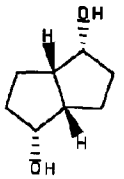
Tetrahedron Asymmetry **1994**, *5*, 1

J. Pérard-Viret, A. Rassat



$C_8H_{14}O_2$
*diendo*bicyclo[3.3.0]octane-2,6-diol

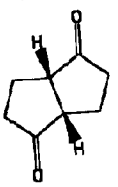
Ee ≥ 99% [by DSC of diester, cpv of o-acetyllactyldiester]
$[\alpha]_D = -39$ (c=0.5, $CHCl_3$)

Source of chirality: resolution with
(-) menthyloxyacetic acid

Absolute configuration 1S,2R,5S,6R
(assigned by correlation)

Tetrahedron: Asymmetry **1994**, *5*, 1

J. Pérard-Viret, A. Rassat



$C_8H_{10}O_2$
Bicyclo[3.3.0]octane-2,6-dione

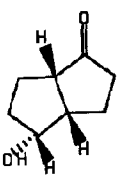
Ee ≥ 99% [by DSC of diester, cpv of o-acetyllactyldiester]
$[\alpha]_D = +474$ (c=0.05, CH_2Cl_2)
CD: $\Delta\varepsilon_{311} = +4.617\ M^{-1}cm^{-1}$ (CH_2Cl_2)

Source of chirality: resolution of diol intermediate with
(-) menthyloxyacetic acid

Absolute configuration 1S,5S
(assigned by CD and correlation)

Tetrahedron Asymmetry **1994**, *5*, 1

J. Pérard-Viret, A. Rassat



$C_8H_{12}O_2$
endo-2-hydroxy-6-oxobicyclo[3.3.0]octane

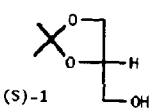
Ee ≥ 99% [by DSC of diester, cpv of o-acetyllactyldiester]
$[\alpha]_D = +113$ (c=0.35, $CHCl_3$)
CD: $\Delta\varepsilon_{311} = +1.4\ M^{-1}cm^{-1}$ (CH_2Cl_2)

Source of chirality: enzymatic reduction of optically pure
dione

Absolute configuration 1S,2R,5S
(assigned by CD and correlation)

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

M.Pallavicini,E.Valoti*,L.Villa and O.Piccolo*



(S)-1

$C_6H_{12}O_3$ (S)-isopropylidene glycerol

o.p.> 98%

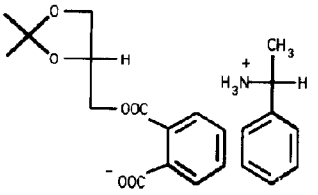
$[\alpha]_D^{20} = +21.8$ (c = 1, ethanol)

Source of chirality : chemical resolution by selective crystallization of the salt between the hydrogen phthalate of (±)-1 and (R)-MBA.

Absolute configuration : S

Tetrahedron Asymmetry **1994**, *5*, 5

M.Pallavicini,E.Valoti*,L.Villa and O.Piccolo*



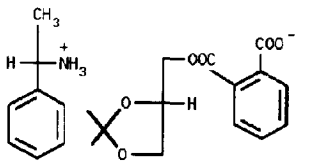
d.e. > 98% (e.e. determined on the corresponding mono methyl ester by chiral HPLC analysis).
$[\alpha]_D^{20}$ = +14.5 (c 2.5, methanol)

(R)-1-methylbenzylamine salt of
(R)-isopropylideneglyceryl hydrogen phthalate

$C_{22}H_{27}NO_6$

Tetrahedron Asymmetry **1994**, *5*, 5

M.Pallavicini,E.Valoti*,L.Villa and O.Piccolo*



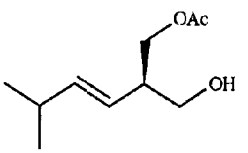
d.e. > 98% (e.e. determined on the corresponding monomethyl ester by chiral HPLC analysis)
$[\alpha]_D^{20}$ = -14.5 (c 2.5, methanol)

(S)-1-methylbenzylamine salt of
(S)-isopropylideneglyceryl hydrogen phthalate

$C_{22}H_{27}NO_6$

Tetrahedron Asymmetry **1994**, *5*, 9

G. Guanti, L. Banfi, R. Riva



$C_{10}H_{18}O_3$
(E)-2-(Acetoxymethyl)-5-methyl-3-hexen-1-ol

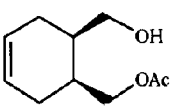
E.e. = 96.0% [by nmr with $Eu(hfc)_3$]
$[\alpha]_D^{25}$ = + 25.3 (c 2, $CHCl_3$)

Source of chirality: enzymatic asymmetrization

Absolute configuration: R
(assigned by chemical correlation)

Tetrahedron Asymmetry **1994**, *5*, 9

G. Guanti, L. Banfi, R. Riva



$C_{10}H_{16}O_3$
cis-6-(Acetoxymethyl)-cyclohex-3-en-1-methanol

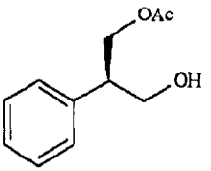
E.e. = 93.6% [by nmr with $Eu(hfc)_3$]
$[\alpha]_D^{25}$ = + 18.3 (c 2, $CHCl_3$)

Source of chirality: enzymatic asymmetrization

Absolute configuration: 1R,6S
(assigned by chemical correlation)

G. Guanti, L. Banfi, R. Riva

Tetrahedron: Asymmetry **1994**, *5*, 9



$C_{11}H_{14}O_3$

2-(Acetoxymethyl)-2-phenylethanol

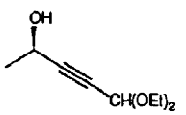
E.e. = 96.6% [by nmr with $Eu(hfc)_3$]
$[\alpha]_D^{25} = +16.1$ (c 2, $CHCl_3$)

Source of chirality: enzymatic asymmetrization

Absolute configuration: R
(assigned by chemical correlation)

P. Allevi, M. Anastasia, F. Cajone, P. Ciuffreda and A. M. Sanvito

Tetrahedron: Asymmetry **1994**, *5*, 13



$C_9H_{16}O_3$

(*R*)-5,5-Diethoxy-3-pentyn-2-ol

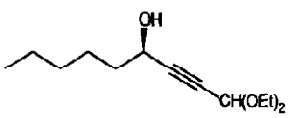
E.e. > 95% [by nmr with (*R*)-2-methoxy-2-phenyl-2-(trifluoromethyl)acetyl chloride, Mosher's Method]
$[\alpha]_D^{25}$ +10.4 ($CHCl_3$, *c* 1)

Source of Chirality: enzymatic resolution

Absolute configuration 2R
(assigned by nmr of corresponding Mosher's (*R*)- and (*S*)-esters)

P. Allevi, M. Anastasia, F. Cajone, P. Ciuffreda and A. M. Sanvito

Tetrahedron Asymmetry **1994**, *5*, 13



$C_{13}H_{24}O_3$

(*R*)-1,1-Diethoxy-2-nonyn-4-ol

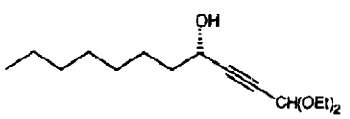
E.e. = 95% [by nmr with (*R*)-2-methoxy-2-phenyl-2-(trifluoromethyl)acetyl chloride, Mosher's Method]
$[\alpha]_D^{25}$ +1.5 ($CHCl_3$, c 1)

Source of Chirality: enzymatic resolution

Absolute configuration 4R
(assigned by nmr of corresponding Mosher's (*R*)- and (*S*)-esters)

P. Allevi, M. Anastasia, F. Cajone, P. Ciuffreda and A. M. Sanvito

Tetrahedron Asymmetry **1994**, *5*, 13



$C_{15}H_{28}O_3$

(*S*)-1,1-Diethoxy-2-undecyn-4-ol

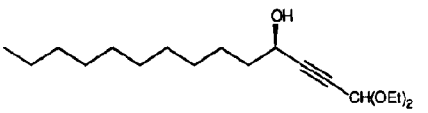
E.e. = 95% [by nmr with (*R*)-2-methoxy-2-phenyl-2-(trifluoromethyl)acetyl chloride, Mosher's Method]
$[\alpha]_D^{25}$ +0.7 ($CHCl_3$, c 1)

Source of Chirality: enzymatic resolution

Absolute configuration 4S
(assigned by nmr of corresponding Mosher's (*R*)- and (*S*)-esters)

P. Allevi, M. Anastasia, F. Cajone, P. Ciuffreda and A. M. Sanvito

Tetrahedron: Asymmetry **1994,** *5,* 13



$C_{18}H_{34}O_3$

(*R*)-1,1-Diethoxy-2-tetradecyn-4-ol

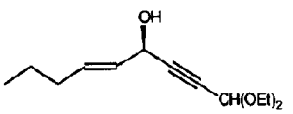
E.e. > 95% [by nmr with (*R*)-2-methoxy-2-phenyl-2-(trifluoromethyl)acetyl chloride, Mosher's Method]
$[\alpha]_D^{25}$ -0.9 ($CHCl_3$, *c* 1)

Source of Chirality: enzymatic resolution

Absolute configuration 4R
(assigned by nmr of corresponding Mosher's (*R*)- and (*S*)-esters)

P. Allevi, M. Anastasia, F. Cajone, P. Ciuffreda and A. M. Sanvito

Tetrahedron: Asymmetry **1994,** *5,* 13



$C_{13}H_{22}O_3$

(4*R*, 5*E*)-1,1-Diethoxy-5-nonen-2-yn-4-ol

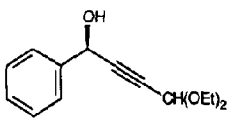
E.e. > 95% [by nmr with (*R*)-2-methoxy-2-phenyl-2-(trifluoromethyl)acetyl chloride, Mosher's Method]
$[\alpha]_D^{25}$ -33.8 ($CHCl_3$, *c* 1)

Source of Chirality: enzymatic resolution

Absolute configuration 4R
(assigned by nmr of corresponding Mosher's (*R*)- and (*S*)-esters)

P. Allevi, M. Anastasia, F. Cajone, P. Ciuffreda and A. M. Sanvito

Tetrahedron Asymmetry **1994,** *5,* 13



$C_{14}H_{18}O_3$

(*R*)-4,4-Diethoxy-1-phenyl-2-butyn-1-ol

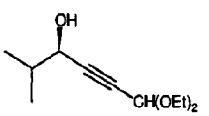
E.e. = 95% [by nmr with (*R*)-2-methoxy-2-phenyl-2-(trifluoromethyl)acetyl chloride, Mosher's Method]
$[\alpha]_D^{25}$ +8.5 ($CHCl_3$, *c* 1)

Source of Chirality: enzymatic resolution

Absolute configuration 1R
(assigned by nmr of corresponding Mosher's (*R*)- and (*S*)-esters)

P. Allevi, M. Anastasia, F. Cajone, P. Ciuffreda and A. M. Sanvito

Tetrahedron Asymmetry **1994,** *5,* 13



$C_{11}H_{20}O_3$

(*R*)-6,6-Diethoxy-2-methyl-4-esyn-3-ol

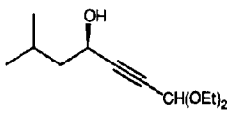
E.e. = 87% [by nmr with (*R*)-2-methoxy-2-phenyl-2-(trifluoromethyl)acetyl chloride, Mosher's Method]
$[\alpha]_D^{25}$ +0.9 ($CHCl_3$, *c* 1)

Source of Chirality: enzymatic resolution

Absolute configuration 3R
(assigned by nmr of corresponding Mosher's (*R*)- and (*S*)-esters)

P. Allevi, M. Anastasia, F. Cajone, P. Ciuffreda and A. M. Sanvito

Tetrahedron: Asymmetry **1994**, *5*, 13



$C_{12}H_{22}O_3$

(*R*)-1,1-Diethoxy-6-methyl-2-eptyn-4-ol

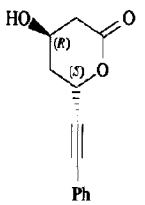
E.e. = 90% [by nmr with (*R*)-2-methoxy-2-phenyl-2-(trifluoromethyl)acetyl chloride, Mosher's Method]
$[\alpha]_D^{25}$ +10.2 ($CHCl_3$, c 1)

Source of Chirality: enzymatic resolution

Absolute configuration 4R
(assigned by nmr of corresponding Mosher's (*R*)- and (*S*)-esters)

B. Henkel, A. Kunath and H. Schick

Tetrahedron Asymmetry **1994**, *5*, 17

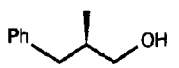


E.e. = 98 % (by HPLC on Chiralpak AD)
$[\alpha]_D^{20}$ = 14.0 (c = 2.5, dichloromethane)
Source of chirality: enzyme-catalyzed lactonization
Absolute configuration: 3*R*,5*S* (assigned by chemical transformation into a lactone of known configuration

$C_{13}H_{12}O_3$ 3-Hydroxy-7-phenyl-6-heptyn-5-olide

P. Ferraboschi, S. Casati, E. Santaniello

Tetrahedron Asymmetry **1994**, *5*, 19

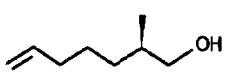


$C_{10}H_{14}O$
(R)-3-Phenyl-2-methyl-1-propanol

E.e. 96% ee
(by ^{1}H-NMR of (S)-MTPA ester)
$[\alpha]_D$ +10 (c 1.15 C_6H_6)
Source of chirality: Baker's yeast
Absolute configuration: (R)

P. Ferraboschi, S. Casati, E. Santaniello

Tetrahedron: Asymmetry **1994**, *5*, 19

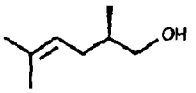


$C_8H_{16}O$
(R)-2-Methyl-hept-6-en-1-ol

E.e. 95% ee
(by ^{1}H-NMR of (S)-MTPA ester)
$[\alpha]_D$ +1.14 (c 1.4 CH_2Cl_2)
Source of chirality: Baker's yeast
Absolute configuration: (R)

P. Ferraboschi, S. Casati, E. Santaniello

Tetrahedron Asymmetry **1994**, *5*, 19

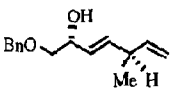


E.e. 98% ee
(by ^{1}H-NMR of (S)-MTPA ester)
$[\alpha]_D$ +0.56 (c 1.4 CH_2Cl_2)
Source of chirality: Baker's yeast
Absolute configuration: (R)

$C_8H_{16}O$
(R)-2,5-Dimethyl-hex-4-en-1-ol

S-K. Kang, D-G. Cho, J-U. Chung, and D-Y. Kim

Tetrahedron: Asymmetry **1994**, *5*, 21

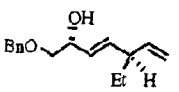


E.e >> 99% (GLC of the acetate)
$[\alpha]^{25}_D$ = -35 (*c* 0.2, $CHCl_3$)
Source of chirality: natural and asymm. synth.
Absolute configuration: *2R, 5R*

$C_{15}H_{20}O_2$
(*3E, 2R, 5R*)-(-)-1-Benzyloxy-5-methyl-3,6-heptadien-2-ol

S-K. Kang, D-G. Cho, J-U. Chung, and D-Y. Kim

Tetrahedron Asymmetry **1994**, *5*, 21

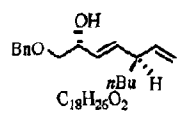


E.e >> 99% (GLC of the acetate)
$[\alpha]^{25}_D$ = -20.6 (*c* 0.9, $CHCl_3$)
Source of chirality: natural and asymm. synth.
Absolute configuration: *2R, 5R*

$C_{16}H_{22}O_2$
(*3E, 2R, 5R*)-(-)-1-Benzyloxy-5-ethyl-3,6-heptadien-2-ol

S-K. Kang, D-G. Cho, J-U. Chung, and D-Y. Kim

Tetrahedron: Asymmetry **1994**, *5*, 21

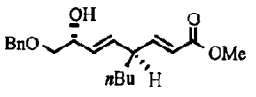


E.e = 92% (GLC of the acetate)
$[\alpha]^{25}_D$ = -20.1 (*c* 1.0, $CHCl_3$)
Source of chirality: natural and asymm. synth.
Absolute configuration: *2R, 5R*

$C_{18}H_{26}O_2$
(*3E, 2R, 5R*)-(-)-1-Benzyloxy-5-*n*-buthyl-3,6-octadien-2-ol

S-K. Kang, D-G. Cho, J-U. Chung, and D-Y. Kim

Tetrahedron Asymmetry **1994**, *5*, 21



$C_{20}H_{28}O_4$

E.e >> 99% (GLC of the acetate)

$[\alpha]^{25}_D$ = +7.8 (*c* 1.1, $CHCl_3$)

Source of chirality: natural and asymm. synth.

Absolute configuration: *2R, 5R*

Methyl (*2E, 5E,4R, 7R*)-(+)-8-benzyloxy-4-*n*-buthyl-7-hydroxy-2,5-octadienoate

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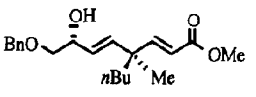
S-K. Kang, D-G. Cho, J-U. Chung, and D-Y. Kim

Tetrahedron Asymmetry **1994**, *5*, 21



$C_{21}H_{30}O_4$

E.e = 95% (GLC of the acetate)

$[\alpha]^{25}_D$ = +2.4 (*c* 0.9, $CHCl_3$)

Source of chirality: natural and asymm. synth.

Absolute configuration: *4S, 7R*

Methyl (*2E, 5E,4S,7R*)-(+)-8-benzyloxy-4-*n*-buthyl-7-hydroxy-4-methyl-2,5-octadienoate

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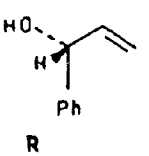
U.V. Mallavadhani and Y.R. Rao

Tetrahedron: Asymmetry **1994**, *5*, 23



$C_9H_{10}O$

R-(+)-1-phenyl-2-propen-1-ol.

e.e.: 88% (by ^{1}HNMR of the MTPA ester)

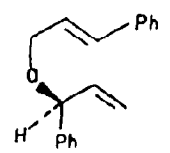
$[\alpha]^{28}_D$: +2.2 (c,2.1;CHCl$_3$)

Source of chirality: lipase catalysed kinetic resolution.

Absolute configuration : R.

U.V.Mallavadhani and Y.R. Rao

Tetrahedron Asymmetry **1994**, *5*, 23



$C_{18}H_{18}O$ S.

S-(-)-cinnamyl-1-phenyl-2-propenylether

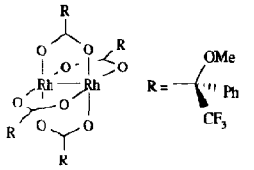
$[\alpha]^{28}_D$: -4.5 (c,1.1;CHCl$_3$)

Source of chirality: lipase catalysed kinetic resolution of intermediate carbinol.

Absolute configuration : S.

Klaudia Wypchlo and Helmut Duddeck, Universität Hannover

Tetrahedron Asymmetry **1994**, *5*, 27



E.e. = 94%
[from commercial (R)-MTPA (Mosher's acid), e.e. = 98.5% (Fluka)]
$[\alpha]_D^{20} = -201 \pm 10$ (c 0.0048, $CHCl_3$)

Source of chirality: commercial (R)-MTPA (Fluka)
Absolute configuration: R

$C_{40}H_{32}F_{12}O_{12}Rh_2$
Dirhodium tetra-(R)-α-methoxy-α-(trifluormethyl)-phenylacetate

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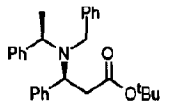
Mark E. Bunnage, Stephen G. Davies,* Christopher J. Goodwin, and Iain A.S. Walters

Tetrahedron Asymmetry **1994**, *5*, 35



Homochiral d.e. = ≥95% (by 300MHz ^1H nmr spectroscopy)

$[\alpha]_D^{21} = +3.1$ (*c* 1.00, CH_2Cl_2)

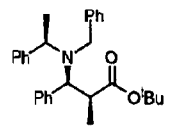
Source of chirality: (*R*)-1-phenylethylamine
Absolute Configuration: 3S, αR

$C_{28}H_{33}O_2N$

t-Butyl 3-(*N*-benzyl-*N*-α-methylbenzyl)amino
-3-phenylpropionate

Mark E. Bunnage, Stephen G. Davies,* Christopher J. Goodwin, and Iain A.S. Walters

Tetrahedron: Asymmetry **1994**, *5*, 35



Homochiral

$[\alpha]_D^{25} = -68.1$ (*c* 1.00, $CHCl_3$)

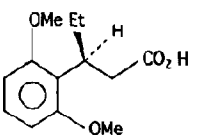
Source of chirality: (*R*)-1-phenylethylamine
Absolute Configuration: 2S, 3S, αR

$C_{29}H_{35}O_2N$

t-Butyl 3-(*N*-benzyl-*N*-α-methylbenzyl)amino
-3-phenyl-2-methylpropionate

Tetrahedron Asymmetry **1994**, *5*, 41

E. Stephan , R. Rocher , J. Aubouet , G. Pourcelot and P. Cresson



E.e = 90%

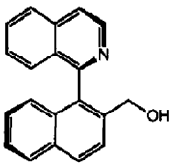
$(\alpha)_D = +17$ (c= 1.8 ; $CHCl_3$)

absolute configuration S

$C_{13}H_{18}O_4$ 3-(2,6-dimethoxyphenyl)pentanoic acid

Tetrahedron Asymmetry **1994**, *5*, 45

R.W. Baker,* S.O. Rea, M.V. Sargent,* E.M.C. Schenkelaars, B.W. Skelton and A.H. White



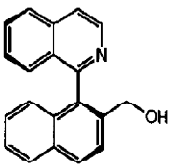
$C_{20}H_{15}NO$

(*R*)-1-(1-Isoquinolinyl)-2-naphthalenemethanol

E.e = >98% (by 300 MHz ^{1}H NMR with (*S*)-(+)-2,2,2-trifluoro-1-(9-anthryl)ethanol)
$[\alpha]_D$ -325 (c 1.44, $CHCl_3$)
Source of chirality: resolution *via* the (+)-Noe-lactol® derivative
Absolute configuration: *R*

Tetrahedron: Asymmetry **1994**, *5*, 45

R.W. Baker,* S.O. Rea, M.V. Sargent,* E.M.C. Schenkelaars, B.W. Skelton and A.H. White



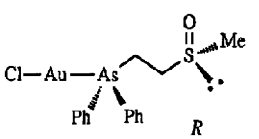
$C_{20}H_{15}NO$

(*S*)-1-(1-Isoquinolinyl)-2-naphthalenemethanol

E.e = 90% (by 300 MHz ^{1}H NMR with (*S*)-(+)-2,2,2-trifluoro-1-(9-anthryl)ethanol)
$[\alpha]_D$ +290 (c 1.67, $CHCl_3$)
Source of chirality: resolution *via* the (+)-Noe-lactol® derivative
Absolute configuration: *S*

Tetrahedron Asymmetry **1994**, *5*, 49

Simon Y.M. Chooi, Pak-Hing Leung, K.Y. Sim, K.S. Tan and O.L. Kon

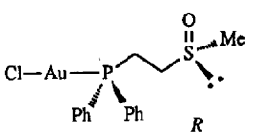


(*R*)-Chloro[[2-(methylsulfinyl)ethyl]diphenylarsine-*As*]golg(I)
$[\alpha]_D$ -38.4 (c 1.0, dichloromethane)

Source of chirality: Resolution using Pd(II) complex of (*S*)-*N*,*N*-dimethyl-1-(1-naphthyl)ethylamine

Tetrahedron Asymmetry **1994**, *5*, 49

Simon Y.M. Chooi, Pak-Hing Leung, K.Y. Sim, K.S. Tan and O.L. Kon

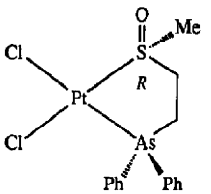


(*R*)-Chloro[[2-(methylsulfinyl)ethyl]diphenylphosphine-*P*]golg(I)
$[\alpha]_D$ -29.7 (c 1.0, dichloromethane)

Source of chirality: Resolution using Pd(II) complex of (*S*)-*N*,*N*-dimethyl-1-(1-naphthyl)ethylamine

Tetrahedron: Asymmetry **1994**, *5*, 49

Simon Y.M. Chooi, Pak-Hing Leung, K.Y. Sim, K.S. Tan and O.L. Kon

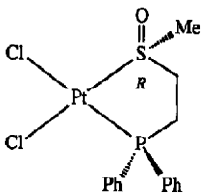


(*R*)-Dichloro[[2-(methylsulfinyl)ethyl]diphenylarsine-*As*,*S*]platinum(II)
$[\alpha]_D$ -35.6 (c 1.0, DMSO)

Source of chirality: Resolution using Pd(II) complex of
(*S*)-*N*,*N*-dimethyl-1-(1-naphthyl)ethylamine

Tetrahedron Asymmetry **1994**, *5*, 49

Simon Y.M. Chooi, Pak-Hing Leung, K.Y. Sim, K.S. Tan and O.L. Kon

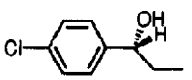


(*R*)-Dichloro[[2-(methylsulfinyl)ethyl]diphenylphosphine-*P*,*S*]platinum(II)
$[\alpha]_D$ -44.0 (c 1.0, DMSO)

Source of chirality: Resolution using Pd(II) complex of
(*S*)-*N*,*N*-dimethyl-1-(1-naphthyl)ethylamine

Tetrahedron: Asymmetry **1994**, *5*, 67

José M. Andrés, María A. Martínez, Rafael Pedrosa, and Alfonso Pérez-Encabo

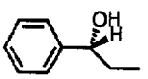


$C_9H_{11}ClO$
(R)-1-(p-Chlorophenyl)propan-1-ol

E.e.= 98% (by ^{1}H-NMR of (R)-(-)- MTPA esters)
$[\alpha]_D^{23}$= +23.7 (c 1.1, C_6H_6)
Source of Chirality: Asymmetric synthesis
Absolute configuration: R (assigned by comparison of optical rotations)

Tetrahedron Asymmetry **1994**, *5*, 67

José M. Andrés, María A. Martínez, Rafael Pedrosa, and Alfonso Pérez-Encabo

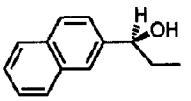


$C_9H_{12}O$
(R)-1-phenylpropan-1-ol

E.e.= 96% (by ^{1}H-NMR of (R)-(-)- MTPA esters)
$[\alpha]_D^{23}$= +43.6 (c 5.1, $CHCl_3$)
Source of Chirality: Asymmetric synthesis
Absolute configuration: R (assigned by comparison of optical rotations)

José M. Andrés, María A. Martínez, Rafael Pedrosa, and Alfonso Pérez-Encabo

Tetrahedron Asymmetry **1994**, *5*, 67

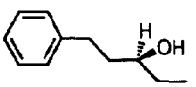


$C_{13}H_{14}O$
(S)-1-(2-naphtyl)propan-1-ol

E.e.= 94% (by ^{1}H-NMR of (R)-(-)- MTPA esters)
$[\alpha]_D^{23}$= -25.8 (c 3.3, C_6H_6)
Source of Chirality: Asymmetric synthesis
Absolute configuration: S (assigned by comparison of optical rotations)

José M. Andrés, María A. Martínez, Rafael Pedrosa, and Alfonso Pérez-Encabo

Tetrahedron Asymmetry **1994**, *5*, 67

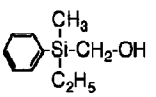


$C_{11}H_{16}O$
(S)-1-phenylpentan-3-ol

E.e.= 79% (by ^{1}H-NMR of (R)-(-)- MTPA esters)
$[\alpha]_D^{23}$= +21.2 (c 5.0, Ethanol)
Source of Chirality: Asymmetric synthesis
Absolute configuration: S (assigned by comparison of optical rotations)

T.Fukui, T.Kawamoto, and A.Tanaka

Tetrahedron: Asymmetry **1994**, *5*, 73



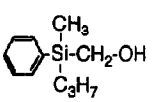
$C_{10}H_{16}OSi$

(+)-Ethylmethylphenylsilylmethanol

E.e. = 92 % [by chiral HPLC]
$[\alpha]_D^{20}$ = +5.7 (c = 20, $CHCl_3$)
Source of chirality: enzymatic esterification

T.Fukui, T.Kawamoto, and A.Tanaka

Tetrahedron Asymmetry **1994**, *5*, 73



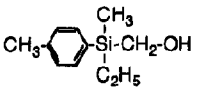
$C_{11}H_{18}OSi$

(+)-Methylphenyl-*n*-propylsilylmethanol

E.e. = 93 % [by chiral HPLC]
$[\alpha]_D^{20}$ = +1.6 (c = 20, $CHCl_3$)
Source of chirality: enzymatic esterification

Tetrahedron: Asymmetry **1994,** *5,* 73

T.Fukui, T.Kawamoto, and A.Tanaka



$C_{11}H_{18}OSi$

Ethylmethyl(*p*-methylphenyl)silylmethanol

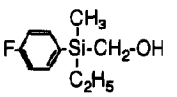
E.e. = 96 % [by chiral HPLC]

$[\alpha]_D^{20}$ = +5.4 (c = 20, $CHCl_3$)

Source of chirality: enzymatic esterification

Tetrahedron Asymmetry **1994,** *5,* 73

T.Fukui, T.Kawamoto, and A.Tanaka



$C_{10}H_{15}OFSi$

Ethylmethyl(*p*-fluorophenyl)silylmethanol

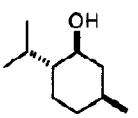
E.e. = 99 % [by chiral HPLC]

$[\alpha]_D^{20}$ = +5.5 (c = 20, $CHCl_3$)

Source of chirality: enzymatic esterification

Tetrahedron Asymmetry **1994,** *5,* 83

G. Caron, G. W.-M. Tseng, and R. J. Kazlauskas



$C_{10}H_{20}O$
(+)-menthol

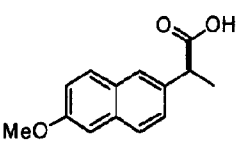
E.e. = 97.7% [by GC on Chiraldex G-TA after concentrating the minor enantiomer with a kinetic resolution]

Source of chirality: commercial sample

Absolute configuration: 1S,2R,5S

Tetrahedron Asymmetry **1994,** *5,* 83

G. Caron, G. W.-M. Tseng, and R. J. Kazlauskas



$C_{13}H_{14}O_3$
(+)-6-methoxy-α-methyl-2-naphthaleneacetic acid,
(+)-naproxen

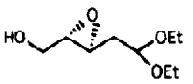
E.e. = 98.5% [by optical rotation after concentrating the minor enantiomer with a kinetic resolution]

Source of chirality: commercial sample.

Absolute configuration: S

Jun'ichi Uenishi,* Mitsuhiro Motoyama and Keiji Takahashi

Tetrahedron Asymmetry **1994**, *5*, 101

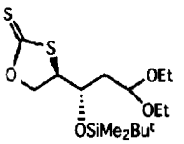


$[\alpha]_D^{24}$ -44.7 (*c* 1.0, chloroform)
E. e.= 95 % (by NMR of the MTPA ester)
Source of chirality: Sharpless asymmetric epoxidation
Absolute configuration: 2S, 3R

$C_9H_{18}O_4$
(2S,3R-*trans*)-5,5-Bis(ethoxy)-2,3-epoxypentan-1-ol

Jun'ichi Uenishi,* Mitsuhiro Motoyama and Keiji Takahashi

Tetrahedron Asymmetry **1994**, *5*, 101



$[\alpha]_D^{24}$ -12.7 (*c* 1.0, chloroform)
E. e.= 95 %
Source of chirality: Optically active precussor
Absolute configuration: 4R, 1'S

$C_{16}H_{32}O_4S_2Si$
[4R,(1'S)]-4-[3,3-Bis(ethoxy)-1-(*tert*-butyldimethylsilyl)oxy-1-propyl]-1,3-oxathiolane-2-thione

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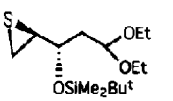
Jun'ichi Uenishi,* Mitsuhiro Motoyama and Keiji Takahashi

Tetrahedron: Asymmetry **1994**, *5*, 101



$[\alpha]_D^{24}$ -20.7 (*c* 1.0, chloroform)
E. e.= 95 %
Source of chirality: Optically active precussor
Absolute configuration: 3S, 4S

$C_{15}H_{32}O_3SSi$
(3S,4S)-3-(*tert*-Butyldimethylsilyl)oxy-4,5-epithiopentanal diethyl acetal

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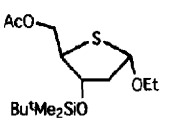
Jun'ichi Uenishi,* Mitsuhiro Motoyama and Keiji Takahashi

Tetrahedron: Asymmetry **1994**, *5*, 101

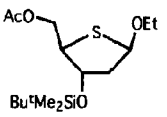


$[\alpha]_D^{24}$ -87.2 (*c* 1.0, chloroform)
E. e.= 95 %
Source of chirality: Optically active precussor
Absolute configuration: 1S, 3S, 4R

$C_{15}H_{30}O_4SSi$
Ethyl 5-O-acetyl-3-O-(*tert*-butyldimethylsilyl)-2-deoxy-4-thio-α-D-xylofuranoside

Tetrahedron Asymmetry **1994**, *5*, 101

Jun'ichi Uenishi,* Mitsuhiro Motoyama and Keiji Takahashi



$[\alpha]_D^{24}$ + 196.8 (*c* 1.0, chloroform)

E. e.= 95 %

Source of chirality: Optically active precussor

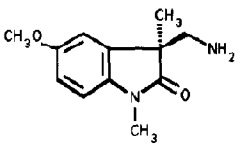
Absolute configuration: 1R, 3S, 4R

$C_{15}H_{30}O_4SSi$

Ethyl 5-O-acetyl-3-O-(*tert*-butyldimethylsilyl)-2-deoxy-4-thio-β-D-xylofuranoside

Tetrahedron Asymmetry **1994**, *5*, 111

M.Pallavicini, E.Valoti*, L.Villa and F.Lianza



$C_{12}H_{16}N_2O_2$

(R)-1,3-Dimethyl-3-(2-aminoethyl)-5-methoxyoxindole

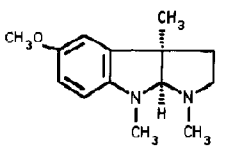
$[\alpha]_D^{20}$ = + 26.4 (c 1, EtOH)

e.e. 99.7% (determined by chiral HPLC analysis)

Source of chirality: chemical resolution by selective crystallization of the hydrogen salt with L-tartaric acid.

Tetrahedron Asymmetry **1994**, *5*, 111

M.Pallavicini, E.Valoti*, L.Villa and F.Lianza



$C_{14}H_{20}N_2O$

(+)-Esermethole

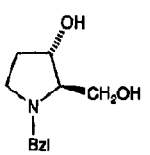
$[\alpha]_D^{20}$ = + 137.6 (c 0.35, benzene)

e.e. 99.7% (determined by chiral HPLC analysis)

Source of chirality: (R)-1,3-dimethyl-3-(2-aminoethyl)-5-methoxyoxindole

C. Herdeis and H. P. Hubmann

Tetrahedron Asymmetry **1994**, *5*, 119



$C_{12}H_{17}NO_2$

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

$[\alpha]_D^{20}$ = - 43 (c=0.116, $CHCl_3$)

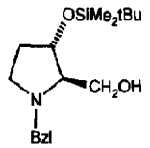
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2R,3S

2R,3S-1-Benzyl-2-hydroxymethylpyrrolidine-3-ol

C. Herdeis and H. P. Hubmann

Tetrahedron: Asymmetry **1994**, *5*, 119



$C_{18}H_{31}NO_2Si$

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

$[\alpha]_D^{20}$ = - 12.5 (c = 0.226, $CHCl_3$)

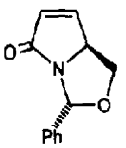
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2R,3S

2R.3S-1-Benzyl-3-tert.butyldimethylsilyloxy-2-hydroxymethylpyrrolidine

C. Herdeis and H. P. Hubmann

Tetrahedron Asymmetry **1994**, *5*, 119



$C_{12}H_{11}NO_2$

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

$[\alpha]_D^{20}$ = 214 (c = 0.275, $CHCl_3$)

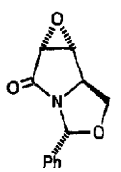
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2R,5S

2R,5S-2-Phenyl-3-oxa-1-aza-bicyclo[3.3.0]oct-6-en-8-one

C. Herdeis and H. P. Hubmann

Tetrahedron Asymmetry **1994**, *5*, 119



$C_{12}H_{11}NO_3$

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

$[\alpha]_D^{20}$ = 240 (c = 0.185, $CHCl_3$)

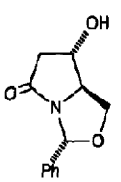
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2R,5R,6R,7R

2R,5R,6R,7R-6,7-Epoxy-2-phenyl-3-oxa-1-aza-bicyclo[3.3.0]octane-8-one

C. Herdeis and H. P. Hubmann

Tetrahedron Asymmetry **1994**, *5*, 119



$C_{12}H_{13}NO_3$

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

$[\alpha]_D^{20}$ = 228 (c = 0.204, $CHCl_3$)

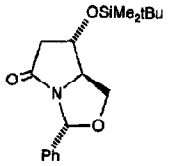
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2R,5R,6S

2R,5R,6S-6-Hydroxy-2-phenyl-3-oxa-1-aza-bicyclo[3.3.0]octane-8-one

C. Herdeis and H. P. Hubmann

Tetrahedron Asymmetry **1994**, *5*, 119



$C_{18}H_{27}NO_3Si$

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

$[\alpha]_D^{20}$ = 157 (c = 0.274, $CHCl_3$)

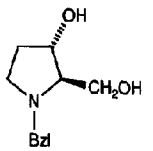
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2R,5R,6S

2R,5R,6S-6-tert.Butyldimethylsilyloxy-2-phenyl-3-oxa-1-azabicyclo[3.3.0]octane-8-one

C. Herdeis and H. P. Hubmann

Tetrahedron Asymmetry **1994**, *5*, 119



$C_{12}H_{17}NO_2$

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

$[\alpha]_D^{20}$ = - 43 (c = 0.116, $CHCl_3$)

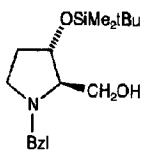
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2R,3S

2R,3S-1-Benzyl-2-hydroxymethylpyrrolidine-3-ol

C. Herdeis and H. P. Hubmann

Tetrahedron: Asymmetry **1994**, *5*, 119



$C_{18}H_{31}NO_2Si$

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

[a] $_D^{20}$ = - 12.5 (c = 0.226, $CHCl_3$)

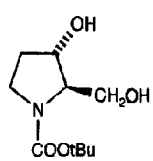
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2R,3S

2R,3S-1-Benzyl-3-tert.butyldimethylsilyloxy-2-hydroxymethylpyrrolidine

C. Herdeis and H. P. Hubmann

Tetrahedron: Asymmetry **1994**, *5*, 119



$C_{10}H_{19}NO_4$

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

$[\alpha]_D^{20}$ = - 34.3 (c = 0.21, $CHCl_3$)

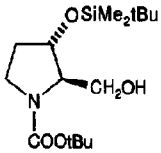
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2R,3S

2R,3S-1-tert.Butoxycarbonyl-2-hydroxymethylpyrrolidine-3-ol

C. Herdeis and H. P. Hubmann

Tetrahedron: Asymmetry **1994**, *5*, 119



$C_{16}H_{33}NO_4Si$

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

$[\alpha]_D^{20}$ = - 8.5 (c = 0.2, $CHCl_3$)

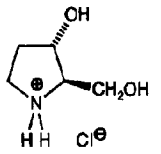
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2R,3S

2R,3S-1-tert.Butoxycarbonyl-3-tert.butyldimethylsilyloxy-2-hydroxymethyl-pyrrolidine

C. Herdeis and H. P. Hubmann

Tetrahedron: Asymmetry **1994**, *5*, 119



$C_5H_{12}NO_2Cl$

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

$[\alpha]_D^{20}$ = 45.7 (c = 0.21, H_2O)

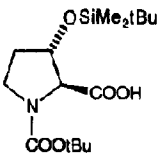
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2R,3S

2R,3S-2-Hydroxymethyl-pyrrolidine-3-ol-hydrochloride

C. Herdeis and H. P. Hubmann

Tetrahedron Asymmetry **1994**, *5*, 119



$C_{16}H_{31}NO_5Si$

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

$[\alpha]_D^{20}$ = 18.0 (c = 0.23, EtOAc)

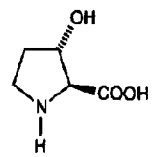
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2S,3S

2S,3S-1-tert.Butoxycarbonyl-3-tert.butyldimethylsilyloxypyrrolidine-2-carboxylic acid

C. Herdeis and H. P. Hubmann

Tetrahedron: Asymmetry **1994**, *5*, 119



$C_5H_9NO_3$

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

$[\alpha]_D^{20}$ = - 18.8 (c = 0.14, H_2O)

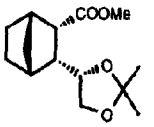
Source of chirality: (S)-pyroglutamic acid

Absolute configuration: 2S,3S

2S,3S-3-Hydroxyproline

Tetrahedron Asymmetry **1994**, *5*, 129

Miguel Díaz, Javier Ibarzo, José M. Jiménez, Rosa M. Ortuño



$[\alpha]_D$= +42.6 (c= 0.75, $CHCl_3$)

Source of chirality: D-Mannitol.

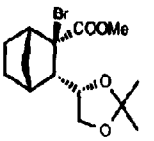
Absolute configuration 1*S*, 2*S*, 3*R*, 4*R*, 4'*S*

$C_{14}H_{22}O_4$

Methyl 3-[4-(2,2-dimethyl-1,3-dioxolo)]bicyclo[2.2.1]hept-2-ylcarboxylate

Tetrahedron: Asymmetry **1994**, *5*, 129

Miguel Díaz, Javier Ibarzo, José M. Jiménez, Rosa M. Ortuño



$[\alpha]_D$= +33.4 (c= 5.39, $CHCl_3$)

Source of chirality: D-Mannitol.

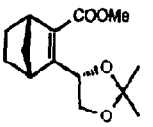
Absolute configuration 1*S*, 2*S*, 3 *S*, 4*R*, 4'*S*

$C_{14}H_{21}O_4Br$

Methyl2-bromo-3-[4-(2,2-dimethyl-1,3-dioxolo)]bicyclo[2.2.1]hept-2-ylcarboxylate

Tetrahedron Asymmetry **1994**, *5*, 129

Miguel Díaz, Javier Ibarzo, José M. Jiménez, Rosa M. Ortuño



$[\alpha]_D$= +67.1 (c= 1.40, $CHCl_3$)

Source of chirality: D-Mannitol.

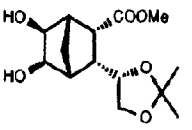
Absolute configuration 1*S*, 4*R*, 4'*S*

$C_{14}H_{20}O_4$

Methyl 3-[4-(2,2-dimethyl-1,3-dioxolo)]bicyclo[2.2.1]
hept-2-en-2 yl carboxylate

Tetrahedron Asymmetry **1994**, *5*, 129

Miguel Díaz, Javier Ibarzo, José M. Jiménez, Rosa M. Ortuño



$[\alpha]_D$= +23.9 (c= 0.92, $CHCl_3$)

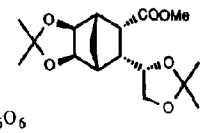
Source of chirality: D-Mannitol.

Absolute configuration 1*S*, 2*R*, 3*S*, 4*R*, 5*S*, 6*R*, 4'*S*

$C_{14}H_{22}O_6$

Methyl 2,3-dihydroxy-6-[4-(2,2-dimethyl-1,3-dioxolo)]bicyclo[2.2.1]
hept-5-ylcarboxylate

Miguel Díaz, Javier Ibarzo, José M. Jiménez, Rosa M. Ortuño | *Tetrahedron Asymmetry* **1994**, *5*, 129

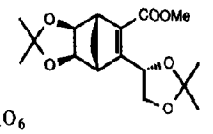


$[\alpha]_D$= +13.8 (c= 2.03, $CHCl_3$)
Source of chirality: D-Mannitol.
Absolute configuration 1*S*, 2*R*, 6*S*, 7*R*, 8*S*, 9*R*, 4'*S*

$C_{17}H_{26}O_6$

Methyl 4,4-dimethyl-9-[4-(2,2-dimethyl-1,3-dioxolo)]-3,5-dioxatricyclo [5.2.1.$0^{2,6}$]dec-8-ylcarboxylate

Miguel Díaz, Javier Ibarzo, José M. Jiménez, Rosa M. Ortuño | *Tetrahedron: Asymmetry* **1994**, *5*, 129

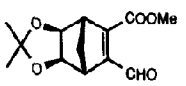


$[\alpha]_D$= +15.6 (c= 1.12, $CHCl_3$)
Source of chirality: D-Mannitol.
Absolute configuration 1*S*, 2*R*, 6*S*, 7*R*, 4'*S*

$C_{17}H_{24}O_6$

Methyl 4,4-dimethyl-9-[4-(2,2-dimethyl-1,3-dioxolo)]-3,5-dioxatricyclo [5.2.1.$0^{2,6}$]dec-8-en-8-ylcarboxylate

Miguel Díaz, Javier Ibarzo, José M. Jiménez, Rosa M. Ortuño | *Tetrahedron Asymmetry* **1994**, *5*, 129

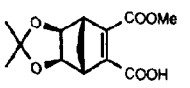


$[\alpha]_D$= -12.6 (c= 0.99, $CHCl_3$)
Source of chirality: D-Mannitol.
Absolute configuration 1*S*, 2*R*, 6*S*, 7*R*

$C_{13}H_{16}O_5$

Methyl 4,4-dimethyl-9-formyl-3,5-dioxatricyclo[5.2.1.$0^{2,6}$] dec-8-en-8-ylcarboxylate

Miguel Díaz, Javier Ibarzo, José M. Jiménez, Rosa M. Ortuño | *Tetrahedron Asymmetry* **1994**, *5*, 129

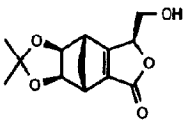


$[\alpha]_D$= +28.6 (c= 1.10, $CHCl_3$)
Source of chirality: D-Mannitol.
Absolute configuration 1*S*, 2*R*, 6*S*, 7*R*

$C_{13}H_{16}O_6$

Methyl 4,4-dimethyl-9-carboxyl-3,5-dioxatricyclo[5.2.1.$0^{2,6}$] dec-8-en-8-yl carboxylate

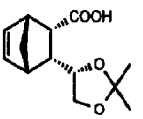
Miguel Díaz, Javier Ibarzo, José M. Jiménez, Rosa M. Ortuño | *Tetrahedron Asymmetry* **1994**, *5*, 129



$[\alpha]_D$= -37.5 (c= 0.95, $CHCl_3$)
Source of chirality: D-Mannitol.
Absolute configuration *1R*, *5S*, *6S*, *8S*, *9R*

$C_{13}H_{16}O_5$
5-Hidroxymethyl-8,9-isopropylidenedioxy-4-oxatricyclo[5.2.1.$0^{2,6}$]
dec-2-en-3-one

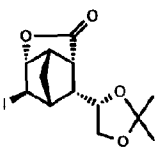
Miguel Díaz, Javier Ibarzo, José M. Jiménez, Rosa M. Ortuño | *Tetrahedron: Asymmetry* **1994**, *5*, 129



$[\alpha]_D$= +22.1 (c= 1.00, $CHCl_3$)
Source of chirality: D-Mannitol.
Absolute configuration *1S*, *2S*, *3R*, *4R*, *4'S*

$C_{14}H_{20}O_4$
3-[4-(2,2-dimethyl-1,3-dioxolo)]bicyclo[2.2.1]hept-5-en-2-ylcarboxylic acid

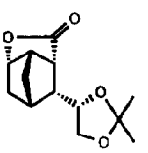
Miguel Díaz, Javier Ibarzo, José M. Jiménez, Rosa M. Ortuño | *Tetrahedron: Asymmetry* **1994**, *5*, 129



$[\alpha]_D$= -48.9 (c= 1.10, $CHCl_3$)
Source of chirality: D-Mannitol.
Absolute configuration *1S*, *2R*, *3S*, *4R*, *5R*, *6S* , *4'S*

$C_{13}H_{17}O_4I$
3-[4-(2,2-dimethyl-1,3-dioxolo)]-6-hydroxy-5-iodobicyclo[2.2.1]
hept-2-ylcarboxylic acid lactone

Miguel Díaz, Javier Ibarzo, José M. Jiménez, Rosa M. Ortuño | *Tetrahedron: Asymmetry* **1994**, *5*, 129

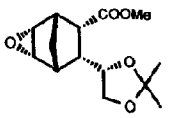


$[\alpha]_D$= -41.9 (c= 0.95, $CHCl_3$)
Source of chirality: D-Mannitol.
Absolute configuration *1S*, *2R*, *3R*, *4R*, *5R*, *6S*, *4'S*

$C_{13}H_{18}O_4$
3-[4-(2,2-dimethyl-1,3-dioxolo)]-6-hydroxybicyclo[2.2.1]
hept-2-ylcarboxylic acid lactone

Miguel Díaz, Javier Ibarzo, José M. Jiménez, Rosa M. Ortuño

Tetrahedron: Asymmetry **1994**, *5*, 129



$[\alpha]_D$= -6.0 (c= 1.00, $CHCl_3$)

Source of chirality: D-Mannitol.

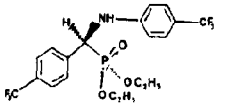
Absolute configuration 1*S*, 2*S*, 3 *R*, 4*R*, 5*S*, 4'*S*

$C_{14}H_{20}O_5$

Methyl 3-[4-(2,2-dimethyl-1,3-dioxolo)]-5,6-epoxybicyclo[2.2.1.]hept-2-ylcarboxylate

Tetrahedron: Asymmetry **1994**, *5*, 141

S. Caccamese, G. Principato, U. Gruss, G. Hagele, S. Failla



E. e. (S)= 80 %; E. e.= (R) 99 % by chiral HPLC

(S) configuration: negative CD

Source of chirality: from the racemic compound by separation with HPLC CSPs

Absolute configuration: (S) assigned by chiral recognition mechanism with CSP.

$C_{19}H_{20}NO_3F_6P$

(S)-1-(N-4' trifluoromethylphenyl) amino-1-(4'' trifluoromethylphenyl) methanephosphonic acid diethyl ester