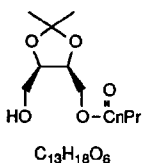


STEREOCHEMISTRY ABSTRACTS

M. Pottie, J. Van der Eycken and M. Vandewalle, H. Röper

Tetrahedron: Asymmetry **1991**, 2, 329

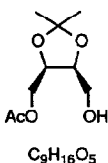


E.e. = 97 %
 $[\alpha]_D^{20} = -11.1$ (c = 1, $CHCl_3$)
 Source of chirality : enzymatic hydrolysis
 Absolute configuration : (2R, 3S)

(2R,3S)-4-butanoyloxy-2,3-O-isopropylidene-butane-1,2,3-triol

M. Pottie, J. Van der Eycken and M. Vandewalle, H. Röper

Tetrahedron: Asymmetry **1991**, 2, 329

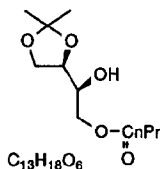


E.e. = 95 %
 $[\alpha]_D^{20} = +18.5$ (c = 1.1, $CHCl_3$)
 Source of chirality : enzymatic transesterification
 Absolute configuration : (2S,3R)

(2S,3R)-4-acetoxy-3,4-O-isopropylidene-butane-1,2,3-triol

M. Pottie, J. Van der Eycken and M. Vandewalle, H. Röper

Tetrahedron: Asymmetry **1991**, 2, 329

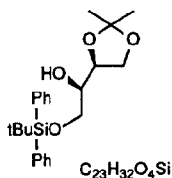


E.e. = 97 %
 $[\alpha]_D^{20} = -6.2$ (c = 0.95, $CHCl_3$)
 Source of chirality : enzymatic hydrolysis
 Absolute configuration : (2R,3S)

(2R,3S)-4-butanoyloxy-1,2-O-isopropylidene-butane-1,2,3-triol

M. Pottie, J. Van der Eycken and M. Vandewalle, H. Röper

Tetrahedron: Asymmetry **1991**, 2, 329

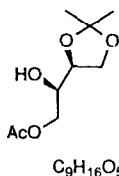


E.e. = 97 %
 $[\alpha]_D^{20} = -1.06$ (c = 1.01, $CHCl_3$)
 Source of chirality : enzymatic hydrolysis
 Absolute configuration : (2S,3R)

(2S,3R)-4-t-butyl(diphenyl)silyloxy-1,2-O-isopropylidene-butane-1,2,3-triol

M. Pottie, J. Van der Eycken and M. Vandewalle, H. Röper

Tetrahedron: Asymmetry **1991**, *2*, 329

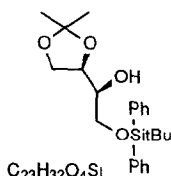


E. e. = 95 %
 $[\alpha]_D^{20} = +8.03$ (c = 1.3, $CHCl_3$)
Source of chirality : enzymatic transesterification
Absolute configuration : (2S,3R)

(2S,3R)-4-acetoxy-1,2-O-isopropylidene-butane-1,2,3-triol

M. Pottie, J. Van der Eycken and M. Vandewalle, H. Röper

Tetrahedron: Asymmetry **1991**, *2*, 329

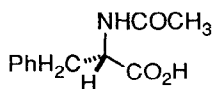


E. e. = 95 %
 $[\alpha]_D^{20} = +1.96$ (c = 1.2, $CHCl_3$)
Source of chirality : enzymatic transesterification
Absolute configuration : (2R,3S)

(2R,3S)-4-t-butylidiphenylsilyloxy-1,2-O-isopropylidene-butane-1,2,3-triol

J.M. Brown, H. Brunner, W. Leitner and M. Rose

Tetrahedron: Asymmetry **1991**, *2*, 331



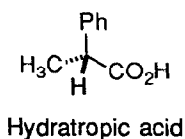
$[\alpha]_D^{25} = +26.60$ (c 1.07, 95% EtOH)

ee = 56.8% (S) by comparison to lit. value

G. Gelbard, H.B. Kagan, R. Stern, *Tetrahedron*, **32**
(1976) 233.

J.M. Brown, H. Brunner, W. Leitner and M. Rose

Tetrahedron: Asymmetry **1991**, *2*, 331



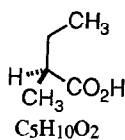
$[\alpha]_D^{25} = -10.23$ (c 1.68, $CHCl_3$)

ee = 13.4% (R) by comparison to lit. value

S.P. Bakshi, E.E. Turner, *J. Chem. Soc.* (1961) 171.

J.M. Brown, H. Brunner, W. Leitner and M. Rose

Tetrahedron: Asymmetry **1991**, 2, 331



2-Methylbutyric acid

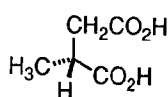
$$[\alpha]_{\text{D}}^{20} = +14.64 \quad (c \ 0.92, \text{H}_2\text{O})$$

ee = 61.0% (S) by comparison to lit. value

W. Poethke, *Arch. Pharm.*, **275** (1937) 571.

J.M. Brown, H. Brunner, W. Leitner and M. Rose

Tetrahedron: Asymmetry **1991**, 2, 331



C5H8O4
Methylsuccinic acid

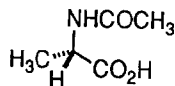
$$[\alpha]_{\text{D}}^{25} = +14.49 \quad (c \ 2.84, \text{abs. EtOH})$$

ee = 93.5% (R) by comparison to lit. value

E.J. Eisenbrunn, S.M. McElvain, *J. Am. Chem. Soc.*, **77**
(1955) 3383.

J.M. Brown, H. Brunner, W. Leitner and M. Rose

Tetrahedron: Asymmetry **1991**, 2, 331



C5H9NO3
N-Acetylalanine

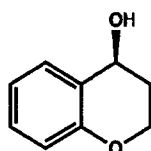
$$[\alpha]_{\text{D}}^{20} = -26.61 \quad (c \ 1.82, \text{H}_2\text{O})$$

ee = 40.0% (S) by comparison to lit. value

S.M. Birbaum, L. Levintov, R.B. Kingsley, J.P. Greenstein, *J. Biol. Chem.*, **194** (1952) 455.

H.L. Holland, T.S. Manoharan and F. Schweizer

Tetrahedron: Asymmetry **1991**, 2, 335



C9H10O2
Chroman-4-ol

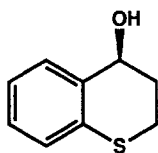
E.e >98% (nmr with $\text{Eu}(\text{thfc})_3$)

$$[\alpha]_{\text{D}}^{20} = -67.45 \quad (c = 0.5, \text{EtOH})$$

Absolute configuration 4S by derivatization and Prelog's rule

H.L. Holland, T.S. Manoharan and F. Schweizer

Tetrahedron: Asymmetry **1991**, *2*, 335



Thiochroman-4-ol

E.e >98% (nmr with $Eu(thfc)_3$)

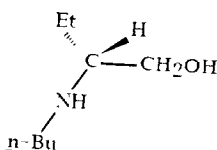
$[\alpha]_D^{20} -129$ (c = 2.0, EtOH)

Source of chirality: biotransformation

Absolute configuration 4S

E. Brown, A. Penforinis, J. Bayma and J. Touet

Tetrahedron: Asymmetry **1991**, *2*, 339



(R)-(-)-2-(n-Butylamino)butan-1-ol

$[\alpha]_D -29.1$ (c 5, MeOH)

Ee = 100%

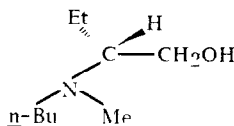
Chiral source :

(R)-(-)-2-aminobutan-1-ol

Absolute configuration : R

E. Brown, A. Penforinis, J. Bayma and J. Touet

Tetrahedron: Asymmetry **1991**, *2*, 339



(R)-(-)-2-(n-Butyl methylamino)butan-1-ol

$[\alpha]_D -4$ (c 5, MeOH)

Ee = 100%

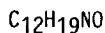
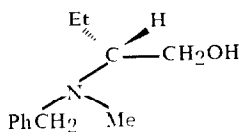
Chiral source :

(R)-(-)-2-aminobutan-1-ol

Absolute configuration : R

E. Brown, A. Penforinis, J. Bayma and J. Touet

Tetrahedron: Asymmetry **1991**, *2*, 339



(R)-(-)-2-(Benzyl methylamino)butan-1-ol

$[\alpha]_D -2$ (c 2, MeOH)

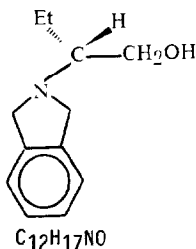
Ee = 100%

Chiral source :

(R)-(-)-2-aminobutan-1-ol

Absolute configuration : R

E. Brown, A. Penforinis, J. Bayma and J. Touet



C₁₂H₁₇NO

(R)-(-)-2-[2-iso-indoliny]butan-1-ol

Tetrahedron: Asymmetry 1991, 2, 339

mp. 57-58°C

[α]_D -19.8 (c 1, EtOH)

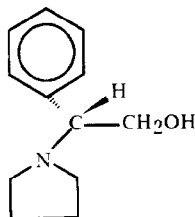
Ee = 100%

Chiral source :

(R)-(-)-2-aminobutan-1-ol

Absolute configuration : R

E. Brown, A. Penforinis, J. Bayma and J. Touet



C₁₂H₁₇NO

(R)-(-)-2-[1-Pyrrolidiny]-2-phenylethan-1-ol

Tetrahedron: Asymmetry 1991, 2, 339

mp. 58°C

[α]_D -36 (c 1, MeOH)

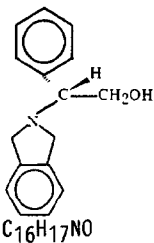
Ee = 100%

Chiral source :

(R)-(-)-2-amino-2-phenylethan-1-ol

Absolute configuration : R

E. Brown, A. Penforinis, J. Bayma and J. Touet



C₁₆H₁₇NO

(R)-(-)-2-[2-Iso-indoliny]-2-phenylethan-1-ol

Tetrahedron: Asymmetry 1991, 2, 339

mp. 78°C

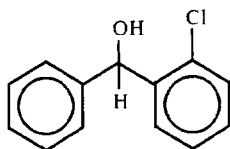
[α]_D -20.5 (c 5, MeOH)

Chiral source :

(R)-(-)-2-amino-2-phenylethan-1-ol

Absolute configuration : R

E. Brown, A. Penforinis, J. Bayma and J. Touet



C₁₃H₁₁ClO

(+)-2-Chlorobenzhydryol

Tetrahedron: Asymmetry 1991, 2, 339

[α]_D +21.3 (c 0.5, Me₂CO)

Ee = 100%

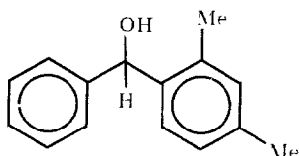
Source of chirality :

(R)-(-)-2-aminobutan-1-ol

Absolute configuration : unknown

E. Brown, A. Penforinis, J. Bayma and J. Touet

Tetrahedron: Asymmetry **1991**, 2, 339



C₁₅H₁₆O

(+)-2,4-Dimethylbenzhydrol

$[\alpha]_D +6.12$ (c 0.5, Me₂CO)

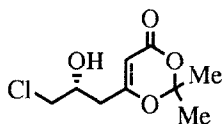
Ee = 100% [¹H-NMR ; shift reagent :
Eu(hfc)₃]

Source of chirality :
(R)-(-)-2-aminobutan-1-ol

Absolute configuration : unknown

J. Sakaki,* H. Sakoda, Y. Sugita, M. Sato, and C. Kaneko

Tetrahedron: Asymmetry **1991**, 2, 343



C₉H₁₃ClO₄

(R)-6-(3-Chloro-2-hydroxypropyl)-2,2-dimethyl-1,3-dioxin-4-one

E.e. ≥ 98% [by HPLC analysis (Chiralcell OD)]

$[\alpha]_D^{20} = +19.3$ (c 1.67, CHCl₃)

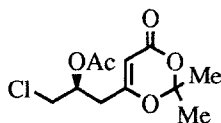
Source of chirality: kinetic resolution by lipase

Absolute configuration R

(assigned by conversion to the intermediate of L-carnitine)

J. Sakaki,* H. Sakoda, Y. Sugita, M. Sato, and C. Kaneko

Tetrahedron: Asymmetry **1991**, 2, 343



C₁₁H₁₅ClO₅

(S)-6-(3-Chloro-2-acetoxypromyl)-2,2-dimethyl-1,3-dioxin-4-one

E.e. ≥ 98% [by HPLC analysis (Chiralcell OJ)]

$[\alpha]_D^{20} = +0.12$ (c 1.20, CHCl₃)

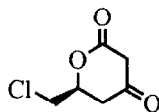
Source of chirality: Asymmetric acetylation catalyzed by lipase

Absolute configuration S

(assigned by conversion to the known compound)

J. Sakaki,* H. Sakoda, Y. Sugita, M. Sato, and C. Kaneko

Tetrahedron: Asymmetry **1991**, 2, 343



C₆H₇ClO₃

(S)-6-Chloro-3-oxohexan-5-olide

E.e. ≥ 98%

$[\alpha]_D^{25} = -83.4$ (c 1.07, MeOH)

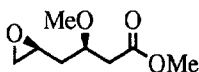
Source of chirality: from a precursor obtained by enzymatic method

Absolute configuration S

(assigned by conversion to the known compound)

J. Sakaki,* H. Sakoda, Y. Sugita, M. Sato, and C. Kaneko

Tetrahedron: Asymmetry **1991**, 2, 343



E.e. = $\geq 98\%$

$[\alpha]_D^{24} = -19.1$ (c 3.55, CHCl₃)

Source of chirality: enzymatic method, asymmetric addition

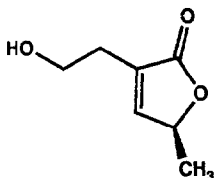
Absolute configuration 3R, 5S

C₈H₁₄O₄

Methyl (3R,5S)-5,6-Epoxy-3-methoxyhexanoate

Jean-Christophe Harmange, Bruno Figadère*, Reynald Hocquemiller

Tetrahedron: Asymmetry **1991**, 2, 347



E.e. = 99% (measured by Mosher's method)

$[\alpha]_D^{25} = -56$ (c 1.50, CHCl₃)

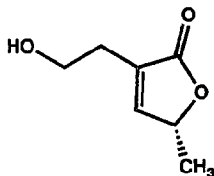
Source of chirality : natural

Absolute configuration : 4S

(S)-2-(2'-hydroxyethyl)-4-methyl- γ -butyrolactone

Jean-Christophe Harmange, Bruno Figadère*, Reynald Hocquemiller

Tetrahedron: Asymmetry **1991**, 2, 347



E.e. = 99% (measured by Mosher's method)

$[\alpha]_D^{25} = +56$ (c 1.50, CHCl₃)

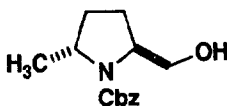
Source of chirality : natural

Absolute configuration : 4R

(R)-2-(2'-hydroxyethyl)-4-methyl- γ -butyrolactone

H. Takahata, H. Bandoh, and T. Momose

Tetrahedron: Asymmetry **1991**, 2, 351



E. e. = $> 99\%$

$[\alpha]_D^{24} = -45.8$ (c 3.895, CHCl₃)

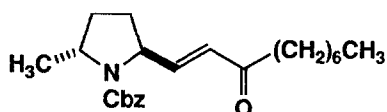
Source of chirality: D-alanine

Absolute configuration: 2S, 5R

C₁₄H₁₉NO₃

(2S,5R)-1-benzoyloxycarbonyl-2-hydroxymethyl-5-methylpyrrolidine

H. Takahata, H. Bandoh, and T. Momose



$C_{23}H_{33}NO_3$

(2*S*,5*R*)-1-benzyloxycarbonyl-2-(3-oxo-1-decyl)-5-methylpyrrolidine

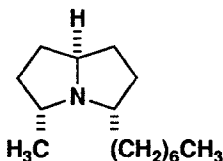
E. e. = > 99% (determined by HPLC)

$[\alpha]_D^{24}$ -74.0 (c 0.94, $CHCl_3$)

Source of chirality: D-alanine

Absolute configuration: 2*S*, 5*R*

H. Takahata, H. Bandoh, and T. Momose



$C_{15}H_{29}N$

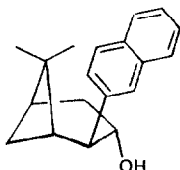
3*S*-(3β,5β,8α)-3-heptyl-5-methylpyrrolidine

$[\alpha]_D^{24}$ +11.7 (c 0.695, $CHCl_3$)

Source of chirality: D-alanine

Absolute configuration: 3*S*, 5*R*, 8*S*

M.L. Vasconcellos, J. d'Angelo, D. Desmaele, P.R.R. Costa, D. Potin



$C_{19}H_{22}O_4$

6,6-Dimethyl-2-(2-naphthyl)-bicyclo[3.3.1]heptan-3-ol

ee 92 %

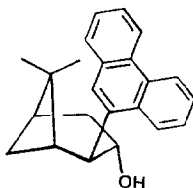
$[\alpha]_D^{20}$ = +50 (c 4.5 EtOH)

source of chirality : natural (1*S*)-

(-)-β-pinene

absolute configuration : 1*S*

M.L. Vasconcellos, J. d'Angelo, D. Desmaele, P.R.R. Costa, D. Potin



$C_{23}H_{24}O$

6,6-Dimethyl-2-(9-phenanthryl)-bicyclo[3.3.1]heptan-3-ol

ee 92 %

$[\alpha]_D^{20}$ = +65 (c 4.4 EtOH)

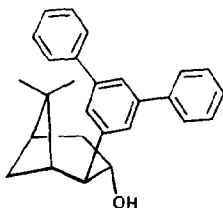
source of chirality : natural (1*S*)-

(-)-β-pinene

absolute configuration : 1*S*

M.L. Vasconcellos, J. d'Angelo, D. Desmaele, P.R.R. Costa, D. Potin

Tetrahedron: Asymmetry **1991**, *2*, 353



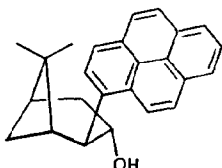
$C_{27}H_{28}O$

6,6-Dimethyl-2-(3,5-terphenyl)-bicyclo[3.3.1]heptan-3-ol

ee 92 %
[α]_D²⁰ = +21 (c 3.8 EtOH)
source of chirality : natural (1S)-
(-)- β -pinene
absolute configuration : 1S

M.L. Vasconcellos, J. d'Angelo, D. Desmaele, P.R.R. Costa, D. Potin

Tetrahedron: Asymmetry **1991**, *2*, 353



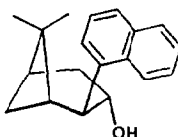
$C_{25}H_{24}O$

6,6-Dimethyl-2-(1-pyrenyl)-bicyclo[3.3.1]heptan-3-ol

ee 92 %
[α]_D²⁰ = +48 (c 3.7 EtOH)
source of chirality : natural (1S)-
(-)- β -pinene
absolute configuration : 1S

M.L. Vasconcellos, J. d'Angelo, D. Desmaele, P.R.R. Costa, D. Potin

Tetrahedron: Asymmetry **1991**, *2*, 353



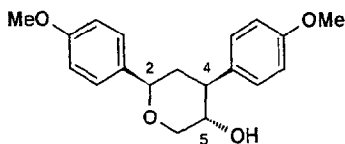
$C_{19}H_{22}O_4$

6,6-Dimethyl-2-(1-naphthyl)-bicyclo[3.3.1]heptan-3-ol

ee 92 %
[α]_D²⁰ = +62 (c 6.0 EtOH)
source of chirality : natural (1S)-
(-)- β -pinene
absolute configuration : 1S

O. Muraoka, N. Fujiwara, G. Tanabe and T. Momose

Tetrahedron: Asymmetry **1991**, *2*, 357



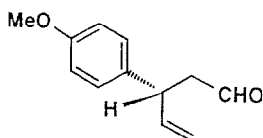
$C_{19}H_{22}O_4$

(-)-2,4-Bis(4-methoxyphenyl)-5-hydroxytetrahydropyran

E.e. = 100% [by nmr of Mosher's ester]
[α]_D¹⁷ = -4 (c 1.0, CHCl₃)
Source of chirality: asymmetric synthesis
Absolute configuration: **2R,4S,5S**

O. Muraoka, N. Fujiwara, G. Tanabe and T. Momose

Tetrahedron: Asymmetry **1991**, *2*, 357



E.e. = >95% [by nmr of Mosher's ester of the corresponding alcohol]

$[\alpha]_D^{17} = -18$ (c 1.0, CHCl_3)

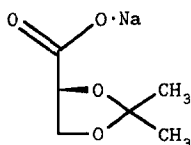
Source of chirality: asymmetric synthesis

Absolute configuration: **R**

$\text{C}_{12}\text{H}_{14}\text{O}_2$ (-)-3-(4-Methoxyphenyl)pent-4-enal

C. H. H. Emons, B. F. M. Kuster, J. A. J. M. Vekemans, R. A. Sheldon

Tetrahedron: Asymmetry **1991**, *2*, 359



$[\alpha]_D^{20} = +32.6$ (c = 0.98, H_2O)

Source of chirality: natural

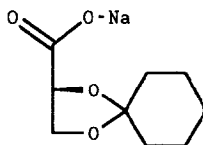
Absolute configuration: **R**

$\text{C}_6\text{H}_9\text{O}_4\text{Na}$

sodium 2,3-O-isopropylidene-D-glycerate

C. H. H. Emons, B. F. M. Kuster, J. A. J. M. Vekemans, R. A. Sheldon

Tetrahedron: Asymmetry **1991**, *2*, 359



$[\alpha]_D^{20} = +34.5$ (c = 1, H_2O)

Source of chirality: natural

Absolute configuration: **R**

$\text{C}_9\text{H}_{13}\text{O}_4\text{Na}$

sodium 2,3-O-cyclohexylidene-D-glycerate

L. Breau and T. Durst*

Tetrahedron: Asymmetry **1991**, *2*, 367



$\text{C}_{14}\text{H}_{12}\text{O}$
trans-Stilbene Oxide

E.e. $\geq 96\%$ [by nmr with (+)-tris[3-(heptafluoropropylhydroxymethylene)-camphorato] europium (III)].

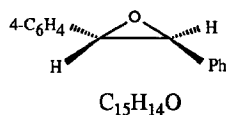
$[\alpha]_D^{24} = -285$ (c=1, acetone)

Source of chirality: asymm. synth. (sulfur ylide)

Absolute configuration: **2S,3S**

L. Breau and T. Durst*

Tetrahedron: Asymmetry **1991**, *2*, 367



trans-2-(*p*-Toluy)-3-phenyl oxirane

E.e. $\geq 96^+$ [by nmr with (+)-tris[3-(heptafluoropropylhydroxy-methylene)-camphorato] europium (III)].

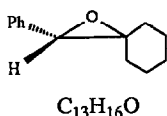
$[\alpha]_D^{24} = -289$ (c=2, EtOH)

Source of chirality: asymm. synth. (sulfur ylide)

Absolute configuration: 2*S*,3*S*

L. Breau and T. Durst*

Tetrahedron: Asymmetry **1991**, *2*, 367



Spiro-2-cyclohexyl-3-phenyl oxirane

E.e. $\geq 96^+$ [by nmr with (+)-tris[3-(heptafluoropropylhydroxy-methylene)-camphorato] europium (III)].

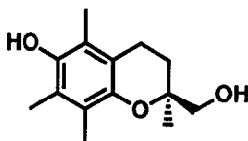
$[\alpha]_D^{24} = -37$ (c=0.16, CH_2Cl_2)

Source of chirality: asymm. synth. (sulfur ylide)

Absolute configuration: 3*S*

T. Sugai, N. Watanabe and H. Ohta

Tetrahedron: Asymmetry **1991**, *2*, 371



$C_{14}H_{20}O_3$

6-Hydroxy-2,5,7,8-tetramethyl-2-chromanmethanol

E.e. = $>99\%$ [by NMR of the corresponding bis-MTPA ester]

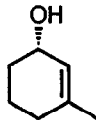
$[\alpha]_D^{27} = -2.36$ (c = 1.49, CH_2Cl_2)

Source of Chirality: Kinetic Resolution by Enzymatic Hydrolysis

Absolute Configuration S

B. D. Johnston, B. Morgan, A. C. Oehlschlager and S. Ramaswamy

Tetrahedron: Asymmetry **1991**, *2*, 377



$C_7H_{12}O$

3-Methyl-2-cyclohexen-1-ol
(Seudenol)

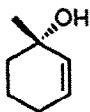
E.e. = 98.5% (by GC with acetyl-S-lactyl chloride)

Source of Chirality: Enzymatic resolution with PPL

Absolute Configuration 1*S* (based on rotation)

B. D. Johnston, B. Morgan, A. C. Oehlschlager and
S. Ramaswamy

Tetrahedron: Asymmetry **1991**, *2*, 377



C₇H₁₂O

1-Methyl-2-cyclohexen-1-ol
(MCO)

E.e. = ≥ 95% (by chiral GC)

Source of Chirality: Enzymatic resolution of seudenol with

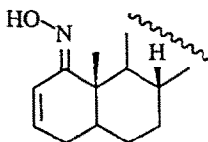
PPL, followed by 1,3-allylic transposition

$[\alpha]_D^{22} = -79.1$ (c = 1.48, Et₂O)

Absolute Configuration 1S (based on rotation)

J. Frelek, G. Snatzke, and W. J. Szczepek

Tetrahedron: Asymmetry **1991**, *2*, 381



C₂₇H₄₄NO

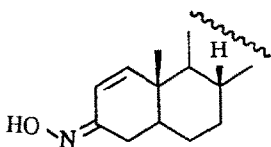
(1E)-1-Hydroxyimino-5α-cholest-2-ene (1)

CD[(Δε(λ_{max}))] = -0.13(275), +22.8(227), +3(195)
(MeCN)

Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.

J. Frelek, G. Snatzke, and W. J. Szczepek

Tetrahedron: Asymmetry **1991**, *2*, 381



C₂₇H₄₄NO

(3Z)-3-Hydroxyimino-5α-cholest-1-ene (2)

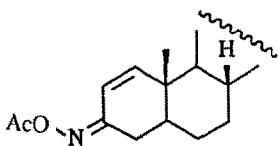
CD[(Δε(λ_{max}))] = +0.9(270), -3.2(237), +5(213)
(MeCN)

Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.

$[\alpha]_D = +29.1$ (CHCl₃, c = 0.2)

J. Frelek, G. Snatzke, and W. J. Szczepek

Tetrahedron: Asymmetry **1991**, *2*, 381



C₂₇H₄₄NO₂

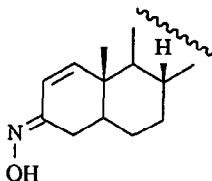
(3Z)-3-Acetoxyimino-5α-cholest-1-ene (3)

CD[(Δε(λ_{max}))] = +0.92(267), +4.0(227), -6(202)
(MeCN)

Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.

J.Frelek, G.Snatzke, and W.J.Szczepek

Tetrahedron: Asymmetry 1991, 2, 381



CD[($\Delta\epsilon(\lambda_{max})$)] = -6.20(249), +17.7(224), -2(199)
(MeCN)

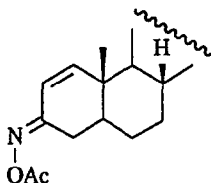
Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.

C₂₇H₄₄NO

(3E)-3-Hydroxyimino-5a-cholest-1-ene (4)

J.Frelek, G.Snatzke, and W.J.Szczepek

Tetrahedron: Asymmetry 1991, 2, 381



CD[($\Delta\epsilon(\lambda_{max})$)] = -5.65(254), +17.9(226), -7(199)
(MeCN)

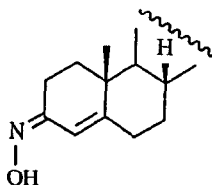
Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.

C₂₇H₄₄NO₂

(3E)-3-Acetoxyimino-5a-cholest-1-ene (5)

J.Frelek, G.Snatzke, and W.J.Szczepek

Tetrahedron: Asymmetry 1991, 2, 381



CD[($\Delta\epsilon(\lambda_{max})$)] = -0.35(280), +12.6(235), -4(211),
(MeCN) +2(193)

Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.

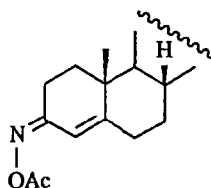
[α]_D = +165.8(CHCl₃, c = 0.6)

C₂₇H₄₄NO

(3Z)-3-Hydroxyimino-cholest-4-ene (6)

J.Frelek, G.Snatzke, and W.J.Szczepek

Tetrahedron: Asymmetry 1991, 2, 381



CD[($\Delta\epsilon(\lambda_{max})$)] = +0.02(333), -0.41(277), +7.(212)
(MeCN)

Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.

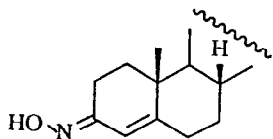
[α]_D = +165.8(CHCl₃, c = 0.3)

C₂₇H₄₄NO₂

(3Z)-3-Acetoxyimino-cholest-4-ene (7)

J.Frelek, G.Snatzke, and W.J.Szczepek

Tetrahedron: Asymmetry 1991, 2, 381



CD[($\Delta\epsilon(\lambda_{max})$)] = +11.7(246), -6.8(221),
(MeCN) -3(197)

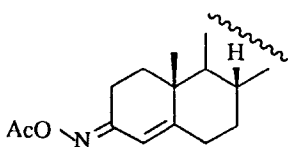
Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.
[α]_D = +76.5 (CHCl₃, c = 0.4)

C₂₇H₄₄NO

(3E)-3-Hydroxyimino-cholest-4-ene (8)

J.Frelek, G.Snatzke, and W.J.Szczepek

Tetrahedron: Asymmetry 1991, 2, 381



CD[($\Delta\epsilon(\lambda_{max})$)] = -0.02(329), +14.0(250), 4.1(224),
(MeCN) -4(199)

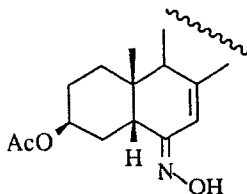
Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.
[α]_D = +107.9(CHCl₃, c = 0.9)

C₂₇H₄₄NO₂

(3E)-3-Acetoxyimino-cholest-4-ene (9)

J.Frelek, G.Snatzke, and W.J.Szczepek

Tetrahedron: Asymmetry 1991, 2, 381



CD[($\Delta\epsilon(\lambda_{max})$)] = +0.46(281), -19.8(234), +6(205),
(MeCN)

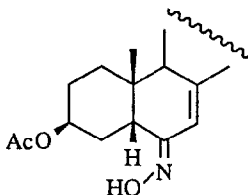
Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.

C₂₇H₄₄NO₃

(6E)-6-Hydroxyimino-5β-cholest-7-en-3β-ol 3-acetate (10)

J.Frelek, G.Snatzke, and W.J.Szczepek

Tetrahedron: Asymmetry 1991, 2, 381



CD[($\Delta\epsilon(\lambda_{max})$)] = -18.6(250), +10(190)
(MeCN)

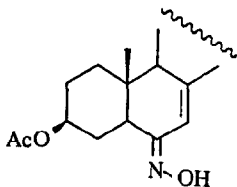
Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.
[α]_D = -42.0(CHCl₃, c = 0.4)

C₂₇H₄₄NO₃

(6Z)-6-Hydroxyimino-5β-cholest-7-en-3β-ol 3-acetate (11)

J.Frelek, G.Snatzke, and W.J.Szczepek

Tetrahedron: Asymmetry 1991, 2, 381



CD[($\Delta\epsilon(\lambda_{max})$)] = -0.03(300), +0.39(279), -28.9(232),
(MeCN) +3(203)

Source of chirality: from natural cholesterol.

Oxime-E/Z configuration from NMR and CD.

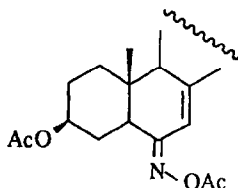
[α]_D = -120.5 (CHCl₃, c = 0.4)

C₂₇H₄₄NO₃

(6E)-6-Hydroxyimino-5a-cholest-7-en-3β-ol 3-acetate (12)

J.Frelek, G.Snatzke, and W.J.Szczepek

Tetrahedron: Asymmetry 1991, 2, 381



CD[($\Delta\epsilon(\lambda_{max})$)] = -0.11(296), +0.07(280), -27.1(234),
(MeCN) +10(199)

Source of chirality: from natural cholesterol.

Oxime-E/Z configuration from NMR and CD.

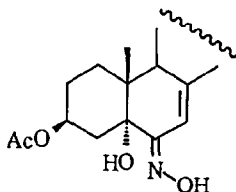
[α]_D = -126.8(CHCl₃, c = 0.8)

C₂₇H₄₄NO₄

(6E)-6-Acetoxyimino-5a-cholest-7-en-3β-ol 3-acetate (13)

J.Frelek, G.Snatzke, and W.J.Szczepek

Tetrahedron: Asymmetry 1991, 2, 381



CD[($\Delta\epsilon(\lambda_{max})$)] = +0.62(276) -24.6(237), +10(200)
(MeCN)

Source of chirality: from natural cholesterol.

Oxime-E/Z configuration from NMR and CD.

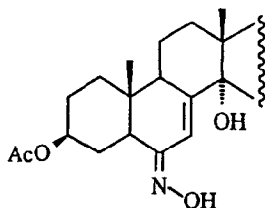
[α]_D = -132.3(CHCl₃, c = 0.4)

C₂₇H₄₄NO₄

(6E)-6-Hydroxyimino-5a-cholest-7-en-3β,5-diol 3-acetate (14)

J.Frelek, G.Snatzke, and W.J.Szczepek

Tetrahedron: Asymmetry 1991, 2, 381



CD[($\Delta\epsilon(\lambda_{max})$)] = +0.85(274), -10.7(235)
(MeCN)

Source of chirality: from natural cholesterol.

Oxime-E/Z configuration from NMR and CD.

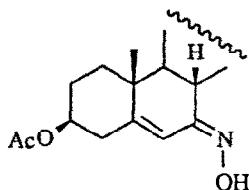
[α]_D = -56.5(CHCl₃, c = 0.4)

C₂₇H₄₄NO₄

(6E)-6-Hydroxyimino-5a-cholest-7-en-3β,14α-diol 3-acetate (15)

J. Frelek, G. Snatzke, and W. J. Szczepek

Tetrahedron: Asymmetry 1991, 2, 381



CD[$(\Delta\epsilon(\lambda_{max}))$] = +0.41(279), -19.0(234), -6(196)
(MeCN)

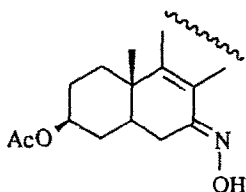
Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.

$C_{27}H_{44}NO_3$

(7Z)-7-Hydroxyimino-cholest-5-en-3 β -ol 3-acetate (16)

J. Frelek, G. Snatzke, and W. J. Szczepek

Tetrahedron: Asymmetry 1991, 2, 381



CD[$(\Delta\epsilon(\lambda_{max}))$] = +13.29(259), -25.2(231), +5(203)
(MeCN)

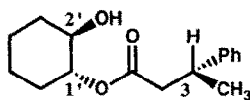
Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.
[α]_D = -51.3(CHCl₃, c = 0.4)

$C_{27}H_{44}NO_3$

(7E)-7-Hydroxyimino-5 α -cholest-8-en-3 β -ol 3-acetate (17)

C.-L. Fang, T. Ogawa, H. Suemune and K. Sakai

Tetrahedron: Asymmetry 1991, 2, 389



$C_{16}H_{22}O_3$

(1R, 2R, 3R)-2'-Hydroxycyclohexyl
3-Phenylbutanoate (10)

D.e. = 88% (determined by ¹H-NMR)

[α]_D²⁷ = -60.2 (c = 2.11, CHCl₃)

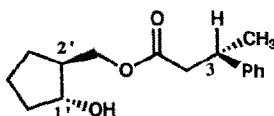
Source of chirality: (1R, 2R)-cyclohexanediol

Absolute configuration: 3R

(assigned by correlation of Configuration)

C.-L. Fang, T. Ogawa, H. Suemune and K. Sakai

Tetrahedron: Asymmetry 1991, 2, 389



$C_{16}H_{22}O_3$

(1R, 2S, 3S)-(1-Hydroxycyclopent-2-yl)-
methyl 3-Phenylbutanoate (11)

D.e. = 84% (determined by ¹H-NMR)

[α]_D²² = +1.97 (c = 1.03, CHCl₃)

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

Absolute configuration: 3S

(assigned by correlation of Configuration)