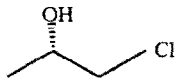
M. Hamdani, B. De Jeso, H. Deleuze and B. Maillard

Tetrahedron: Asymmetry **1991,** *2*, 867



C_3H_7ClO

1-Chloro-2-propanol

E.e > 95% (By GC on Mosher's ester)

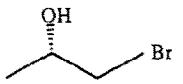
$[\alpha]_D^{24}$ = - 10.4 (c 1, $CHCl_3$)

Halodecarboxylation of Barton's derivative of ethyl 3-hydroxybutyrate

Absolute configuration 2S

M. Hamdani, B. De Jeso, H. Deleuze and B. Maillard

Tetrahedron: Asymmetry **1991,** *2*, 867



C_3H_7BrO

1-Bromo-2-propanol

E.e > 95% (By GC on Mosher's ester)

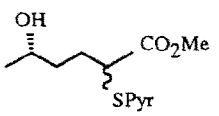
$[\alpha]_D^{24}$ = - 11.6 (c 1, $CHCl_3$)

Halodecarboxylation of Barton's derivative of ethyl 3-hydroxybutyrate

Absolute configuration 2S

M. Hamdani, B. De Jeso, H. Deleuze and B. Maillard

Tetrahedron: Asymmetry **1991,** *2*, 867



$C_{12}H_{17}NO_3S$

Methyl 5-hydroxy-2-(2-thiopyridyl)hexanoate

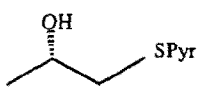
$[\alpha]_D^{24}$ = -26.7 (c 1, $CHCl_3$)

Photolysis of a Barton's derivatives of ethyl 3-hydroxybutyrate in the presence of methyl acrylate

Absolute configuration 5S

M. Hamdani, B. De Jeso, H. Deleuze and B. Maillard

Tetrahedron: Asymmetry **1991,** *2*, 867



$C_8H_{11}NOS$

2-(2-hydroxypropylthiyl)pyridin

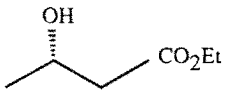
$[\alpha]_D^{24}$ = +29..8 (c 1, $CHCl_3$)

Photolysis of a Barton's derivatives of ethyl 3-hydroxybutyrate

Absolute configuration 2S

Tetrahedron: Asymmetry **1991,** *2*, 867

M. Hamdani, B. De Jeso, H. Deleuze and B. Maillard



$C_6H_{12}O_3$

Ethyl 3-hydroxybutyrate

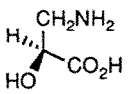
E.e > 95% (By GC on Mosher's ester)
$[\alpha]_D^{24} = +40.3$ (c1, $CHCl_3$)

Reduction by Baker's yeast

Absolute configuration 3S

Tetrahedron: Asymmetry **1991,** *2*, 871

Y. Lu, C. Miet, N. Kunesch and J. E. Poisson



$C_3H_7NO_3$
Isoserine

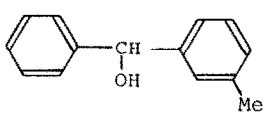
$[\alpha]_D^{20} = -32.70$ (c 0.50, H_2O)

(S) by comparison to lit. value
$[\alpha]_D^{20} = -32.2$ (c 1, H_2O)

R. Andruskiewicz, A. Czerwinski , J. Grzybowska *Synthesis* **1983**, 31.

Tetrahedron: Asymmetry **1991,** *2*, 873

F. Toda, K. Tanaka and K. Kōshiro



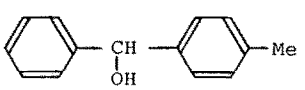
$C_{14}H_{14}O$

m-Methylphenylphenylcarbinol

E.e. = 92.1%
$[\alpha]_D$ = -2.5 (c = 0.32, MeOH)
Source of chirality: enantioselective complexation with brucine

Tetrahedron: Asymmetry **1991,** *2*, 873

F. Toda, K. Tanaka and K. Kōshiro



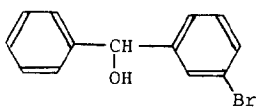
$C_{14}H_{14}O$

p-Methylphenylphenylcarbinol

E.e. = 92.6%
$[\alpha]_D$ = -10.1 (c = 0.13, MeOH)
Source of chirality: enantioselective complexation with brucine

F. Toda, K. Tanaka and K. Koshiro

Tetrahedron: Asymmetry **1991**, *2*, 873

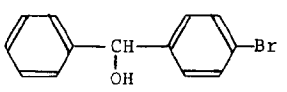


E.e. = 98.0%
$[\alpha]_D$ = +34.2 (c = 0.69, MeOH)
Source of chirality: enantioselective complexation with brucine

$C_{13}H_{11}OBr$
m-Bromophenylphenylcarbinol

F. Toda, K. Tanaka and K. Kōshiro

Tetrahedron: Asymmetry **1991**, *2*, 873

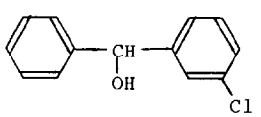


E.e. = 100.0%
$[\alpha]_D$ = +13.5 (c = 0.67, MeOH)
Source of chirality: enantioselective complexation with brucine

$C_{13}H_{11}OBr$
p-Bromophenylphenylcarbinol

F. Toda, K. Tanaka and K. Kōshiro

Tetrahedron: Asymmetry **1991**, *2*, 873

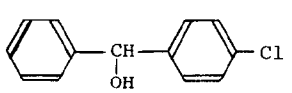


E.e. = 99.2%
$[\alpha]_D$ = +36.9 (c = 0.52, MeOH)
Source of chirality: enantioselective complexation with brucine

$C_{13}H_{11}OCl$
m-Chlorophenylphenylcarbinol

F. Toda, K. Tanaka and K. Kōshiro

Tetrahedron: Asymmetry **1991**, *2*, 873

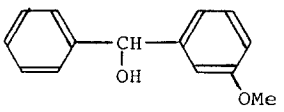


E.e. = 97.0%
$[\alpha]_D$ = +13.5 (c = 0.53, MeOH)
Source of chirality: enantioselective complexation with brucine

$C_{13}H_{11}OCl$
p-Chlorophenylphenylcarbinol

F. Toda, K. Tanaka and K. Kōshiro

Tetrahedron: Asymmetry **1991,** *2*, 873



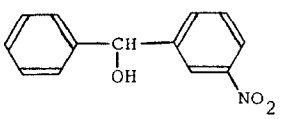
E.e. = 93.0%
$[\alpha]_D$ = +20.9 (c = 0.44, MeOH)
Source of chirality: enantioselective complexation with brucine

$C_{14}H_{14}O_2$

m-Methoxyphenylphenylcarbinol

F. Toda, K. Tanaka and K. Kōshiro

Tetrahedron: Asymmetry **1991,** *2*, 873



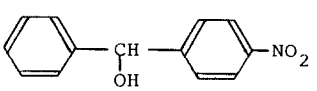
E.e. = 99.6%
$[\alpha]_D$ = +54.9 (c = 0.63, MeOH)
Source of chirality: enantioselective complexation with brucine

$C_{13}H_{11}O_3N$

m-Nitrophenylphenylcarbinol

F. Toda, K. Tanaka and K. Kōshiro

Tetrahedron: Asymmetry **1991,** *2*, 873



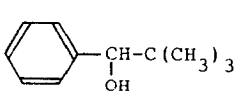
E.e. = 85.5%
$[\alpha]_D$ = +50.0 (c = 0.62, MeOH)
Source of chirality: enantioselective complexation with brucine

$C_{13}H_{11}O_3N$

p-Nitrophenylphenylcarbinol

F. Toda, K. Tanaka and K. Kōshiro

Tetrahedron: Asymmetry **1991,** *2*, 873



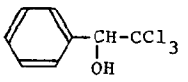
E.e. = 100%
$[\alpha]_D$ = -32.2 (c = 1.0, MeOH)
Source of chirality: enantioselective complexation with brucine

$C_{11}H_{16}O$

t-Butylphenylcarbinol

F. Toda, K. Tanaka and K. Kōshiro

Tetrahedron: Asymmetry **1991**, *2*, 873



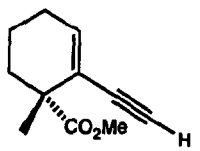
E.e. = 100%
$[\alpha]_D$ = -36.9 (c = 1.0, MeOH)
Source of chirality: enantioselective complexation with brucine

$C_8H_7OCl_3$

Trichloromethylphenylcarbinol

P.Q. Huang and W.S. Zhou

Tetrahedron: Asymmetry **1991**, *2*, 875



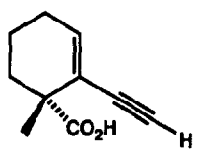
E.e. >95% determined by 1H-NMR chiral shift
$[\alpha]_D^{20}$ = +32.5 (c, 0.85, $CHCl_3$)
Source of chirality: asymmetric methylation
Absolute configuration: R

$C_{11}H_{14}O_2$

2-acetylenyl-3-methyl-methoxycarbonyl-1-cyclohexene

P.Q. Huang and W.S. Zhou

Tetrahedron: Asymmetry **1991**, *2*, 875



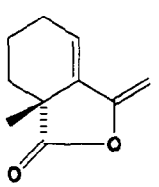
E.e. >95% determined by 1H-NMR chiral shift
$[\alpha]_D^{20}$ = +40.3 (c, 0.21, $CHCl_3$)
Source of chirality: asymmetric methylation
Absolute configuration: R

$C_{10}H_{12}O_2$

2-acetylenyl-3-methyl-3-carboxyl-1-cyclohexene

P.Q. Huang and W.S. Zhou

Tetrahedron: Asymmetry **1991**, *2*, 875



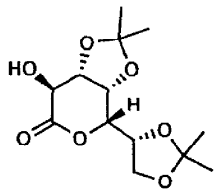
E.e. >95% determined by 1H-NMR chiral shift
Source of chirality: asymmetric methylation
Absolute configuration: R

$C_{10}H_{12}O_2$

8-methyl-3-methylene-5,6,7-trihydrophthealide

A. R. Beacham, I. Bruce, S. Choi, O. Doherty, A. J. Fairbanks, G W. J. Fleet, B. M. Skead, J. M. Peach, J. Saunders, and D. J. Watkin

Tetrahedron: Asymmetry **1991,** *2*,883



E.e. = 100%

$[\alpha]_D^{20}$ = -92.4 (c, 1.0 in chloroform)

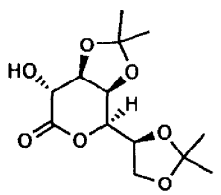
Source of chirality. D-gulonolactone as starting material

$C_{13}H_{20}O_7$

3,4:6,7-Di-*O*-isopropylidene-D-*glycero*-L-*galacto*-heptono-1,5-lactone

A. R. Beacham, I. Bruce, S. Choi, O. Doherty, A. J. Fairbanks, G. W. J. Fleet, B. M. Skead, J. M. Peach, J. Saunders, and D. J. Watkin

Tetrahedron: Asymmetry **1991,** *2*, 883



E.e. = 100%

$[\alpha]_D^{20}$ = +97.8 (c, 0.44 in chloroform)

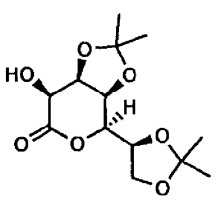
Source of chirality: L-gulonolactone as starting material

$C_{13}H_{20}O_7$

3,4:6,7-Di-*O*-isopropylidene-L-*glycero*-D-*galacto*-heptono-1,5-lactone

A. R. Beacham, I. Bruce, S. Choi, O. Doherty, A. J. Fairbanks, G. W. J. Fleet, B. M. Skead, J. M. Peach, J. Saunders, and D. J. Watkin

Tetrahedron: Asymmetry **1991,** *2*, 883



E.e. = 100%

$[\alpha]_D^{20}$ = +74.3 (c, 0.44 in chloroform)

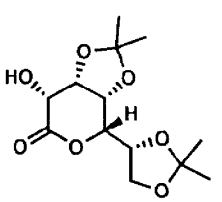
Source of chirality: L-gulonolactone as starting material

$C_{13}H_{20}O_7$

3,4:6,7-Di-*O*-isopropylidene-L-*glycero*-D-*talo*-heptono-1,5-lactone

A. R. Beacham, I. Bruce, S. Choi, O. Doherty, A. J. Fairbanks, G. W. J. Fleet, B. M. Skead, J. M. Peach, J Saunders, and D. J. Watkin

Tetrahedron: Asymmetry **1991,** *2*, 883



E.e. = 100%

$[\alpha]_D^{20}$ = -66.4 (c, 0.50 in acetone)

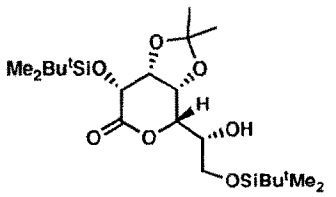
Source of chirality: D-gulonolactone as starting material

$C_{13}H_{20}O_7$

3,4:6,7-Di-*O*-isopropylidene-D-*glycero*-L-*talo*-heptono-1,5-lactone

A. R. Beacham, I. Bruce, S. Choi, O. Doherty, A. J. Fairbanks, G. W. J. Fleet, B. M. Skead, J. M. Peach, J. Saunders, and D. J. Watkin

Tetrahedron: Asymmetry **1991,** *2*, 883



E.e. = 100%

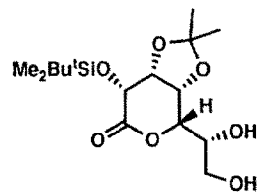
$[\alpha]_D^{20}$ = -44.4 (c, 0.25 in chloroform)

Source of chirality: D-gulonolactone as starting material

$C_{16}H_{30}O_7Si$
2-O-*tert*-Butyldimethylsilyl-3,4-O-isopropylidene-D-*glycero*-L-*talo*-heptono-1,5-lactone

A. R. Beacham, I. Bruce, S. Choi, O. Doherty, A. J. Fairbanks, G. W. J. Fleet, B. M. Skead, J. M. Peach, J. Saunders, and D. J. Watkin

Tetrahedron: Asymmetry **1991,** *2*, 883



E.e. = 100%

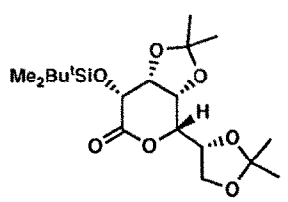
$[\alpha]_D^{20}$ = -35.6 (c, 1.0 in chloroform)

Source of chirality: D-gulonolactone as starting material

$C_{16}H_{30}O_7Si$
2-O-*tert*-Butyldimethylsilyl-3,4-O-isopropylidene-D-*glycero*-L-*talo*-heptono-1,5-lactone

A. R. Beacham, I. Bruce, S. Choi, O. Doherty, A. J. Fairbanks, G. W. J. Fleet, B. M Skead, J. M. Peach, J. Saunders, and D. J. Watkin

Tetrahedron: Asymmetry **1991,** *2*, 883



E.e. = 100%

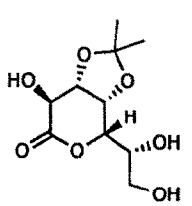
$[\alpha]_D^{20}$ = -33.4 (c, 1.0 in chloroform)

Source of chirality: D-gulonolactone as starting material

$C_{19}H_{34}O_7Si$
2-O-*tert*-Butyldimethylsilyl-3,4:6,7-di-O-isopropylidene-D-*glycero*-L-*talo*-heptono-1,5-lactone

A. R. Beacham, I. Bruce, S. Choi, O. Doherty, A. J. Fairbanks, G. W. J. Fleet, B. M. Skead, J. M. Peach, J. Saunders, and D. J. Watkin

Tetrahedron: Asymmetry **1991,** *2*, 883



E.e. = 100%

$[\alpha]_D^{20}$ = +97.5 (c, 1.09 in methanol)

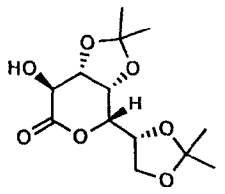
Source of chirality: D-mannose as starting material

$C_{10}H_{16}O_7$

3,4-O-isopropylidene-D-*glycero*-D-*talo*-heptono-1,5-lactone

A. R. Beacham, I. Bruce, S. Choi, O. Doherty, A. J. Fairbanks, G. W. J. Fleet, B. M. Skead, J. M. Peach, J. Saunders, and D. J. Watkin

Tetrahedron: Asymmetry **1991,** *2*, 883



E.e. = 100%

$[\alpha]_D^{20}$ = -92.4 (c, 1.0 in chloroform)

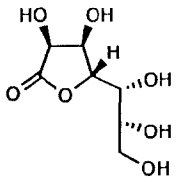
Source of chirality: D-gulonolactone as starting material

$C_{13}H_{20}O_7$

3,4:6,7-Di-*O*-isopropylidene-D-*glycero*-L-*galacto*-heptono-1,5-lactone

A. R. Beacham, I. Bruce, S. Choi, O. Doherty, A J. Fairbanks, G. W. J. Fleet, B. M. Skead, J. M. Peach, J. Saunders, and D. J. Watkin

Tetrahedron: Asymmetry **1991,** *2*, 883



E.e. = 100%

$[\alpha]_D^{20}$ = -35.7 (c, 1.0 in water)

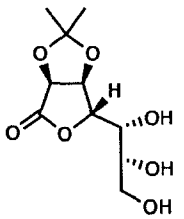
Source of chirality: D-mannose as starting material

$C_7H_{12}O_7$

D-*glycero*-D-*talo*-heptono-1,4-lactone

A. R. Beacham, I. Bruce, S. Choi, O. Doherty, A. J. Fairbanks, G. W. J. Fleet, B. M. Skead, J. M. Peach, J. Saunders, and D. J. Watkin

Tetrahedron: Asymmetry **1991,** *2*, 883



E.e. = 100%

$[\alpha]_D^{20}$ = +19.8 (c, 1.0 in methanol)

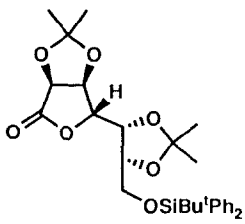
Source of chirality: D-mannose as starting material

$C_{10}H_{16}O_7$

2,3-*O*-Isopropylidene-D-*glycero*-D-*talo*-heptono-1,4-lactone

A. R. Beacham, I. Bruce, S. Choi, O. Doherty, A. J. Fairbanks, G. W. J. Fleet, B. M. Skead, J. M. Peach, J. Saunders, and D. J. Watkin

Tetrahedron: Asymmetry **1991,** *2*, 883



E.e. = 100%

$[\alpha]_D^{20}$ = -25.1 (c, 1.05 in chloroform)

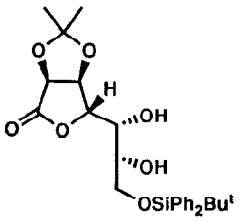
Source of chirality: D-mannose as starting material

$C_{29}H_{38}O_7Si$

7-O-tert-Butyldiphenylsilyl-2,3:5,6-di-*O*-isopropylidene-D-*glycero*-D-*talo*-heptono-1,4-lactone

A. R. Beacham, I. Bruce, S. Choi, O. Doherty, A. J. Fairbanks, G. W. J. Fleet, B. M. Skead, J. M. Peach, J. Saunders, and D. J. Watkin

Tetrahedron: Asymmetry **1991**, *2*, 883



E.e. = 100%

$[\alpha]_D^{20}$ = -7.44 (c, 1.07 in chloroform)

Source of chirality: D-mannose as starting material

$C_{26}H_{34}O_7Si$

7-O-tert-Butyldiphenylsilyl-2,3-*O*-isopropylidene-D-*glycero*-D-*talo*-heptono-1,4-lactone

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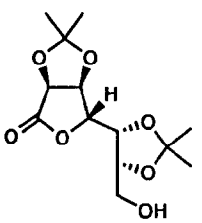
A. R. Beacham, I. Bruce, S. Choi, O. Doherty, A. J. Fairbanks, G. W. J. Fleet, B. M. Skead, J. M. Peach, J. Saunders, and D. J. Watkin

Tetrahedron: Asymmetry **1991**, *2*, 883



E.e. = 100%

$[\alpha]_D^{20}$ = -4.8 (c, 1.05 in chloroform)

Source of chirality: D-mannose as starting material

$C_{29}H_{38}O_7Si$

2,3:5,6-Di-*O*-isopropylidene-D-*glycero*-D-*talo*-heptono-1,4-lactone

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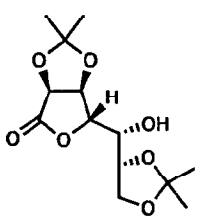
A. R. Beacham, I. Bruce, S. Choi, O. Doherty, A. J. Fairbanks, G. W. J. Fleet, B. M. Skead, J. M. Peach, J. Saunders, and D. J. Watkin

Tetrahedron: Asymmetry **1991**, *2*, 883



E.e. = 100%

$[\alpha]_D^{20}$ = +29.5 (c, 1.07 in chloroform)

Source of chirality: D-mannose as starting material

$C_{13}H_{20}O_7$

2,3:6,7-Di-*O*-isopropylidene-D-*glycero*-D-*talo*-heptono 1,4-lactone

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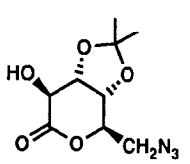
C. J. F. Bichard, A. J. Fairbanks, G. W. J. Fleet, N. G. Ramsden, K. Vogt, O. Doherty, L. Pearce and D.J . Watkin

Tetrahedron: Asymmetry **1991**, *2*, 901



E.e. = 100%

$[\alpha]_D^{20}$ = +127.5 (c, 1.01 in chloroform)

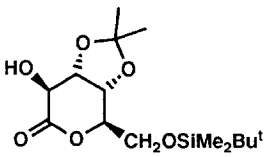
Source of chirality: D-ribose as starting material

$C_9H_{13}N_3O_6$

6-Azido-6-deoxy-3,4-*O*-isopropylidene-D-altrono-1,5-lactone

C. J. F. Bichard, A. J. Fairbanks, G. W. J. Fleet, N. G. Ramsden, K. Vogt, O. Doherty, L. Pearce and D.J . Watkin

Tetrahedron: Asymmetry **1991,** *2*, 901



E.e. = 100%

$[\alpha]_D^{20}$ = +78.2 (c, 1.04 in chloroform)

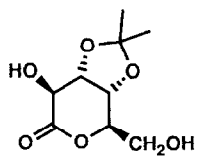
Source of chirality: D-ribose as starting material

$C_{15}H_{28}O_6Si$

6-*tert*-Butyldimethylsilyl-3,4-*O*-isopropylidene-D-altrono-1,5-lactone

C. J. F. Bichard, A. J. Fairbanks, G. W. J. Fleet, N. G. Ramsden, K. Vogt, O. Doherty, L. Pearce and D.J . Watkin

Tetrahedron: Asymmetry **1991,** *2*, 901



E.e. = 100%

$[\alpha]_D^{20}$ = +101.3 (c, 0.9 in ethanol)

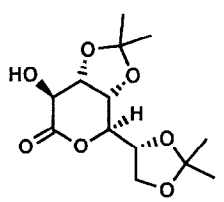
Source of chirality: D-ribose as starting material

$C_9H_{14}O_6$

3,4-*O*-Isopropylidene-D-altrono-1,5-lactone

C. J. F. Bichard, A. J. Fairbanks, G. W. J. Fleet, N. G. Ramsden, K. Vogt, O. Doherty, L. Pearce and D.J . Watkin

Tetrahedron: Asymmetry **1991,** *2*, 901



E.e. = 100%

$[\alpha]_D^{20}$ = +81.2 (c, 1.15 in chloroform)

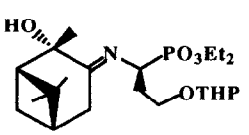
Source of chirality: D-glucose as starting material

$C_{13}H_{20}O_7$

3,4:6,7-Di-*O*-isopropylidene-D-*glycero*-D-*taltr*-heptono-1,5-lactone

F. Ouazzani, M.L. Roumestant, Ph. Viallefont, A.El Hallaoui

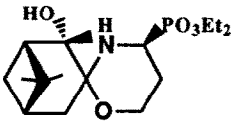
Tetrahedron: Asymmetry **1991,** *2*, 913



D.e>98%(by ^{1}H NMR)
$[\alpha]_D$= -36.65 (c=1.2,$CHCl_3$)
Source of chirality : S 2-hydroxypinan-3-one
Absolute configuration : 2S

F. Ouazzani, M.L. Roumestant, Ph. Viallefont, A.El Hallaoui

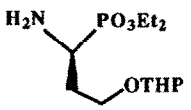
Tetrahedron: Asymmetry **1991,** *2*, 913



D.e>98%(by ^{1}H NMR and ^{31}P NMR)
$[\alpha]_D$= -29.46 (c=4.87,$CHCl_3$)
Source of chirality : S 2-hydroxypinan-3-one
Absolute configuration : S

F. Ouazzani, M.L. Roumestant, Ph. Viallefont, A.El Hallaoui

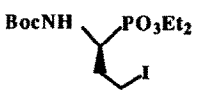
Tetrahedron: Asymmetry **1991,** *2*, 913



e.e>98%
$[\alpha]_D$= +5.5 (c=O.4,$CHCl_3$)
Source of chirality : S 2-hydroxypinan-3-one
Absolute configuration :2 S

F. Ouazzani, M.L. Roumestant, Ph. Viallefont, A.El Hallaoui

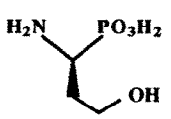
Tetrahedron: Asymmetry **1991,** *2*, 913



e.e>98%
$[\alpha]_D$= -26.75(c=1,$CHCl_3$)
Source of chirality : S 2-hydroxypinan-3-one
Absolute configuration :2 S

F. Ouazzani, M.L. Roumestant, Ph. Viallefont, A.El Hallaoui

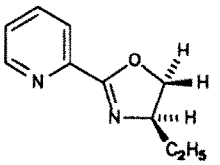
Tetrahedron: Asymmetry **1991,** *2*, 913



e.e>98%
$[\alpha]_D$= +7.3 (c=1,$CHCl_3$)
Source of chirality : S 2-hydroxypinan-3-one
Absolute configuration :2 S

H. Brunner, P. Brandl

Tetrahedron: Asymmetry **1991,** *2*, 919



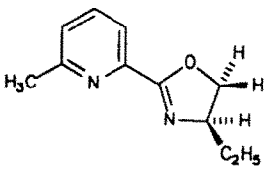
$C_{10}H_{12}N_2O$

R-(+)-4-Ethyl-2-(2-pyridinyl)oxazoline

$[\alpha]_D^{20}$ = +120.23 (c = 5.12, toluene)
E.e. = 100% (prepared from optically pure R-(-)-2-amino-1-butanol)
Absolute configuration: R

H. Brunner, P. Brandl

Tetrahedron: Asymmetry **1991,** *2*, 919



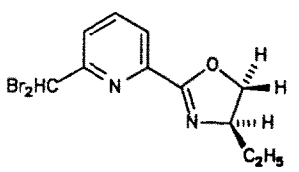
$C_{11}H_{14}N_2O$

R-(+)-4-Ethyl-2-(2-picolinyl)oxazoline

$[\alpha]_D^{20}$ = +81.6 (c = 1.49, $CHCl_3$)
E.e. = 100% (prepared from optically pure R-(-)-2-amino-1-butanol)
Absolute configuration: R

H. Brunner, P. Brandl

Tetrahedron: Asymmetry **1991,** *2*, 919



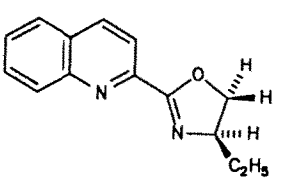
$C_{11}H_{12}N_2OBr_2$

R-(+)-4-Ethyl-2-(2-(6-dibromomethyl)pyridinyl)oxazoline

$[\alpha]_D^{20}$ = +45.1 (c = 2.88, $CHCl_3$)
E.e. = 100% (prepared from optically pure R-(-)-2-amino-1-butanol)
Absolute configuration: R

H. Brunner, P. Brandl

Tetrahedron: Asymmetry **1991,** *2*, 919



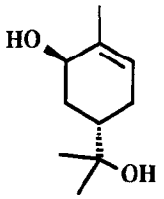
$C_{14}H_{14}N_2O$

R-(+)-4-Ethyl-2-(2-quinolinyl)oxazoline

$[\alpha]_D^{20}$ = +90.1° (c = 0.12, $CHCl_3$)
E.e. = 100% (prepared from optically pure R-(-)-2-amino-1-butanol)
Absolute configuration: R

R. Bovara, G. Carrea, L. Ferrara, S. Riva

Tetrahedron: Asymmetry **1991,** 2, 931



E.e. > 99.5 % by chiral GLC with a CP-Cyclodextrin-β-2,3,6-M-19 column

$[\alpha]_D^{20}$ + 149.5 (c 6.3, EtOH)

Source of chirality : Lipase PS-catalyzed acylation in *t*-amyl-alcohol

Absolute configuration : 1R, 5S

$C_{10}H_{18}O_2$

5-(1-hydroxy-1-methylethyl)-2-methyl-2-cyclohexen-1-ol