. = 100%

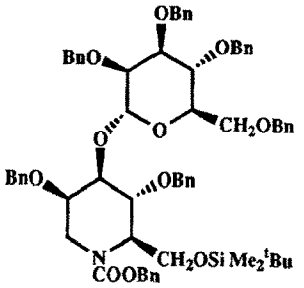
$[\alpha]_D^{20}$ = +49.6 (*c*, 0.55 in water)

1,5-Dideoxy-3-O-(α-D-glucopyranosyl)-1,5-imino-D-mannitol
[Glcα1,3DMJ]
$C_{12}H_{23}NO_9$

Source of chirality: D-glucose as starting material

H. Ardron, T. D. Butters, F. M. Platt, M. R. Wormald, R. A. Dwek, G. W. J. Fleet and G. S. Jacob

Tetrahedron: Asymmetry **1993,** *4*, 2011



E.e. = 100%

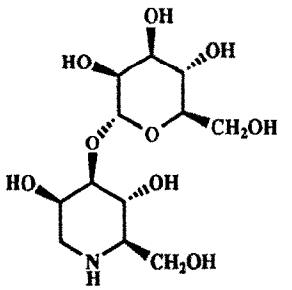
$[\alpha]_D^{20}$ = +24.2 (*c*, 1.17 in $CHCl_3$)

2,4-Di-O-benzyl-N-benzyloxycarbonyl-6-O-*tert*-butyldimethylsilyl-1,5-dideoxy-1,5-imino-3-O-(2,3,4,6-tetra-O-benzyl-α-D-mannopyranosyl)-D-mannitol
$C_{68}H_{79}NO_{11}Si$

Source of chirality: D-glucose as starting material

H. Ardron, T. D. Butters, F. M. Platt, M. R. Wormald, R. A. Dwek, G. W. J. Fleet and G. S. Jacob

Tetrahedron: Asymmetry **1993,** *4*, 2011



E.e. = 100%

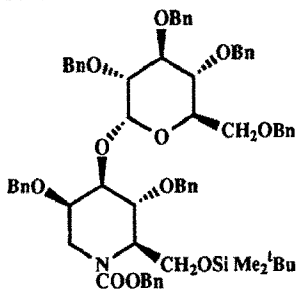
$[\alpha]_D^{20}$ = +27.8 (*c*, 0.40 in water)

1,5-Dideoxy-3-O-(α-D-mannopyranosyl)-1,5-imino-D-mannitol
[Manα1,3DMJ]
$C_{12}H_{23}NO_9$

Source of chirality: D-glucose as starting material

H. Ardron, T. D. Butters, F. M. Platt, M. R. Wormald, R. A. Dwek, G. W. J. Fleet and G. S. Jacob

Tetrahedron: Asymmetry **1993,** *4*, 2011



E.e. = 100%

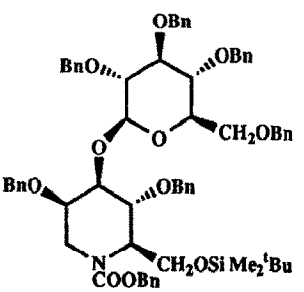
$[\alpha]_D^{20}$ = +27.9 (*c*, 0.76 in $CHCl_3$)

2,4-Di-O-benzyl-N-benzyloxycarbonyl-6-O-*tert*-butyldimethylsilyl-1,5-dideoxy-1,5-imino-3-O-(2,3,4,6-tetra-O-benzyl-α-D-glucopyranosyl)-D-mannitol
$C_{68}H_{79}NO_{11}Si$

Source of chirality: D-glucose as starting material

H. Ardron, T. D. Butters, F. M. Platt, M. R. Wormald, R. A. Dwek, G. W. J. Fleet and G. S. Jacob

Tetrahedron: Asymmetry **1993,** *4*, 2011



E.e. = 100%

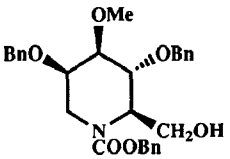
$[\alpha]_D^{20}$ = -4.8 (*c*, 0.90 in $CHCl_3$)

2,4-Di-O-benzyl-N-benzyloxycarbonyl-6-O-*tert*-butyldimethylsilyl-1,5-dideoxy-1,5-imino-3-O-(2,3,4,6-tetra-O-benzyl-β-D-glucopyranosyl)-D-mannitol
$C_{68}H_{79}NO_{11}Si$

Source of chirality: D-glucose as starting material

H. Ardron, T. D. Butters, F. M. Platt, M. R. Wormald, R. A. Dwek, G. W. J. Fleet and G. S. Jacob

Tetrahedron: Asymmetry **1993**, *4*, 2011



E.e. = 100%

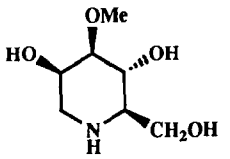
$[\alpha]_D^{25} = -37.7$ (*c*, 1.30 in $CHCl_3$)

2,4-Di-O-benzyl-N-benzyloxycarbonyl-1,5-dideoxy-1,5-imino-3-O-methyl-D-mannitol
$C_{29}H_{33}NO_6$

Source of chirality: D-glucose as starting material

H. Ardron, T. D. Butters, F. M. Platt, M. R. Wormald, R. A. Dwek, G. W. J. Fleet and G. S. Jacob

Tetrahedron: Asymmetry **1993**, *4*, 2011



E.e. = 100%

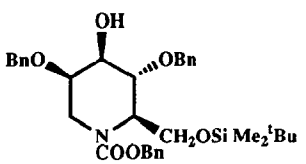
$[\alpha]_D^{20} = -18.9$ (*c*, 1.53 in H_2O)

1,5-Dideoxy-1,5-imino-3-O-methyl-D-mannitol
[3-O-Methyldeoxymannojirimycin]
$C_7H_{15}NO_4$

Source of chirality: D-glucose as starting material

H. Ardron, T. D. Butters, F. M. Platt, M. R. Wormald, R. A. Dwek, G. W. J. Fleet and G. S. Jacob

Tetrahedron: Asymmetry **1993**, *4*, 2011



E.e. = 100%

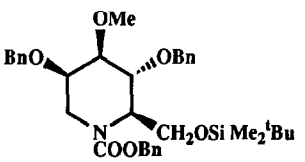
$[\alpha]_D^{25} = -17.7$ (*c*, 1.09 in $CHCl_3$)

2,4-Di-O-benzyl-N-benzyloxycarbonyl-6-O-*tert*-butyldimethylsilyl-1,5-dideoxy-1,5-imino-D-mannitol
$C_{34}H_{45}NO_6Si$

Source of chirality: D-glucose as starting material

H. Ardron, T. D. Butters, F. M. Platt, M. R. Wormald, R. A. Dwek, G. W. J. Fleet and G. S. Jacob

Tetrahedron: Asymmetry **1993**, *4*, 2011



E.e. = 100%

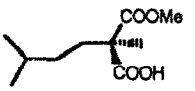
$[\alpha]_D^{20} = -30.6$ (*c*, 1.12 in $CHCl_3$)

2,4-Di-O-benzyl-N-benzyloxycarbonyl-6-O-*tert*-butyldimethylsilyl-1,5-dideoxy-1,5-imino-3-O-methyl-D-mannitol
$C_{35}H_{47}NO_6Si$

Source of chirality: D-glucose as starting material

L. Provencher, H. Wynn, J.B. Jones and A.R. Krawczyk

Tetrahedron: Asymmetry **1993**, *4*, 2025



(2R)-(+)-Hydrogen methyl 2-(3,3-dimethylbutyl)-2-methylmalonate

ee >95 % (by NMR with (R)-(+)-1-phenylethylamine)

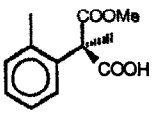
$[\alpha]^{25}_D$ = +1.92 (*c* 0.83, $CHCl_3$)

Source of chirality: PLE-catalyzed stereoselective hydrolysis

Absolute configuration: 2R

L. Provencher, H. Wynn, J.B. Jones and A.R. Krawczyk

Tetrahedron: Asymmetry **1993**, *4*, 2025



(2R)-(+)-Hydrogen methyl 2-methyl-2-(2-methylphenyl)malonate

ee >95% (by NMR with (R)-(+)-1-phenylethylamine)

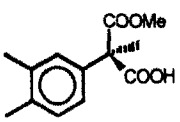
$[\alpha]^{25}_D$ = +29.0 (*c* 8.4, $CDCl_3$)

Source of chirality: PLE-catalyzed stereoselective hydrolysis

Absolute configuration: 2R

L. Provencher, H. Wynn, J.B. Jones and A.R. Krawczyk

Tetrahedron: Asymmetry **1993**, *4*, 2025



(2R)-(+)-Hydrogen methyl 2-(3,4-dimethylphenyl)-2-methylmalonate

ee >95% (by NMR with (R)-(+)-1-phenylethylamine)

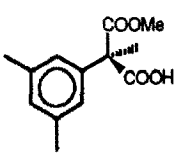
$[\alpha]^{25}_D$ = +12.2 (*c* 8.6, $CDCl_3$)

Source of chirality: PLE-catalyzed stereoselective hydrolysis

Absolute configuration: 2R

L. Provencher, H. Wynn, J.B. Jones and A.R. Krawczyk

Tetrahedron: Asymmetry **1993**, *4*, 2025



(2R)-(+)-Hydrogen methyl 2-(3,5-dimethylphenyl)-2-methylmalonate

ee = 94% (by NMR with (R)-(+)-1-phenylethylamine)

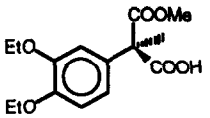
$[\alpha]^{25}_D$ = +14.9 (*c* 4.2, $CDCl_3$)

Source of chirality: PLE-catalyzed stereoselective hydrolysis

Absolute configuration: 2R

L. Provencher, H. Wynn, J.B. Jones and A.R. Krawczyk

Tetrahedron: Asymmetry **1993**, *4*, 2025



ee · >95% (by NMR with (R)-(+)-1-phenylethylamine)

$[\alpha]^{25}_D$ = +13.69 (*c* 1.87, $CHCl_3$)

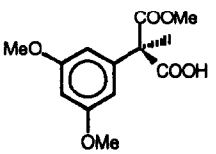
Source of chirality: PLE-catalyzed stereoselective hydrolysis

Absolute configuration: 2R

(2R)-(+)-Hydrogen methyl 2-(3,4-diethoxyphenyl)-2-methylmalonate

L. Provencher, H. Wynn, J.B. Jones and A.R. Krawczyk

Tetrahedron: Asymmetry **1993**, *4*, 2025



ee = 81% (by NMR with (R)-(+)-1-phenylethylamine)

$[\alpha]^{25}_D$ = +9.6 (*c* 11.3, $CHCl_3$)

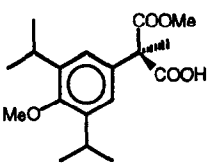
Source of chirality: PLE-catalyzed stereoselective hydrolysis

Absolute configuration: 2R

(2R)-(+)-Hydrogen methyl 2-(3,5-dimethoxyphenyl)-2-methylmalonate

L. Provencher, H. Wynn, J.B. Jones and A.R. Krawczyk

Tetrahedron: Asymmetry **1993**, *4*, 2025



ee >95 % (by NMR with (R)-(+)-1-phenylethylamine)

$[\alpha]^{25}_D$ = +14.2 (*c* 5.2, $CDCl_3$)

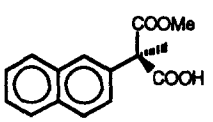
Source of chirality: PLE-catalyzed stereoselective hydrolysis

Absolute configuration: 2R

(2R)-(+)-Hydrogen methyl 2-(3,5-diisopropyl-4-methoxyphenyl)-2-methylmalonate

L. Provencher, H. Wynn, J.B. Jones and A.R. Krawczyk

Tetrahedron: Asymmetry **1993**, *4*, 2025



ee >95% (by NMR with (R)-(+)-1-phenylethylamine)

$[\alpha]^{25}_D$ = +8.3 (*c* 0.83, $CHCl_3$)

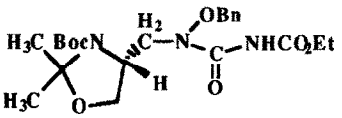
Source of chirality: PLE-catalyzed stereoselective hydrolysis

Absolute configuration: 2R

(2R)-(+)-Hydrogen methyl 2-methyl-2-(2-naphthyl)malonate

C. Guibourdenche, M.L. Roumestant, Ph. Viallefont

Tetrahedron: Asymmetry **1993,** *4*, 2041



$C_{22}H_{33}N_3O_7$

E.e.=100.0%

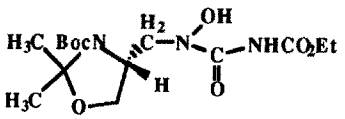
$[\alpha]_D^{24}$=+6.42 (c 1.245, CH_2Cl_2)

Source of chirality: S serine

Absolute configuration 2R

C. Guibourdenche, M.L. Roumestant, Ph. Viallefont

Tetrahedron: Asymmetry **1993,** *4*, 2041



$C_{15}H_{27}N_3O_7$

E.e.=100.0%

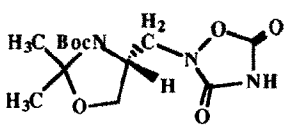
$[\alpha]_D^{24}$=-6.06 (c 0.99, $CHCl_3$)

Source of chirality: S serine

Absolute configuration 2R

C. Guibourdenche, M.L. Roumestant, Ph. Viallefont

Tetrahedron: Asymmetry **1993,** *4*, 2041



$C_{13}H_{21}N_3O_6$

E.e.=100.0%

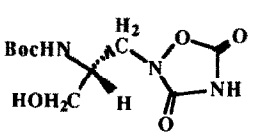
$[\alpha]_D^{24}$=-16.54 (c 1.028, CH_2Cl_2)

Source of chirality: S serine

Absolute configuration 2R

C. Guibourdenche, M.L. Roumestant, Ph. Viallefont

Tetrahedron: Asymmetry **1993,** *4*, 2041



$C_{10}H_{17}N_3O_6$

E.e.=100.0%

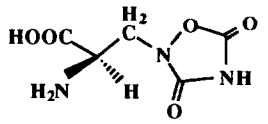
$[\alpha]_D^{24}$=-7.93 (c 1.26, MeOH)

Source of chirality: S serine

Absolute configuration 2R

C. Guibourdenche, M.L. Roumestant, Ph. Viallefont

Tetrahedron: Asymmetry **1993,** *4*, 2041



$C_5H_7N_3O_5$

E.e.=100.0%

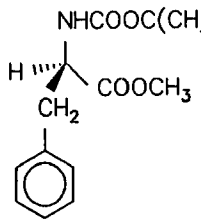
$[\alpha]_D^{24}$=-16.5 (c 2.0, HCl 6N)

Source of chirality: S serine

Absolute configuration 2R

H.–J. Kreuzfeld, Chr. Döbler, H.W. Krause

Tetrahedron: Asymmetry **1993,** *4*, 2047



$C_{15}H_{21}NO_4$

N–t–Boc–D–Phenylalanine Methyl Ester

E.e. = 93 % (by HPLC)

$[\alpha]_D^{25}$= +4.8 (c 1.0 , MeOH)

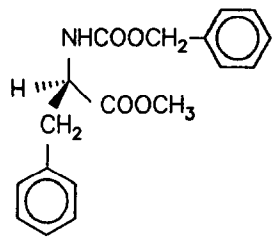
Source of chirality : enantioselective hydrogenation of a precursor.

Absolute configuration : D

(assigned by catalyst configuration)

H.–J. Kreuzfeld, Chr. Döbler, H.W. Krause

Tetrahedron: Asymmetry **1993,** *4*, 2047



$C_{18}H_{19}NO_4$

N–Cbz–D–Phenylalanine Methyl Ester

E.e. = 88 % (by HPLC)

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

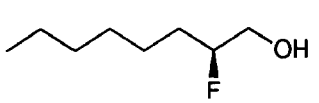
Source of chirality : enantioselective hydrogenation of a precursor.

Absolute configuration : D

(assigned by catalyst configuration)

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

Tetrahedron: Asymmetry **1993,** *4*, 2053



$C_8H_{17}FO$

2-Fluoro-1-octanol

E.e. = 92 % [by GLC of its MTPA ester]

$[\alpha]_D^{25}$ = -13.6 (c 2.0, Et_2O)

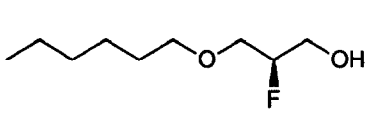
Source of chirality: epoxide produced by a microbilal reaction

Absolute configuration S

(assigned by its optical rotation)

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

Tetrahedron: Asymmetry **1993**, *4*, 2053



E.e. = 86 % [by GLC of its MTPA ester]

$[\alpha]_D^{25}$ = -1.8 (neat)

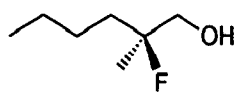
Source of chirality: epoxide produced by a microbilal reaction

$C_9H_{19}FO_2$
2-Fluoro-3-hexyloxy-1-propanol

Absolute configuration R
(determined by optical rotation of its recyclized product under basic condition)

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

Tetrahedron: Asymmetry **1993**, *4*, 2053



E.e. = 71 % [by GLC of its MTPA ester]

$[\alpha]_D^{25}$ = -0.7 (c 2.0, $CHCl_3$)

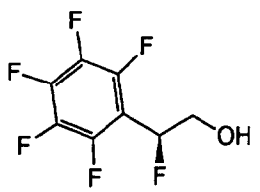
Source of chirality: epoxide produced by a microbilal reaction

$C_7H_{15}FO$
2-Fluoro-2-methyl-1-hexanol

Absolute configuration S
(determined by optical rotation of its corresponding methylester)

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

Tetrahedron: Asymmetry **1993**, *4*, 2053



E.e. = 61 % [by ^{19}F-NMR of its MTPA ester]

$[\alpha]_D^{25}$ = +12.0 (c 0.3, $CHCl_3$)

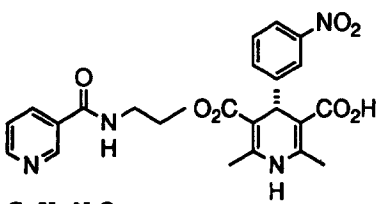
Source of chirality: epoxide produced by a microbilal reaction

Absolute configuration S
(determined by optical rotation of its recyclized product under basic condition)

$C_8H_4F_6O$
2-Fluoro-2-(pentafluorophenyl)ethanol

T. Adachi, M. Ishii, Y. Ohta, T. Ota, T. Ogawa, K. Hanada

Tetrahedron: Asymmetry **1993**, *4*, 2061



E.e. = >99%

$[\alpha]^{30}_D$ -90.7 (c 1.0, EtOH)

Source of chirality: Enzyme-catalyzed hydrolysis of a prochiral diester

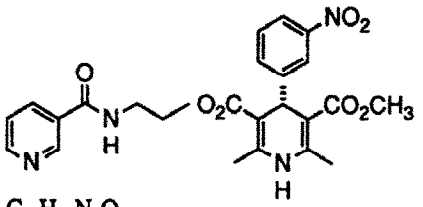
Absolute configuration: 4*R* ; assigned by chemical correlation

$C_{23}H_{22}N_4O_7$

(4*R*)-(-)-3-[2-(Nicotinoylamino)ethoxycarbonyl]-2,6-dimethyl-4-(3-nitrophenyl)-1,4-dihydropyridine-5-carboxylic acid

T. Adachi, M. Ishii, Y. Ohta, T. Ota, T. Ogawa, K. Hanada

Tetrahedron: Asymmetry **1993**, *4*, 2061



$C_{23}H_{22}N_4O_7$

$[\alpha]^{25}_D$ -59.1 (c 1.0, EtOH)

Source of chirality: Enzyme-catalyzed hydrolysis of a prochiral diester

Absolute configuration: 4*R* ; assigned by chemical correlation

(4*R*)-(-)-Methyl 2-(nicotinoylamino)ethyl 2,6-dimethyl-4-(3-nitrophenyl)-1,4-dihydro-3,5-pyridinedicarboxylate

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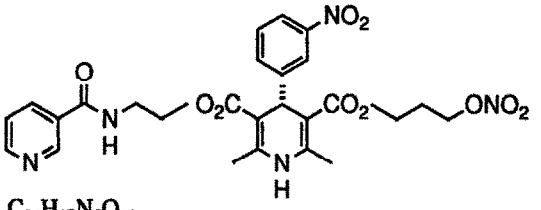
T. Adachi, M. Ishii, Y. Ohta, T. Ota, T. Ogawa, K. Hanada

Tetrahedron: Asymmetry **1993**, *4*, 2061



$C_{26}H_{27}N_5O_{10}$

E.e. = >99.5%

$[\alpha]^{24}_D$ -39.1 (c 1.0, EtOH)

Source of chirality: Enzyme-catalyzed hydrolysis and transesterification of a prochiral diester

Absolute configuration: 4*R* ; assigned by chemical correlation

(4*R*)-(-)-2-(Nicotinoylamino)ethyl 3-nitrooxypropyl 2,6-dimethyl-4-(3-nitrophenyl)-1,4-dihydro-3,5-pyridinedicarboxylate

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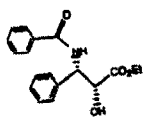
Tetrahedron: Asymmetry **1993**, *4*, 2069

Ramesh N. Patel*, Amit Banerjee, Jeffrey M. Howell, Clydge G. McNamee, David Brozozowski, David Mirfakhrae, Venkat Nanduri, John K. Thottathil, Laszlo J. Szarka.



$C_{18}H_{17}NO_4$

N-Benzoyl-3-phenyl isoserine ethyl ester

E.e. = >99%, Chiral HPLC

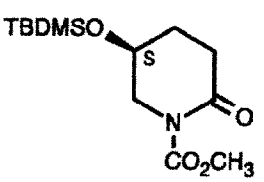
$[\alpha]_D^{25}$ = -21.7 (C 1, $CHCl_3$)

Source of chirality: Microbial Reduction

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

C. Herdeis and E. Heller

Tetrahedron: Asymmetry **1993**, *4*, 2085



$C_{13}H_{25}NO_4Si$

E.e. = > 97 % derived from S-glutamic acid

$[\alpha]_D^{20}$ =-10.9 (c = 1.0, MeOH)

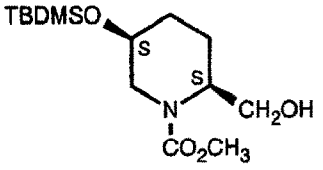
Source of chirality: (S)-glutamic acid

Absolute configuration: 5S

(5S)-5-t-Butyldimethylsilyloxy-N-methoxycarbonyl-2-piperidinone

C. Herdeis and E. Heller

Tetrahedron: Asymmetry **1993**, *4*, 2085



$C_{14}H_{29}NO_4Si$

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

$[\alpha]_D^{20}$ = - 3.9 (c = 1.0, MeOH)

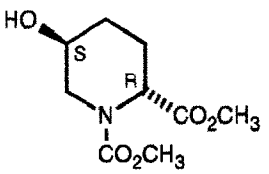
Source of chirality: (S)-glutamic acid

Absolute configuration: 2S,5S

(2S,5S)-5-t-Butyldimethylsilyloxy-N-methoxycarbonyl-2-hydroxymethyl-piperidine

C. Herdeis and E. Heller

Tetrahedron: Asymmetry **1993**, *4*, 2085



$C_9H_{15}NO_5$

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

$[\alpha]_D^{20}$ = + 38.6 (c = 1.0, MeOH)

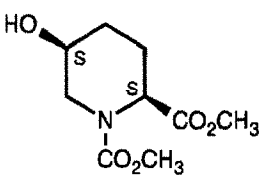
Source of chirality: (S)-glutamic acid

Absolute configuration: 2R,5S

Methyl (2R,5S)-5-Hydroxy-N-methoxycarbonyl-piperidine-2-carboxylate

C. Herdeis and E. Heller

Tetrahedron: Asymmetry **1993**, *4*, 2085



$C_9H_{15}NO_5$

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

$[\alpha]_D^{20}$ = - 24.1 (c = 1.0, MeOH)

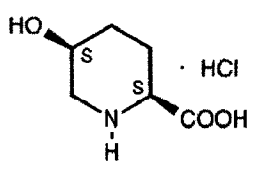
Source of chirality: (S)-glutamic acid

Absolute configuration: 2S,5S

Methyl (2S,5S)-5-Hydroxy-N-methoxycarbonyl-piperidine-2-carboxylate

C. Herdeis and E. Heller

Tetrahedron: Asymmetry **1993**, *4*, 2085



$C_6H_{12}ClNO_3$

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

$[\alpha]_D^{20}$ = - 21.9 (c = 1.0, H_2O)

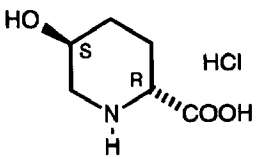
Source of chirality: (S)-glutamic acid

Absolute configuration: 2S,5S

(2S,5S)-5-Hydroxy-piperidine-2-carboxylic acid hydrochloride

C. Herdeis and E. Heller

Tetrahedron: Asymmetry **1993**, *4*, 2085



$C_6H_{12}ClNO_3$

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

$[\alpha]_D^{20}$ = + 8.6 (c = 1.0, H_2O)

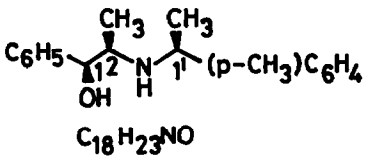
Source of chirality: (S)-glutamic acid

Absolute configuration: 2R,5S

(2R,5S)-5-Hydroxy-piperidine-2-carboxylic acid hydrochloride

R.Sreekumar and C.N.Pillai

Tetrahedron: Asymmetry **1993**, *4*, 2095



$C_{18}H_{23}NO$

(+)-N-(α-p-tolylethyl) norephedrine

E.e:>64% (by the e.e in derived 1'-Primaryamine)

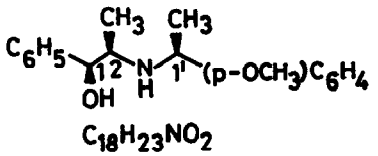
$[\alpha]_D^{30}$ (1NHCl)+3.2

Source of chirality : Asymmetric synthesis

Absolute configuration :1S,2R,1'S (Assigned by correlation).

R.Sreekumar and C.N.Pillai

Tetrahedron: Asymmetry **1993**, *4*, 2095



$C_{18}H_{23}NO_2$

(+)-N-(α-p-Methodyphenylethyl) norephedrine

E.e.:>57%(by the e.e in derived 1'-Primaryamine)

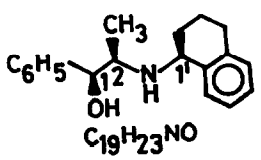
$[\alpha]_D^{30}$ (1NHCl)+4.2

Source of chirality : Asymmetric synthesis

Absolute configuration : 1S,2R,1'S (Assigned by correlation).

R.Sreekumar and C.N.Pillai

Tetrahedron: Asymmetry **1993**, *4*, 2095



$C_{19}H_{23}NO$

(+)-N-(1-tetrahydronaphthyl) norephedrine

E.e.:>64% (by the e.e in derived 1'-Primaryamine)

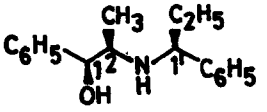
$[\alpha]_D^{30}$ (1NHCl) - 4.5

Source of chirality : Asymmetric synthesis

Absolute configuration : 1S,2R,1'S (Assigned by correlation).

R.Sreekumar and C.N.Pillai

Tetrahedron: Asymmetry **1993**, *4*, 2095



$C_{18}H_{23}NO$

(+)-N-(α-Phenylpropyl) norephedrine

E.e.:>66%(by the e.e in derived 1'-Primaryamine)

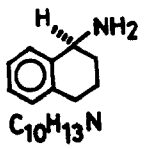
$[\alpha]_D^{30}$(1NHCl)+1.8

Source of chirality : Asymmetric synthesis

Absolute configuration : 1S,2R,1'S (Assigned by correlation).

R.Sreekumar and C.N.Pillai

Tetrahedron: Asymmetry **1993**, *4*, 2095



$C_{10}H_{13}N$

1,2,3,4-Tetrahydro-1-naphthylamine

E.e.: 64%

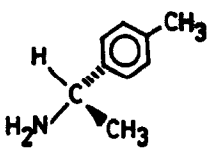
$[\alpha]_D^{30}$(Methanol) - 26.5

Source of chirality : Asymmetric synthesis

Absolute configuration : S

R.Sreekumar and C.N.Pillai

Tetrahedron: Asymmetry **1993**, *4*, 2095



$C_9H_{13}N$

S-(-)-α-p-Tolylethylamine

E.e.: 64%

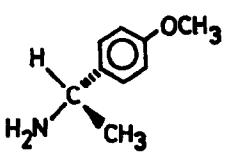
$[\alpha]_D^{30}$ (Ethanol) - 20.4

Source of chirality : Asymmetric synthesis

Absolute configuration : S

R.Sreekumar and C.N.Pillai

Tetrahedron: Asymmetry **1993**, *4*, 2095



$C_9H_{13}NO$

S-(-)-α (4-Methoxyphenyl) ethylamine

E.e.: 57%

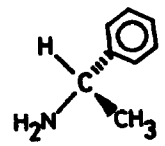
$[\alpha]_D^{30}$ (Methanol) - 15.1

Source of chirality : Asymmetric synthesis

Absolute configuration : S

R.Sreekumar and C.N.Pillai

Tetrahedron: Asymmetry **1993, *4*, 2095**



$C_8H_{11}N$

S-(-)-α-phenylethylamine

E.e.: 59%

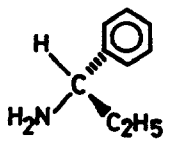
$[\alpha]_D^{30}$ (Benzene) - 20.4

Source of chirality : Asymmetric synthesis

Absolute configuration : S

R.Sreekumar and C.N.Pillai

Tetrahedron: Asymmetry **1993, *4*, 2095**



$C_9H_{13}N$

S-(-)-α-phenylpropylamine

E.e.: 66%

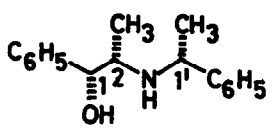
$[\alpha]_D^{30}$ (Ethanol) - 14.1

Source of chirality : Asymmetric synthesis

Absolute configuration : S

R.Sreekumar and C.N.Pillai

Tetrahedron: Asymmetry **1993, *4*, 2095**



$C_{17}H_{21}NO$

(-)-(α-phenylethyl) norephedrine

E.e.:>54% (by the e.e. in derived 1'-Primaryamine)

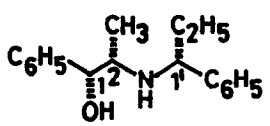
$[\alpha]_D^{30}$ (1NHCl) - 14.5

Source of chirality : Asymmetric synthesis

Absolute configuration : 1R,2S,1'R (Assigned by correlation).

R.Sreekumar and C.N.Pillai

Tetrahedron: Asymmetry **1993, *4*, 2095**



$C_{18}H_{23}NO$

(-)-N-(α-phenylpropyl) norephedrine

E.e.:>59% (by the e.e in derived 1'-Primaryamine)

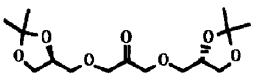
$[\alpha]_D^{30}$ (1NHCl) + 2.4

Source of chirality : Asymmetric synthesis

Absolute configuration : 1R,2S,1'R (Assigned by correlation).

M. Lemaire, G. Jeminet, J.G. Gourcy, G. Dauphin

Tetrahedron: Asymmetry **1993,** *4*, 2101



$C_{15}H_{26}O_7$

E.e ≥ 98 % (deduced from dibutyrate derivative)

$[\alpha]_J^{25}$ + 17 (c = 0.032, $CHCl_3$)

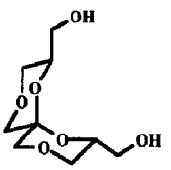
Source of chirality: asym. synth. (D-α,β-isopropylideneglycerol as starting material)

Absolute configuration: **2'S,2"S**

(2'S,2"S)-1-(2',3'-O-Isopropylideneglycerol)-3-(2",3"-O-isopropylideneglycerol)propanone

M. Lemaire, G. Jeminet, J.G. Gourcy, G. Dauphin

Tetrahedron: Asymmetry **1993,** *4*, 2101



$C_9H_{16}O_6$

E.e ≥ 98 % (deduced from dibutyrate derivative)

$[\alpha]_J^{25}$ + 5 (c = 0.021, CH_3OH)

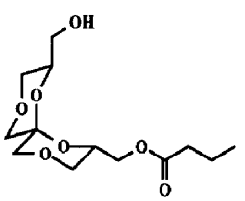
Source of chirality: asym. synth.

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

E,E-(2R,6S,8R)-(+)-2,8-dihydroxymethyl-1,4,7,10-tetraoxaspiro[5.5]undecane

M. Lemaire, G. Jeminet, J.G. Gourcy, G. Dauphin

Tetrahedron: Asymmetry **1993,** *4*, 2101



$C_{13}H_{22}O_7$

E.e ≥ 98 % (by NMR with $Eu(hfc)_3$)

$[\alpha]_J^{25}$ + 7 (c = 0.023, $CHCl_3$)

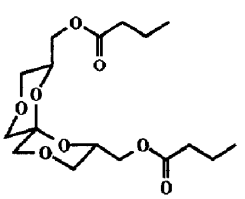
Source of chirality: asym. synth.

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

E,E-(2S,6S,8R)-(+)-2-Butyryloxymethyl-8-hydroxymethyl-1,4,7,10-tetraoxaspiro[5.5]undecane

M. Lemaire, G. Jeminet, J.G. Gourcy, G. Dauphin

Tetrahedron: Asymmetry **1993,** *4*, 2101



$C_{17}H_{28}O_8$

E.e ≥ 98 % (by NMR with $Eu(hfc)_3$)

$[\alpha]_J^{25}$ + 7 (c = 0.023, $CHCl_3$)

Source of chirality: asym. synth.

Absolute configuration: **2S,6S,8S**

E,E-(2S,6S,8S)-(+)-2,8-Dibutyryloxymethyl-1,4,7,10-tetraoxaspiro[5.5]undecane