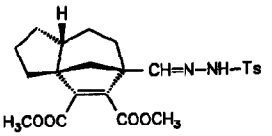
B. Popp, F. Sönnichsen and W. Tochtermann*

Tetrahedron: Asymmetry **1993**, *4*, 281



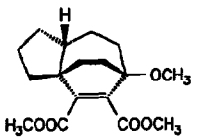
$C_{23}H_{28}N_2O_6S$

ee≥98% (nmr of precursor)
$[\alpha]_D^{20}$ = + 72.5 (c 0.72, CH_2Cl_2).
Source of chirality: D-glucose
Absolute configuration : 3a*S*,6*R*,8a*R*
(assigned by x-ray of synth. intermed. and chem. transf.)

Dimethyl-(6-tosylhydrazono-3a,6-methano-1,2,3,3a,6,7,8,8a-octahydroazulene)-4,5-dicarboxylate

B. Popp, F. Sönnichsen and W. Tochtermann*

Tetrahedron: Asymmetry **1993**, *4*, 281



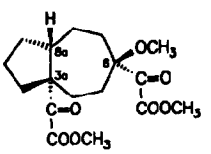
$C_{17}H_{24}O_5$

ee≥98% (nmr of precursor)
$[\alpha]_D^{20}$ = + 15.0 (c 0.48, CH_2Cl_2).
Source of chirality: D-glucose
Absolute configuration : 3a*S*,6*R*,8a*R*
(assigned by x-ray of synth. intermed. and chem. transf.)

Dimethyl-(3a,6-ethano-6-methoxy-1,2,3,3a,6,7,8,8a-octahydroazulene)-4,5-dicarboxylate

B. Popp, F. Sönnichsen and W. Tochtermann*

Tetrahedron: Asymmetry **1993**, *4*, 281



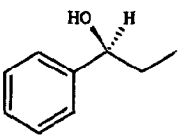
$C_{17}H_{24}O_7$

ee≥98% (nmr of precursor)
$[\alpha]_D^{20}$ = – 49.5 (c 0.2, ether).
Source of chirality: D-glucose
Absolute configuration : 3a*S*,6*R*,8a*R*
(assigned by x-ray of synth. intermed. and chem. transf.)

Dimethyl-(6-methoxy-decahydroazulene)-3a,6-dioxodicarboxylate

Hans Wally, Michael Widhalm, Walter Weissensteiner, and Karl Schlögl

Tetrahedron: Asymmetry **1993**, *4*, 285



$C_9H_{12}O$

1-Phenyl-1-propanol

E.e.= 87% [by opt. rot. and HPLC (CHIRALCEL-OB)]

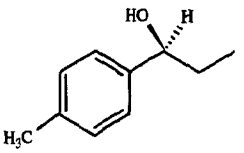
$[\alpha]_D^{22}$= -42.3 (c:5.2, $CHCl_3$)

Source of chirality: asymmetric alkylation with Et_2Zn

Absolute configuration: 1S

Hans Wally, Michael Widhalm, Walter Weissensteiner, and Karl Schlögl

Tetrahedron: Asymmetry **1993,** *4*, 285



$C_{10}H_{14}O$

1-(p-Tolyl)-1-propanol

E.e.= 94% (by 1H-NMR of the MTPA ester)

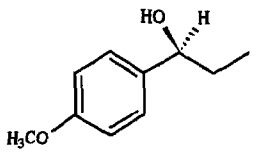
$[\alpha]_D^{22}$= -36.5 (c:4.8, benzene)

Source of chirality: asymmetric alkylation with Et_2Zn

Absolute configuration: 1S

Hans Wally, Michael Widhalm, Walter Weissensteiner, and Karl Schlögl

Tetrahedron: Asymmetry **1993,** *4*, 285



$C_{10}H_{14}O_2$

1-(p-Methoxyphenyl)-1-propanol

E.e.= 87% (by 1H-NMR of the MTPA ester)

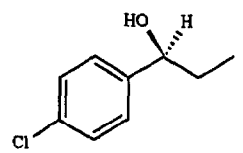
$[\alpha]_D^{22}$= -32.4 (c:4.7, benzene)

Source of chirality: asymmetric alkylation with Et_2Zn

Absolute configuration: 1S

Hans Wally, Michael Widhalm, Walter Weissensteiner, and Karl Schlögl

Tetrahedron: Asymmetry **1993,** *4*, 285



$C_9H_{11}ClO$

1-(p-Chlorphenyl)-1-propanol

E.e.= 80% [by HPLC (CHIRALCEL OB)]

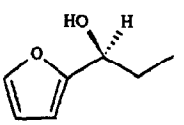
$[\alpha]_D^{22}$= -23.1 (c:4.8 , benzene)

Source of chirality: asymmetric alkylation with Et_2Zn

Absolute configuration: 1S

Hans Wally, Michael Widhalm, Walter Weissensteiner, and Karl Schlögl

Tetrahedron: Asymmetry **1993,** *4*, 285



$C_7H_{10}O_2$

1-(2-Furyl)-1-propanol

E.e.= 86% [by HPLC (CHIRALCEL OB)]

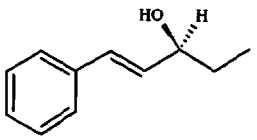
$[\alpha]_D^{22}$= -15.4 (c:1.3, $CHCl_3$)

Source of chirality: asymmetric alkylation with Et_2Zn

Absolute configuration: 1S

Hans Wally, Michael Widhalm, Walter Weissensteiner, and Karl Schlögl

Tetrahedron: Asymmetry **1993**, *4*, 285



$C_{11}H_{14}O$

1-Phenylpent-1-en-3-ol

E.e.= 87% [by HPLC (CHIRALCEL OB)]

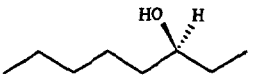
$[\alpha]_D^{22}$= -5.4 (c:3.0, $CHCl_3$)

Source of chirality: asymmetric alkylation with Et_2Zn

Absolute configuration: 3S

Hans Wally, Michael Widhalm, Walter Weissensteiner, and Karl Schlögl

Tetrahedron: Asymmetry **1993**, *4*, 285



$C_8H_{18}O$

3-Octanol

E.e.= 74% (by opt. rot.)

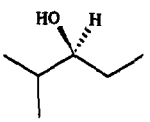
$[\alpha]_D^{22}$= 7.09 (c:5.0, $CHCl_3$)

Source of chirality: asymmetric alkylation with Et_2Zn

Absolute configuration: 3S

Hans Wally, Michael Widhalm, Walter Weissensteiner, and Karl Schlögl

Tetrahedron: Asymmetry **1993**, *4*, 285



$C_6H_{14}O$

2-Methyl-3-pentanol

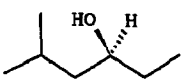
E.e.= 97% (by 13-C NMR of the MTPA ester)

Source of chirality: asymmetric alkylation with Et_2Zn

Absolute configuration: 3S

Hans Wally, Michael Widhalm, Walter Weissensteiner, and Karl Schlögl

Tetrahedron: Asymmetry **1993**, *4*, 285



$C_7H_{16}O$

5-Methyl-3-hexanol

E.e.= 85% (by opt. rot.)

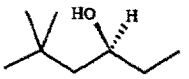
$[\alpha]_D^{24}$= 20.1 (c:4.3, EtOH)

Source of chirality: asymmetric alkylation with Et_2Zn

Absolute configuration: 3S

Hans Wally, Michael Widhalm, Walter Weissensteiner, and Karl Schlögl

Tetrahedron: Asymmetry **1993**, *4*, 285



E.e.= 85% (by 19-F NMR of the MTPA ester)

$[\alpha]_D^{24}$= 20.4 (c:4.2, EtOH)

Source of chirality: asymmetric alkylation with Et_2Zn

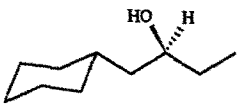
$C_8H_{18}O$

Absolute configuration: 3S

5,5-Dimethyl-3-hexanol

Hans Wally, Michael Widhalm, Walter Weissensteiner, and Karl Schlögl

Tetrahedron: Asymmetry **1993**, *4*, 285



E.e.= 76% (by 19-F NMR of the MTPA ester)

$[\alpha]_D^{23}$= 16.6 (c:4.3, EtOH)

Source of chirality: asymmetric alkylation with Et_2Zn

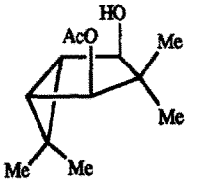
$C_{10}H_{20}O$

Absolute configuration: 2S

1-Cyclohexyl-2-butanol

Alain Krief *, Dominique Surleraux and Nathalie Ropson

Tetrahedron: Asymmetry **1993**, *4*, 289



$C_{12}H_{20}O_3$ (1R,2R,4S,5S)

4-Acetoxy 3,3,6,6-tetramethyl bicyclo [3.1.0] hexane-2-ol

E.e. >95% [assigned by ^1H NMR in the presence of $Eu(hfc)_3$ and correlation with an authentic sample of 1(R)-cis chrysanthemic acid

$[\alpha]^{20}_D$ = -15.36 (c=1.6; $CDCl_3$)

Source of chirality: selective lipase hydrolysis of the meso diacetate

Absolute configuration: assigned by correlation with the one of an authentic sample of 1(R)-cis chrysanthemic acid

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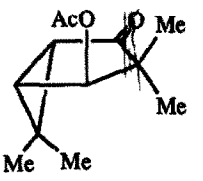
Alain Krief *, Dominique Surleraux and Nathalie Ropson

Tetrahedron: Asymmetry **1993**, *4*, 289



$C_{12}H_{18}O_3$ (1R,2R,4S,5S)

4-Acetoxy 3,3,6,6-tetramethyl bicyclo [3.1.0] hexane-2-one

E.e. >95% [assigned by correlation with an authentic sample of 1(R)-cis chrysanthemic acid

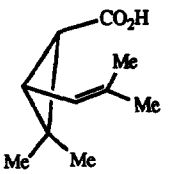
$[\alpha]^{20}_D$ = 77.6 (c=1.85; $CDCl_3$)

Source of chirality: selective lipase hydrolysis of a meso diacetate

Absolute configuration: assigned by correlation with the one of an authentic sample of 1(R)-cis chrysanthemic acid

Alain Krief *, Dominique Surleraux and Nathalie Ropson

Tetrahedron: Asymmetry **1993**, *4*, 289



$C_{10}H_{16}O_2$

(1R,3S)-cis chrysanthemic acid

E.e. >90% [assigned by correlation with an authentic sample of 1(R)-cis chrysanthemic acid

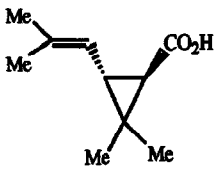
$[\alpha]^{20}_D = 51.70$ (c=1.6; acetone)

Source of chirality: selective lipase hydrolysis of a meso diacetate

Absolute configuration: assigned by correlation with the one of an authentic sample of 1(R)-cis chrysanthemic acid

Alain Krief *, Dominique Surleraux and Nathalie Ropson

Tetrahedron: Asymmetry **1993**, *4*, 289



$C_{10}H_{16}O_2$

(1R,3R)-trans chrysanthemic acid

E.e. >95% [assigned by correlation with an authentic sample of 1(R)-trans chrysanthemic acid

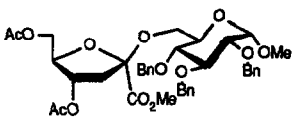
$[\alpha]^{20}_D = 25.70$ (c=1.6; acetone)

Source of chirality: selective lipase hydrolysis of a meso diacetate

Absolute configuration: assigned by comparison of its $[\alpha]_D$ with the one of an authentic sample of 1(R)-trans chrysanthemic acid

I.R. Vlahov, P.I. Vlahova, R.R. Schmidt

Tetrahedron: Asymmetry **1993**, *4*, 293



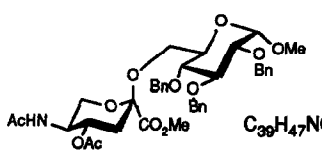
$C_{39}H_{46}O_{13}$

Methyl (Methyl-4',6'-di-O-acetyl-3'-deoxy-β-D-erythro-2'-hexulofuranosylonate)-(2'→6)-2,3,4-tri-O-benzyl-α-D-glucopyranoside

D.e. = 100 % (by ^{1}H-NMR analysis of C-3'-protons)
$[\alpha]_D^{22}$ = + 19.7 (c 2, $CHCl_3$)
Source of chirality: natural and diastereoselective ring closure
Absolute configuration: 1S, 2R, 3S, 4R, 5R, 2'S, 4'S, 5'R

I.R. Vlahov, P.I. Vlahova, R.R. Schmidt

Tetrahedron: Asymmetry **1993**, *4*, 293



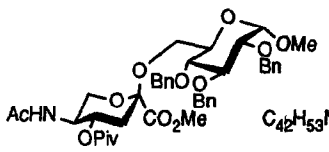
$C_{39}H_{47}NO_{12}$

Methyl (Methyl-5'-acetamido-4'-O-acetyl-3',5'-dideoxy-β-L-threo-2'-hexulopyranosylonate)-(2'→6)-2,3,4-tri-O-benzyl-α-D-glucopyranoside

D.e. = 100 % (by ^{1}H-NMR analysis of C-3'-protons)
$[\alpha]_D^{23}$ = - 4.6 (c 2, $CHCl_3$)
Source of chirality: natural and diastereoselective ring closure
Absolute configuration: 1S, 2R, 3S, 4R, 5R, 2'R, 4'S, 5'S

I.R. Vlahov, P.I. Vlahova, R.R. Schmidt

Tetrahedron: Asymmetry **1993**, *4*, 293



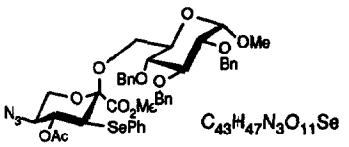
$C_{42}H_{53}NO_{12}$

Methyl (Methyl-5'-acetamido-3',5'-dideoxy-4'-O-pivaloyl-β-L-threo-2'-hexulopyranosylonate)-(2'→6)-2,3,4-tri-O-benzyl-α-D-glucopyranoside

D.e. = 100 % (by ^{1}H-NMR analysis of C-3'-protons)
$[\alpha]_D^{23}$ = - 5.6 (c 2.5, $CHCl_3$)
Source of chirality: natural and diastereoselective ring closure
Absolute configuration: 1S, 2R, 3S, 4R, 5R, 2'R, 4'S, 5'S

I.R. Vlahov, P.I. Vlahova, R.R. Schmidt

Tetrahedron: Asymmetry **1993**, *4*, 293



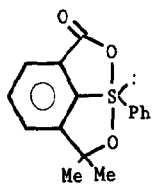
$C_{43}H_{47}N_3O_{11}Se$

Methyl (Methyl-4'O-acetyl-5'-azido-3',5'-dideoxy-3'-phenylselenyl-β-L-xylo-2'-hexylopyranosylonate)-(2'→6)-2,3,4-tri-O-benzyl-α-D-glucopyranoside

D.e. = 100 % (by ^{1}H-NMR analysis of CO_2CH_3-protons)
$[\alpha]_D^{22}$ = + 4.6 (c 3.4, $CHCl_3$)
Source of chirality: natural and diastereoselective ring closure
Absolute configuration: 1S, 2R, 3S, 4R, 5R, 2'S, 4'R, 5'S

J.Drabowicz, J.C.Martin

Tetrahedron: Asymmetry **1993**, *4*, 297



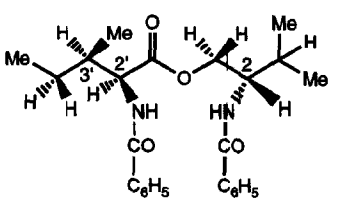
$C_{16}H_{14}O_2S$

2,2-Dimethyl-6-oxo-8-phenyl-2H,6H-[1,2,3]thioxolo[4,5,1-hi]-benzothioxole

$[\alpha]_D$=+18.1±0.3 (c 0.4, $CHCl_3$) or
$[\alpha]_{589}$=-17.8 (c 1.8, $CHCl_3$)
e.e.=100%
Source of chirality: resolution of the racemate with 2,2'-dihydroxy-1,1'-binaphthol

S. Huneck, A. Porzel and J. Schmidt

Tetrahedron: Asymmetry **1993**, *4*, 303



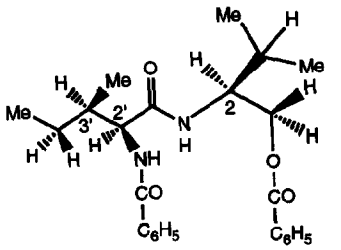
$C_{25}H_{32}N_2O_4$

(-)-N-Benzoyl-L-valinyl N'-benzoyl-L-isoleucinate

$[\alpha]_D^{20}$ = -8.8 (c 1.18, $CHCl_3$)
m.p. = 167 -168 °
Absolute configuration: 2S, 2'S, 3'S

S. Huneck, A. Porzel and J. Schmidt

Tetrahedron: Asymmetry **1993**, *4*, 303



$C_{25}H_{32}N_2O_4$

$[\alpha]_D^{22} = -24.2$ (c 0.43, $CHCl_3$)

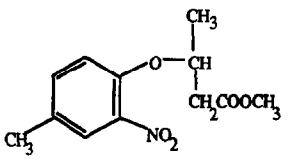
m.p. = 204 -206 °

Absolute configuration: 2S, 2'S, 3'S

(-)-N-Benzoyl-L-isoleucyl-O-benzoyl-L-valinol

S. Knezović, V. Šunjić, A. Levài

Tetrahedron: Asymmetry **1993**, *4*, 313



$C_{12}H_{15}O_5N$

3-(4` -Methyl-2`-nitrophenoxy)butanoic acid, methyl ester

E.e. 72% (by nmr. with $Er(hfc)_3$

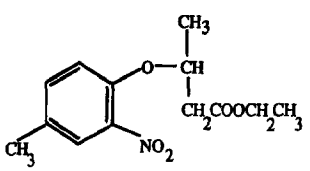
$[\alpha]_D$ =-11 (c 0.9, EtOH)

Source of chirality: Kinetic resolution by *Pseudomonas fluorescens* lipase

Absolute configuration: 3 *R*
(assigned by correlation of $[\alpha]_D$ value with $[\alpha]_D$ of 3-(2` -Nitrophenoxy)butanoic acid, methyl ester prepared from 3*R*-3-hydroxy butanoic acid)

S. Knezović, V. Šunjić, A. Levài

Tetrahedron: Asymmetry **1993**, *4*, 313



$C_{13}H_{17}O_5N$

3-(4` -Methyl-2` -nitrophenoxy)butanoic acid, ethyl ester

E.e. ≥99% (by nmr. with $Er(hfc)_3$

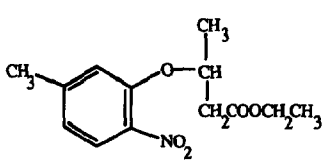
$[\alpha]_D$=-34 (c 0.7, CH_2Cl_2)

Source of chirality: Kinetic resolution by *Pseudomonas fluorescens* lipase

Absolute configuration: 3 *R*
(assigned by correlation of $[\alpha]_D$value with $[\alpha]_D$ of 3-(2` -Nitrophenoxy)butanoic acid, methyl ester prepared from 3*R*-3-hydroxy butanoic acid)

S. Knezović, V. Šunjić, A. Levài

Tetrahedron: Asymmetry **1993**, *4*, 313



$C_{13}H_{17}O_5N$

3-(5` -Methyl-2` -nitrophenoxy)butanoic acid, ethyl ester

E.e. ≥99% (by nmr. with $Eu(hfc)_3$

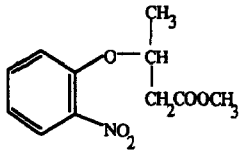
$[\alpha]_D$=-35 (c 1.9, CH_2Cl_2)

Source of chirality: Kinetic resolution by *Pseudomonas fluorescens* lipase

Absolute configuration: 3 *R*
(assigned by correlation of $[\alpha]_D$value with $[\alpha]_D$ of 3-(2` -Nitrophenoxy)butanoic acid, methyl ester prepared from 3*R*-3-hydroxy butanoic acid)

S. Knezović, V. Šunjić, A. Levài

Tetrahedron: Asymmetry **1993**, *4*, 313



$C_{11}H_{13}O_5N$

3-(2` -Nitrophenoxy)butanoic acid, methyl ester

E.e. 88% (by nmr. with Eu(hfc)$_3$

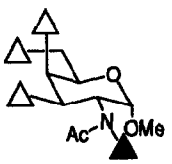
$[\alpha]_D$ =-34 (c 1.4, EtOH)

Source of chirality: Kinetic resolution by *Pseudomonas fluorescens* lipase

Absolute configuration: 3 *R*
(assigned by correlation of $[\alpha]_D$ value with $[\alpha]_D$ of the ester prepared from 3*R*-3-hydroxy butanoic acid)

Lee-Chiang Lo, Nina Berova, Koji Nakanishi, Ezequiel Q. Morales and Jesús T. Vázquez

Tetrahedron: Asymmetry **1993**, *4*, 321



△ = *p*-Br-C_6H_4-CO-O-

▲ = *p*-Br-C_6H_4-CO-

$C_{37}H_{29}Br_4NO_{10}$

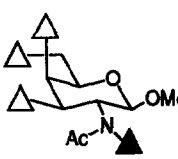
CD [λ_{max} ($\Delta\varepsilon$)] (MeCN) :
212 (-7.2), 233 (+11.5), 250 (+31.0), 286 (-5.3)

Source of chirality: *N*-acetyl-D-galactosamine

Methyl 2-(*N*-acetyl-*p*-bromobenzamido)-3,4,6-tri-*O*-(*p*-bromobenzoyl)-2-deoxy-α-D-galactopyranoside (**7**)

Lee-Chiang Lo, Nina Berova, Koji Nakanishi, Ezequiel Q. Morales and Jesús T. Vázquez

Tetrahedron: Asymmetry **1993**, *4*, 321



△ = *p*-Br-C_6H_4-CO-O-

▲ = *p*-Br-C_6H_4-CO-

$C_{37}H_{29}Br_4NO_{10}$

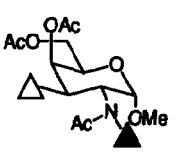
CD [λ_{max} ($\Delta\varepsilon$)] (MeCN) :
207 (-4.5), 216 (+5.8), 234 (+5.5), 257 (+8.9)

Source of chirality: *N*-acetyl-D-galactosamine

Methyl 2-(*N*-acetyl-*p*-bromobenzamido)-3,4,6-tri-*O*-(*p*-bromobenzoyl)-2-deoxy-β-D-galactopyranoside (**8**)

Lee-Chiang Lo, Nina Berova, Koji Nakanishi, Ezequiel Q. Morales and Jesús T. Vázquez

Tetrahedron: Asymmetry **1993**, *4*, 321



△ = *p*-Br-C_6H_4-CO-O-

▲ = *p*-Br-C_6H_4-CO-

$C_{27}H_{27}Br_2NO_{10}$

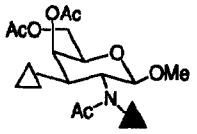
CD [λ_{max} ($\Delta\varepsilon$)] (MeCN) :
210 (-16.4), 234 (+10.2), 257 (+23.0), 285 (-6.1), 311sh (-3.5), 322sh (-2.1)

Source of chirality: *N*-acetyl-D-galactosamine

Methyl 2-(*N*-acetyl-*p*-bromobenzamido)-4,6-di-*O*-acetyl-3-*O*-(*p*-bromobenzoyl)-2-deoxy-α-D-galactopyranoside (**13**)

Lee-Chiang Lo, Nina Berova, Koji Nakanishi, Ezequiel Q. Morales and Jesús T. Vázquez

Tetrahedron: Asymmetry **1993**, *4*, 321



△ = *p*-Br-C_6H_4-CO-O-

▲ = *p*-Br-C_6H_4-CO-

CD [λ_{max} ($\Delta\varepsilon$)] (MeCN) :
207 (-4.5), 216 (+5.8), 234 (+5.5), 257 (+8.9)
263 (+6.0), 289sh (+1.2)

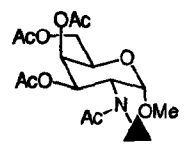
Source of chirality: *N*-acetyl-D-galactosamine

$C_{27}H_{27}Br_2NO_{10}$

Methyl 2-(*N*-acetyl-*p*-bromobenzamido)-4,6-di-*O*-acetyl-3-*O*-(*p*-bromobenzoyl)-2-deoxy-β-D-galactopyranoside (**14**)

Lee-Chiang Lo, Nina Berova, Koji Nakanishi, Ezequiel Q. Morales and Jesús T. Vázquez

Tetrahedron: Asymmetry **1993**, *4*, 321



▲ = *p*-Br-C_6H_4-CO-

CD [λ_{max} ($\Delta\varepsilon$)] (MeCN) :
211 (-13.1), 242 (+17.5), 259sh (+11.6), 287 (-5.1)

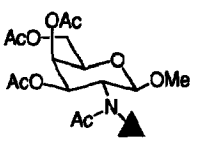
Source of chirality: *N*-acetyl-D-galactosamine

$C_{22}H_{26}BrNO_{10}$

Methyl 2-(*N*-acetyl-*p*-bromobenzamido)-3,4,6-tri-*O*-acetyl-2-deoxy-α-D-galactopyranoside (**9**)

Lee-Chiang Lo, Nina Berova, Koji Nakanishi, Ezequiel Q. Morales and Jesús T. Vázquez

Tetrahedron: Asymmetry **1993**, *4*, 321



▲ = *p*-Br-C_6H_4-CO-

CD [λ_{max} ($\Delta\varepsilon$)] (MeCN) :
238 (-14.2), 276 (+4.6), 294sh (+2.2)

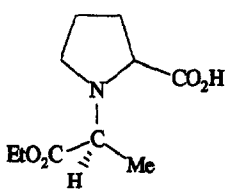
Source of chirality: *N*-acetyl-D-galactosamine

$C_{22}H_{26}BrNO_{10}$

Methyl 2-(*N*-acetyl-*p*-bromobenzamido)-3,4,6-tri-*O*-acetyl-2-deoxy-β-D-galactopyranoside (**10**)

G. Tóth, A. Kovács, T. Tarnai and A. Tungler

Tetrahedron: Asymmetry **1993**, *4*, 331



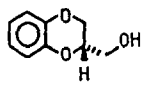
$[\alpha]_D^{20}$ = -41.2 (c=1, ethanol)
Source of chirality: (*S*)-proline

Absolute configuration: *SS*
(assigned by NMR, CD)

$C_{10}H_{17}NO_4$
(*S*)-1-(1-ethoxycarbonyl-ethyl)-pyrrolidine-(*S*)-2-carboxylic acid

Sándor Antus, Ágnes Gottsegen, Judit Kajtár, Tibor Kovács, Tamás S.Tóth and Hildebert Wagner

Tetrahedron: Asymmetry **1993**, *4*, 339



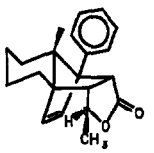
$C_9H_{10}O_3$

2-hydroxymethyl-1,4-benzodioxane

E.e. > 99.8%
$[\alpha]_D^{24}$ = -34.2 (c=1, EtOH)
CD(dioxan): Δε (λnm) = -0.55 (279nm), +6.00 (230nm)
Source of chirality: asym. synth. (enzym). Absolute configuration 2S assigned by comparision with the literature.

Bernd Wegener, Martin Hansen, Ekkehard Winterfeldt

Tetrahedron: Asymmetry **1993**, *4*, 345



$C_{21}H_{24}O_2$

E_i = 100% with ^{1}H-NMR
$[\alpha]_D$ =-82,6 (c=1,03, $CHCl_3$)
SOURCE OF CHIRALITY:
S-DIENE 1 ≡ FROM HAJOS WIECHERT KETONE
ABSOLUTE CONFIGURATION: S, S

Bernd Wegener, Martin Hansen, Ekkehard Winterfeldt

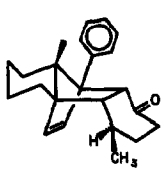
Tetrahedron: Asymmetry **1993**, *4*, 345

$C_{22}H_{26}O_2$

E_i = 100% with ^{1}H-NMR
$[\alpha]_D$ =-88,3 (c=1,03, $CHCl_3$)
SOURCE OF CHIRALITY:
S-DIENE 1 ≡ FROM HAJOS WIECHERT KETONE
ABSOLUTE CONFIGURATION: S, S

Bernd Wegener, Martin Hansen, Ekkehard Winterfeldt

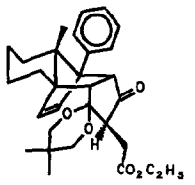
Tetrahedron: Asymmetry **1993**, *4*, 345



E_i = 100% with ^{1}H-NMR
$[\alpha]_D$ =+15,2 (c=1,025, $CHCl_3$)
SOURCE OF CHIRALITY:
S-DIENE 1 ≡ FROM HAJOS WIECHERT KETONE
ABSOLUTE CONFIGURATION: S, R

Bernd Wegener, Martin Hansen, Ekkehard Winterfeldt

Tetrahedron: Asymmetry **1993**, *4*, 345



$C_{20}H_{28}O_5$

E_i = 100% with ^{1}H-NMR

$[\alpha]_D$ = -14,7 (c=1,0, $CHCl_3$)

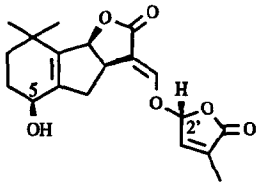
SOURCE OF CHIRALITY:

S-DIENE 1 ≙ HAJOS WIECHERT KETONE

ABSOLUTE CONFIGURATION: S, S

K. Frischmuth, U. Wagner, E. Samson, D. Weigelt, P. Koll, H. Meuer, W. Sheldrick, and P. Welzel*

Tetrahedron: Asymmetry **1993**, *4*, 351



$[\alpha]_D^{20}$ = + 262.7 (c 0.69, $CHCl_3$), after crystallization from ethanol-water

$[\alpha]_D^{20}$ = + 244.6 (c 0.40, $CHCl_3$), after crystallization from CH_2Cl_2-pentane

CD : λ_{max} ($\Delta\varepsilon$) = 261 (-2.2), 227 (27.7), 204 (-20.1)

Source of chirality : resolution

(3aR)-5t-Hydroxy-8,8-dimethyl-3-((R,E)-4-methyl-5-oxo-2,5-dihydrofuran-2-yloxymethylene)-(3ar, 8bc)-3,3a,4,5,6,7,8,8b-octahydroindeno[1,2-b]furan-2-one

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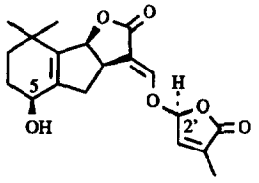
K. Frischmuth, U. Wagner, E. Samson, D. Weigelt, P. Koll, H. Meuer, W. Sheldrick, and P. Welzel*

Tetrahedron: Asymmetry **1993**, *4*, 351



$[\alpha]_D^{20}$ = + 94.0 (c 1.24, $CHCl_3$)

CD : λ_{max} ($\Delta\varepsilon$) = 243 (5.7), 213 (-12.0)

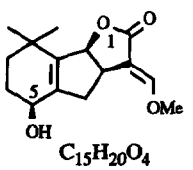
Source of chirality : resolution

(3aR)-5t-Hydroxy-8,8-dimethyl-3-((S,E)-4-methyl-5-oxo-2,5-dihydrofuran-2-yloxymethylene)-(3ar, 8bc)-3,3a,4,5,6,7,8,8b-octahydroindeno[1,2-b]furan-2-one

---

K. Frischmuth, U. Wagner, E. Samson, D. Weigelt, P. Koll, H. Meuer, W. Sheldrick, and P. Welzel*

Tetrahedron: Asymmetry **1993**, *4*, 351



$C_{15}H_{20}O_4$

CD : λ_{max} ($\Delta\varepsilon$) = 243 (12.5), 238 (11.9), 209 (-12.0), 193 (9.1)

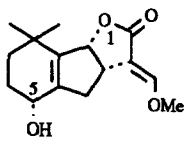
Source of chirality : resolution

Absolute configuration : 3aR,5S,8bS (assigned by correlation with (+)-strigol)

(3aR)-5t-Hydroxy-8,8-dimethyl-3-(methoxymethylene)-(3ar,8bc)-3,3a,4,5,6,7,8,8b-octahydroindeno[1,2-b]furan-2-one

K. Frischmuth, U. Wagner, E. Samson, D. Weigelt, P. Koll, H. Meuer, W. Sheldrick, and P. Welzel*

Tetrahedron: Asymmetry **1993**, *4*, 351



$C_{15}H_{20}O_4$

CD : λ_{max} ($\Delta\varepsilon$) = 244 (-9.4), 240 (-9.1), 208 (9.9), 191 (-6.9)

Source of chirality : resolution

Absolute configuration : 3aS,5R,8bR (assigned by correlation with (+)-strigol)

(3aS)-5t-Hydroxy-8,8-dimethyl-3-(methoxymethylene)-(3ar,8bc)-3,3a,4,5,6,7,8,8b-octahydroindeno[1,2-b]furan-2-one

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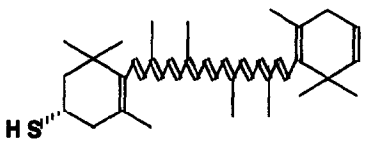
H.-R. Sliwka and S. Liaaen-Jensen

Tetrahedron: Asymmetry **1993**, *4*, 361



$C_{40}H_{56}S$

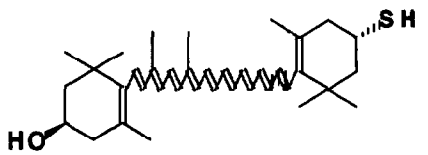
2′,3′-Didehydro-β,β-carotene-3-thiol

Source of chirality: natural and synthetic, S_N2 inversion

Absolute configuration: 3S (assigned by CD)

H.-R. Sliwka and S. Liaaen-Jensen

Tetrahedron: Asymmetry **1993**, *4*, 361



$C_{40}H_{58}OS$

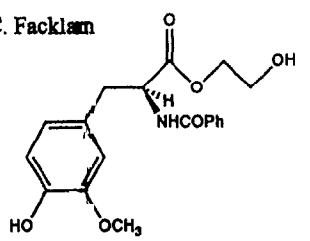
3′-Mercapto-β,β-caroten-3-ol

Source of chirality: natural and synthetic, S_N2 inversion

Absolute configuration: 3R, 3′S (assigned by CD)

R. Selke, H. Foken, C. Facklam

Tetrahedron: Asymmetry **1993**, *4*, 369



$C_{19}H_{21}NO_6$

(S)-2-Hydroxyethyl N-benzoyl-4-hydroxy-3-methoxyphenylalaninate

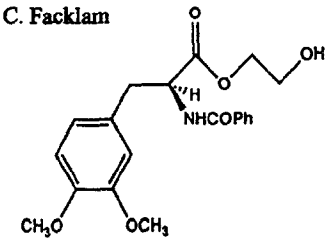
m.p. 134.5 - 136 °C

$[\alpha]_D^{25}$ -20.8 ° (c 2, acetone)

source of chirality: enantioselective hydrogenation

R. Selke, H. Foken, C. Facklam

Tetrahedron: Asymmetry **1993,** *4*, 369



m.p. 94 -96 °C

$[\alpha]_D^{25}$ + 70.6 ° (c 2, CH_2Cl_2)

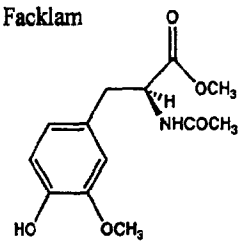
source of chirality: enantioselective hydrogenation

$C_{20}H_{23}NO_6$

(S)-2-Hydroxyethyl N-benzoyl-3,4-dimethoxyphenylalaninate

R. Selke, H. Foken, C. Facklam

Tetrahedron: Asymmetry **1993,** *4*, 369



m.p. 125 - 128 °C

$[\alpha]_D^{25}$ + 26.9 ° (c 2, acetone)

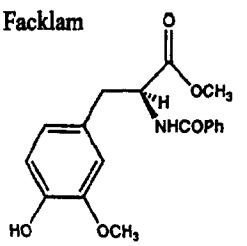
source of chirality: enantioselective hydrogenation

$C_{13}H_{17}NO_5$

(S)-Methyl N-acetyl-4-hydroxy-3-methoxyphenylalaninate

R. Selke, H. Foken, C. Facklam

Tetrahedron: Asymmetry **1993,** *4*, 369



m.p. 140 - 141.5 °C

$[\alpha]_D^{25}$ + 70.6 ° (c 2, CH_2Cl_2)

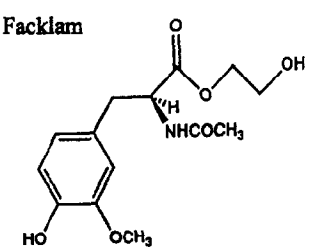
source of chirality: enantioselective hydrogenation

$C_{18}H_{19}NO_5$

(S)-Methyl N-benzoyl-4-hydroxy-3-methoxyphenylalaninate

R. Selke, H. Foken, C. Facklam

Tetrahedron: Asymmetry **1993,** *4*, 369



$[\alpha]_D^{25}$ + 18.0 ° (c 1, acetone)

source of chirality: enantioselective hydrogenation

$C_{14}H_{19}NO_6$

(S)-2-Hydroxyethyl N-acetyl-4-hydroxy-3-methoxyphenylalaninate

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383

CD [$\Delta\varepsilon(\lambda_{max})$]: +0.19(276), -1.12(270), -1.48(263), -1.10(257), -9.0(225)

$[\alpha]_D$ = -127 (c=1, $CHCl_3$)

Source of chirality : optically active precursor

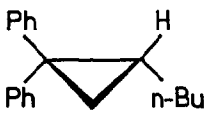
Absolute configuration : R

$C_{15}H_{16}$

1,1-Diphenyl-2-methylcyclopropane

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383



CD [$\Delta\varepsilon(\lambda_{max})$]: +0.15(276), -1.55(270), -2.24(263), -1.50(257), -10.1(221)

$[\alpha]_{546}$ = -193 (c=1, $CHCl_3$)

Source of chirality : optically active precursor

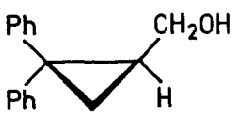
Absolute configuration : R

$C_{19}H_{22}$

1,1-Diphenyl-2-n-butylcyclopropane

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383



CD [$\Delta\varepsilon(\lambda_{max})$]: -0.03(276), +1.21(270), +1.45(263), +1.05(257), +9.8(217)

$[\alpha]_D$ = +167 (c=1, $CHCl_3$)

Source of chirality : optically active precursor

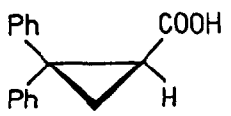
Absolute configuration : S

$C_{16}H_{16}O$

1-Hydroxymethyl-2,2-diphenylcyclopropane

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383



CD [$\Delta\varepsilon(\lambda_{max})$]: +1.50(268), +1.90(263), +1.45 (258) +18.0(218)

$[\alpha]_D$ = +230 (c=1, $CHCl_3$)

Source of chirality : resolution

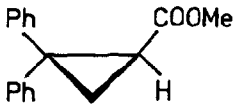
Absolute configuration : S

$C_{16}H_{14}O_2$

2,2-Diphenylcyclopropanecarboxylic acid

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383



CD [$\Delta\varepsilon(\lambda_{max})$]: +1.26(269), +1.48(263), +1.12(256), +16.6(218)

$[\alpha]_D$ = +245 (c=1, $CHCl_3$)

Source of chirality : optically active precursor

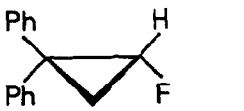
Absolute configuration : S

$C_{17}H_{16}O_2$

Methyl 2,2-diphenylcyclopropanecarboxylate

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383



CD [$\Delta\varepsilon(\lambda_{max})$]: +0.04(274), -0.40(268), -0.51(261), -0.33(256), -2,6(219)

$[\alpha]_{546}$ = +20.7 (c=1, $CHCl_3$)

Source of chirality : optically active precursor

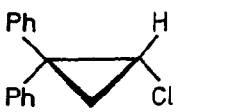
Absolute configuration : R

$C_{15}H_{13}F$

1-Fluoro-2,2-diphenylcyclopropane

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383



CD [$\Delta\varepsilon(\lambda_{max})$]: -0.90(269), -1.04(262), -0.64(256), +1.0(231), -5.5(215)

$[\alpha]_{546}$ = -215 (c=1, $CHCl_3$)

Source of chirality : optically active precursor

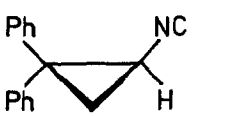
Absolute configuration : R

$C_{15}H_{13}Cl$

1-Chloro-2,2-diphenylcyclopropane

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383



CD [$\Delta\varepsilon(\lambda_{max})$]: +0.88(269), +1.00(262), +0.72(255), +10.7(215)

$[\alpha]_{546}$ = + 353 (c=1, $CHCl_3$)

Source of chirality : optically active precursor

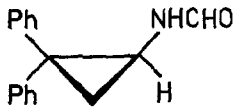
Absolute configuration : S

$C_{16}H_{13}N$

1-Isocyano-2,2-diphenylcyclopropane

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383



CD [$\Delta\varepsilon(\lambda_{max})$]: +1.13(269), +1.18(263), +0.80(256), +3.1(227)

$[\alpha]_{546}$ = + 72.6 (c=1, $CHCl_3$)

Source of chirality : optically active precursor

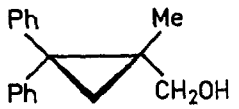
Absolute configuration : S

$C_{16}H_{15}NO$

1-Formamido-2,2-diphenylcyclopropane

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383



CD [$\Delta\varepsilon(\lambda_{max})$]: -0.03(274), +0.27(270), +0.24(263), +0.11(257), -2.7(231)

$[\alpha]_D$ = -32.0 (c=1, $CHCl_3$)

Source of chirality : optically active precursor

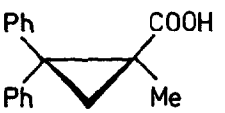
Absolute configuration : R

$C_{17}H_{18}O$

1-Hydroxymethyl-1-methyl-2,2-diphenylcyclopropane

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383



CD [$\Delta\varepsilon(\lambda_{max})$]: -0.70(270), -0.80(263), -0.50(257), -1.8(233), +3.9(223)

$[\alpha]_D$ = -34.0 (c=1, $CHCl_3$)

Source of chirality : resolution

Absolute configuration : S

$C_{17}H_{16}O_2$

1-Methyl-2,2-diphenylcyclopropanecarboxylic acid

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383

CD [$\Delta\varepsilon(\lambda_{max})$]: +0.47(271), +0.54(264), +0.38(257), +8.0(224)

$[\alpha]_{546}$ = +176 (c=1, $CHCl_3$)

Source of chirality : optically active precursor

Absolute configuration : R

$C_{16}H_{15}F$

1-Fluoro-1-methyl-2,2-diphenylcyclopropane

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383

CD [$\Delta\varepsilon(\lambda_{max})$]: -0.31(272), -0.25(265), -0.10(258), -8.8(230)

$[\alpha]_D$ = + 64.0 (c=1, $CHCl_3$)

Source of chirality : optically active precursor

Absolute configuration : S

$C_{16}H_{15}Cl$

1-Chloro-1-methyl-2,2-diphenylcyclopropane

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383

CD [$\Delta\varepsilon(\lambda_{max})$]: +0.37(272), +0.28(265), +0.15(257), +11.5(232)

$[\alpha]_D$ = -112 (c=1, $CHCl_3$)

Source of chirality : optically active precursor

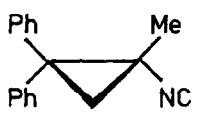
Absolute configuration : R

$C_{16}H_{15}Br$

1-Bromo-1-methyl-2,2-diphenylcyclopropane

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383



CD [$\Delta\varepsilon(\lambda_{max})$]: +0.25(271), +0.23(264), +0.12(257), +2.8(225)

$[\alpha]_{546}$ = -166 (c=1, $CHCl_3$)

Source of chirality : optically active precursor

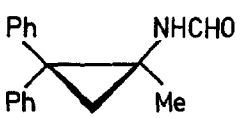
Absolute configuration : R

$C_{17}H_{15}N$

1-Isocyano-1-methyl-2,2-diphenylcyclopropane

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383



CD [$\Delta\varepsilon(\lambda_{max})$]: +0.33(272), +0.30(265), +0.22(258), +5.2(232)

$[\alpha]_{546}$ = +99.1 (c=1, $CHCl_3$)

Source of chirality : optically active precursor

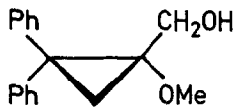
Absolute configuration : S

$C_{17}H_{17}NO$

1-Formamido-1-methyl-2,2-diphenylcyclopropane

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383



CD [$\Delta\varepsilon(\lambda_{max})$]: +0.45(272), +0.46(265), +0.40(258), +7.2(228)

$[\alpha]_{546}$ = -12.5 (c=1, $CHCl_3$)

Source of chirality : optically active precursor

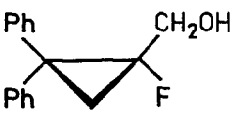
Absolute configuration : R

$C_{17}H_{18}O_2$

1-Hydroxymethyl-1-methoxy-2,2-diphenylcyclopropane

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383



CD [$\Delta\varepsilon(\lambda_{max})$]: +0.37(271), +0.44(264), +0.32(258), +6.8(224)

$[\alpha]_{546}$ = + 146 (c=1, MeOH)

Source of chirality : optically active precursor

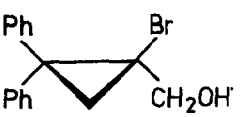
Absolute configuration : R

$C_{16}H_{15}FO$

1-Fluoro-1-hydroxymethyl-2,2-diphenylcyclopropane

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383



CD [$\Delta\varepsilon(\lambda_{max})$]: -0.24(272), +0.05(269), -0.15(266), +0.09(262), -11.8(231)

$[\alpha]_D$ = +109 (c=1, $CHCl_3$)

Source of chirality : optically active precursor

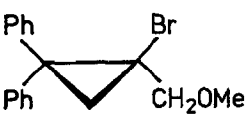
Absolute configuration : S

$C_{16}H_{15}BrO$

1-Bromo-1-hydroxymethyl-2,2-diphenylcyclopropane

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383



CD [$\Delta\varepsilon(\lambda_{max})$]: -0.19(273), +0.08(269), -0.13(266), +0.10(262), -12.5(232)

$[\alpha]_{546}$ = +97.5 (c=1, $CHCl_3$)

Source of chirality : optically active precursor

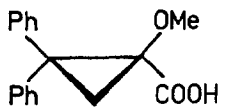
Absolute configuration : S

$C_{17}H_{17}BrO$

1-Bromo-1-methoxymethyl-2,2-diphenylcyclopropane

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383



CD [$\Delta\varepsilon(\lambda_{max})$]: -0.38(272), -0.30(265), -0.19(258), -0.8(243), -13.0sh(216)

$[\alpha]_{546}$ = -84.5 (c=1, $CHCl_3$)

Source of chirality : resolution

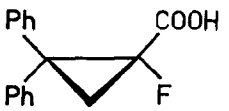
Absolute configuration : S

$C_{17}H_{16}O_3$

1-Methoxy-2,2-diphenylcyclopropanecarboxylic acid

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383



CD [$\Delta\varepsilon(\lambda_{max})$]: +0.26(271), +0.26(264), +0.19(257), +0.4(243), +10.7sh(217)

$[\alpha]_{546}$ = +155 (c=1, acetone)

Source of chirality : resolution

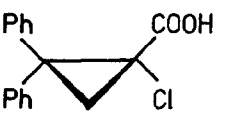
Absolute configuration : R

$C_{16}H_{13}FO_2$

1-Fluoro-2,2-diphenylcyclopropanecarboxylic acid

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383



CD [$\Delta\varepsilon(\lambda_{max})$]: +0.10(274), -0.34(269), -0.40(262), -0.10(257), +7.5(226)

$[\alpha]_D$ = -77.6 (c=1, $CHCl_3$)

Source of chirality : resolution

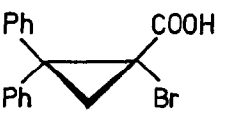
Absolute configuration : R

$C_{16}H_{13}ClO_2$

1-Chloro-2,2-diphenylcyclopropanecarboxylic acid

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383



CD [$\Delta\varepsilon(\lambda_{max})$]: +0.13(274), -0.28(269), +0.09(266), -0.18(262), +6.4(232)

$[\alpha]_D$ = -111 (c=1, $CHCl_3$)

Source of chirality : resolution

Absolute configuration : R

$C_{16}H_{13}BrO_2$

1-Bromo-2,2-diphenylcyclopropanecarboxylic acid

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383

CD [$\Delta\varepsilon(\lambda_{max})$]: +0.13(271), +0.19(263), +0.16sh(256), −2.6(231), +2.0sh(218)

$[\alpha]_{546}$ = +228 (c=1, $CHCl_3$)

Source of chirality : optically active precursor

Absolute configuration : S

$C_{15}H_{12}BrF$

1-Bromo-1-fluoro-2,2-diphenylcyclopropane

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383

CD [$\Delta\varepsilon(\lambda_{max})$]: +0.14(271), +0.06(265), −0.9(247), +0.8(233), −2.0(224)

$[\alpha]_{546}$ = +280 (c=1, $CHCl_3$)

Source of chirality : optically active precursor

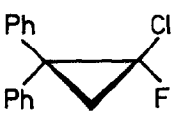
Absolute configuration : S

$C_{15}H_{12}FI$

1-Fluoro-1-iodo-2,2-diphenylcyclopropane

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383



CD [$\Delta\varepsilon(\lambda_{max})$]: +0.13(269), +0.17(262), +0.12(257), −0.7(231), +2.0sh(220)

$[\alpha]_{546}$ = +208 (c=1, $CHCl_3$)

Source of chirality : optically active precursor

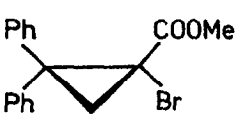
Absolute configuration : S

$C_{15}H_{12}ClF$

1-Chloro-1-fluoro-2,2-diphenylcyclopropane

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383



CD [$\Delta\varepsilon(\lambda_{max})$]: +0.09(274), −0.35(269), −0.30(262), +6.3(233)

$[\alpha]_{546}$ = −96.0 (c=1, $CHCl_3$)

Source of chirality : resolution

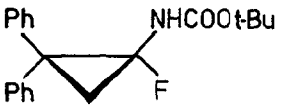
Absolute configuration : R

$C_{17}H_{15}BrO_2$

Methyl 1-bromo-2,2-diphenylcyclopropanecarboxylate

J. Gawronski, K. Gawronska, D. Radocki, and H. M. Walborsky

Tetrahedron: Asymmetry **1993**, *4*, 383



CD [$\Delta\varepsilon(\lambda_{max})$]: +0.36(269), +0.41(262), +0.32(256), +10.4(215)

$[\alpha]_{546}$ = +217 (c=1, $CHCl_3$)

Source of chirality : optically active precursor

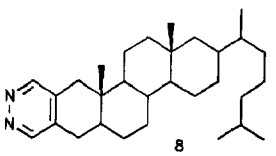
Absolute configuration : R

$C_{20}H_{22}FNO_2$

1-tert-Butoxycarbonylamino-1-fluoro-2,2-diphenylcyclopropane

György Hajós

Tetrahedron: Asymmetry **1993**, *4*, 393



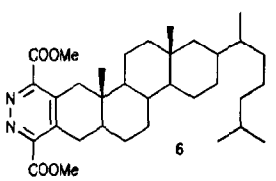
$[\alpha]_D^{24}$ = + 36.2 (c=1.0, $CHCl_3$)
CD: $[\theta]_{315}$ = -3800 $[\theta]_{253}$ = -1100 $[\theta]_{229}$ = +1720
$[\theta]_{214}$ = -4200 (isooctane)
Source of chirality: natural

$C_{29}H_{46}N_2$

Pyridazino[4,5-b]-5α-cholest-2-ene

György Hajós

Tetrahedron: Asymmetry **1993**, *4*, 393



$[\alpha]_D^{24}$ = + 101.4 (c=1.0, $CHCl_3$)
CD: $[\theta]_{306}$ = -5150 $[\theta]_{239}$ = +23520 (CH_3CN)
Source of chirality: natural

$C_{33}H_{50}N_2O_4$

Dimethyl pyridazino[4,5-b]-5α-cholest-2-ene-3',6'-dicarboxylate

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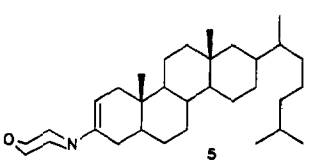
György Hajós

Tetrahedron: Asymmetry **1993**, *4*, 393



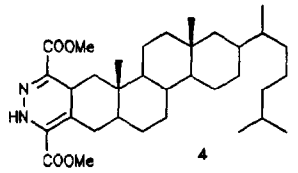
$[\alpha]_D^{24}$ = + 39.9 (c=1.0, $CHCl_3$)
Source of chirality: natural

$C_{31}H_{53}NO$

3-Morpholino-5α-cholest-2-ene

György Hajós

Tetrahedron: Asymmetry **1993**, *4*, 393



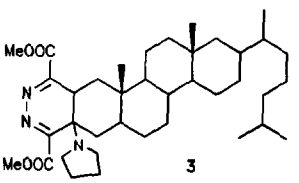
4

$[\alpha]_D^{24}$ = + 446.1 (c=1.0, $CHCl_3$)
CD: $[\theta]_{353}$ = 70490 $[\theta]_{281}$ = -3900 $[\theta]_{262}$ = +4950 $[\theta]_{235}$ = +15900 (CH_3CN)
Source of chirality: natural

$C_{33}H_{52}N_2O_4$
Dimethyl 1',2-Dihydro-pyridazino[4,5-b]-5α-cholest-2-ene-3',6'-dicarboxylate

György Hajós

Tetrahedron: Asymmetry **1993**, *4*, 393



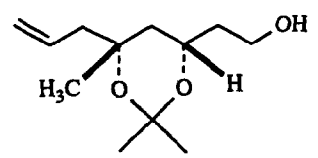
3

$[\alpha]_D^{24}$ = - 161.8 (c=1.0, $CHCl_3$)
CD: $[\theta]_{299}$ = +12960 $[\theta]_{262}$ = -5570 $[\theta]_{215}$ = -39900 (CH_3CN)
Source of chirality: natural

$C_{37}H_{59}N_3O_4$
Dimethyl 2,3-Dihydro-3-pyrrolidino-pyridazino[4,5-b]-5α-cholest-2-ene-3',6'-dicarboxylate

B. Achmatowicz and J. Wicha

Tetrahedron: Asymmetry **1993**, *4*, 399

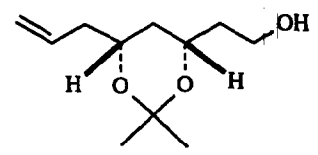


D.e. 97% by NMR
$[\alpha]_D^{23}$= - 46.9 (c 2.3 $CHCl_3$)
Source of chirality: L-(-)-malic acid
Absolute configuration: 3(S), 5(R)

(3,5-O-Isopropylidene)-5-methyl-1,3,5-trihydroxyoct-7-ene

B. Achmatowicz and J. Wicha

Tetrahedron: Asymmetry **1993**, *4*, 399

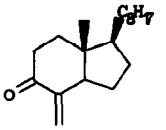


D.e. 97% by NMR
$[\alpha]_D^{20}$= - 2.2 (c 0.7 $CHCl_3$)
Source of chirality: L-(-)-malic acid
Absolute configuration: 3(S), 5(R)

(3,5-O-Isopropylidene)-1,3,5-trihydroxyoct-7-ene

J. Frelek, W.J. Szczepek, and H.P. Weiß

Tetrahedron: Asymmetry **1993**, *4*, 411



CD [$\Delta\varepsilon(\lambda_{max})$] = -0.10(352), +0.23(301), -3.25(235), +5.3(204), +5.5(193)
UV [$\varepsilon(\lambda_{max})$] = 7900(231) (MeCN)

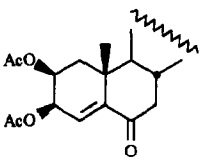
Source of chirality: from natural cholesterol.

$C_{18}H_{33}O$

8-Methylene-des-A,B-cholestan-9-one (**1**)

J. Frelek, W.J. Szczepek, and H.P. Weiß

Tetrahedron: Asymmetry **1993**, *4*, 411



CD [$\Delta\varepsilon(\lambda_{max})$] = -1.67(320), -6.19(232), +11.0(198)
UV [$\varepsilon(\lambda_{max})$] = 43(319), 4500(231) (MeCN)

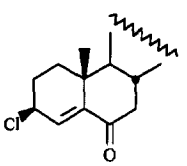
Source of chirality: from natural cholesterol.

$C_{31}H_{48}O_5$

2β,3β-Diacetoxycholest-4-en-6-one (**2**)

J. Frelek, W.J. Szczepek, and H.P. Weiß

Tetrahedron: Asymmetry **1993**, *4*, 411



CD [$\Delta\varepsilon(\lambda_{max})$] = -2.12(328), -6.02(237), +14.4(200)
UV [$\varepsilon(\lambda_{max})$] = 9300(238) (MeCN)

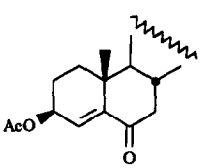
Source of chirality: from natural cholesterol.

$C_{27}H_{43}OCl$

3β-Chlorocholest-4-en-6-one (**3**)

J. Frelek, W.J. Szczepek, and H.P. Weiß

Tetrahedron: Asymmetry **1993**, *4*, 411



CD [$\Delta\varepsilon(\lambda_{max})$] = -2.33(326), -4.80(237), +13.2(197)
UV [$\varepsilon(\lambda_{max})$] = 86(321), 7100(232) (MeCN)

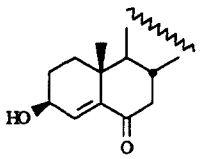
Source of chirality: from natural cholesterol.

$C_{29}H_{45}O_3$

3β-Acetoxycholest-4-en-6-one (**4**)

J. Frelek, W.J. Szczepek, and H.P. Weiß

Tetrahedron: Asymmetry **1993,** *4*, 411



CD [$\Delta\varepsilon(\lambda_{max})$] = -2.43(326), -2.16(246), +16.5(917)
UV [$\varepsilon(\lambda_{max})$] = 94(321), 6700(236)
(MeCN)

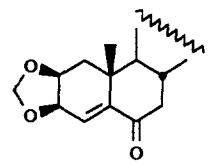
Source of chirality: from natural cholesterol.

$C_{27}H_{44}O_2$

3β-Hydroxycholest-4-en-6-one (5)

J. Frelek, W.J. Szczepek, and H.P. Weiß

Tetrahedron: Asymmetry **1993,** *4*, 411



CD [$\Delta\varepsilon(\lambda_{max})$] = -2.00(327), -1.49(245), +13.9(199)
UV [$\varepsilon(\lambda_{max})$] = 65(317), 6800(233)
(MeCN)

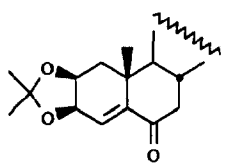
Source of chirality: from natural cholesterol.

$C_{28}H_{44}O_3$

2β,3β-Methanediyldioxycholest-4-en-6-one (6)

J. Frelek, W.J. Szczepek, and H.P. Weiß

Tetrahedron: Asymmetry **1993,** *4*, 411



CD [$\Delta\varepsilon(\lambda_{max})$] = -2.00(326), -1.00(251), -0.86(242), +15.2(198)
UV [$\varepsilon(\lambda_{max})$] = 120(319), 6700(235)
(MeCN)

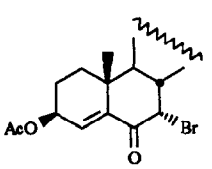
Source of chirality: from natural cholesterol.

$C_{30}H_{48}O_3$

2β,3β-Isopropylidenedioxycholest-4-en-6-one (7)

J. Frelek, W.J. Szczepek, and H.P. Weiß

Tetrahedron: Asymmetry **1993,** *4*, 411



CD [$\Delta\varepsilon(\lambda_{max})$] = -0.04(385), +1.33(327), +4.42(260), -2.27(233), +2.8(202)
UV [$\varepsilon(\lambda_{max})$] = 167(339), 5000(249)
(MeCN)

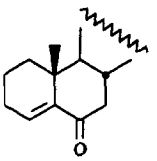
Source of chirality: from natural cholesterol.

$C_{29}H_{45}O_3Br$

3β-Acetoxy-7α-bromocholest-4-en-6-one (8)

J. Frelek, W.J. Szczepek, and H.P. Weiß

Tetrahedron: Asymmetry **1993**, *4*, 411



CD [$\Delta\varepsilon(\lambda_{max})$] =-2.37(325), -0.30(261), +2.23(232), +10.5(198)
UV [$\varepsilon(\lambda_{max})$] = 140(308), 8400(240)
(MeCN)

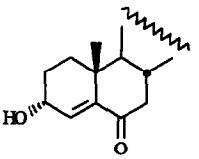
Source of chirality: from natural cholesterol.

$C_{27}H_{44}O$

Cholest-4-en-6-one (**9**)

J. Frelek, W.J. Szczepek, and H.P. Weiß

Tetrahedron: Asymmetry **1993**, *4*, 411



CD [$\Delta\varepsilon(\lambda_{max})$] = -2.98(327), +7.98(225), +11.0(200)
UV [$\varepsilon(\lambda_{max})$] = 76(320), 8100(231)
(MeCN)

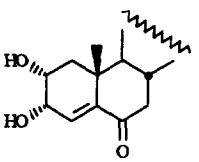
Source of chirality: from natural cholesterol.

$C_{27}H_{44}O_2$

3α-Hydroxycholest-4-en-6-one (**10**)

J. Frelek, W.J. Szczepek, and H.P. Weiß

Tetrahedron: Asymmetry **1993**, *4*, 411



CD [$\Delta\varepsilon(\lambda_{max})$] = -2.62(326), -0.31(257), +9.52(225), +11.3(202)
UV [$\varepsilon(\lambda_{max})$] = 58(321), 6900(230)
(MeCN)

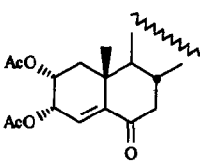
Source of chirality: from natural cholesterol.

$C_{27}H_{44}O_3$

2α,3α-Dihydroxycholest-4-en-6-one (**11**)

J. Frelek, W.J. Szczepek, and H.P. Weiß

Tetrahedron: Asymmetry **1993**, *4*, 411



CD [$\Delta\varepsilon(\lambda_{max})$] = -2.07(325), +11.30(225), +11.1(200)
UV [$\varepsilon(\lambda_{max})$] = 91(318), 6100(227)
(MeCN)

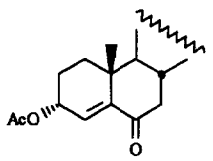
Source of chirality: from natural cholesterol.

$C_{31}H_{48}O_5$

2α,3α-Diacetoxycholest-4-en-6-one (**12**)

J. Frelek, W.J. Szczepek, and H.P. Weiß

Tetrahedron: Asymmetry **1993**, *4*, 411



CD [$\Delta\varepsilon(\lambda_{max})$] = -3.17(328), +14.15(226), +14.8(201)
UV [$\varepsilon(\lambda_{max})$] = 94(321), 10100(229)
(MeCN)

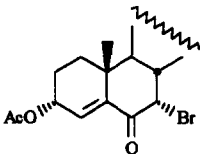
Source of chirality: from natural cholesterol.

$C_{29}H_{45}O_3$

3α-Acetoxycholest-4-en-6-one (13)

J. Frelek, W.J. Szczepek, and H.P. Weiß

Tetrahedron: Asymmetry **1993**, *4*, 411



CD [$\Delta\varepsilon(\lambda_{max})$] = -0.17(370), +0.79(322), +10.30(251), +6.45(229)
+8.7(201), +8.8(192)
UV [$\varepsilon(\lambda_{max})$] = 142(339), 6000(246)
(MeCN)

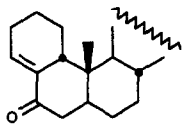
Source of chirality: from natural cholesterol.

$C_{29}H_{45}O_3Br$

3α-Acetoxy-7α-bromocholest-4-en-6-one (14)

J. Frelek, W.J. Szczepek, and H.P. Weiß

Tetrahedron: Asymmetry **1993**, *4*, 411



CD [$\Delta\varepsilon(\lambda_{max})$] = -0.15(332), +0.23(296), -1.33(255), +4.8(208)
UV [$\varepsilon(\lambda_{max})$] = 125(313), 5100(243)
(MeCN)

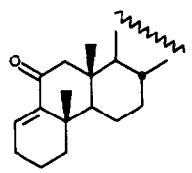
Source of chirality: from natural cholesterol.

$C_{31}H_{50}O$

1β,4′,5′,6′-Tetrahydrobenzo[1,2]-5α-cholest-1-en-3-one (15)

J. Frelek, W.J. Szczepek, and H.P. Weiß

Tetrahedron: Asymmetry **1993**, *4*, 411



CD [$\Delta\varepsilon(\lambda_{max})$] = +2.64(325), +0.15(265), -4.33(234), -8.0(197)
UV [$\varepsilon(\lambda_{max})$] = 74(315), 6800(236)
(MeCN)

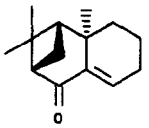
Source of chirality: from natural cholesterol.

$C_{32}H_{52}O$

4β-Methyl-3′,4′,5′-trihydrobenzo[3,4]-5α-cholest-3-en-2-one (16)

J. Frelek, W.J. Szczepek, and H.P. Weiß

Tetrahedron: Asymmetry **1993**, *4*, 411



CD [$\Delta\varepsilon(\lambda_{max})$] = -0.55(321), -4.01(234)
UV [$\varepsilon(\lambda_{max})$] = 63(313), 8000(235)
(MeCN)

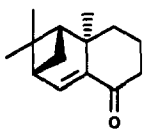
Source of chirality: from (-)-verbenone.

$C_{14}H_{20}O$

(1S,8R,9R)-8,10,10-Trimethyltricyclo[7.1.1.$0^{3,8}$]undec-3-en-2-one (**17**)

J. Frelek, W.J. Szczepek, and H.P. Weiß

Tetrahedron: Asymmetry **1993**, *4*, 411



CD [$\Delta\varepsilon(\lambda_{max})$] = +0.73(323), +0.19(272), -2.23(226)
UV [$\varepsilon(\lambda_{max})$] = 61(312), 5500(249)
(MeCN)

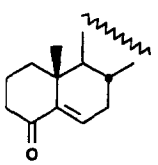
Source of chirality: from (-)-verbenone.

$C_{14}H_{20}O$

(1R,8R,9R)-8,10,10-Trimethyltricyclo[7.1.1.$0^{3,8}$]undec-2-en-4-one (**18**)

J. Frelek, W.J. Szczepek, and H.P. Weiß

Tetrahedron: Asymmetry **1993**, *4*, 411



CD [$\Delta\varepsilon(\lambda_{max})$] = +1.54(329), +0.06(269), -8.51(222)
UV [$\varepsilon(\lambda_{max})$] = 90(320), 8500(240)
(MeCN)

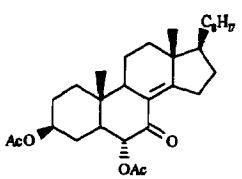
Source of chirality: from natural cholesterol.

$C_{27}H_{44}O$

Cholest-5-en-4-one (**19**)

J. Frelek, W.J. Szczepek, and H.P. Weiß

Tetrahedron: Asymmetry **1993**, *4*, 411



CD [$\Delta\varepsilon(\lambda_{max})$] = -0.94(326), -0.79(278), +0.4(222), -3.0(207)
UV [$\varepsilon(\lambda_{max})$] = 10300(264)
(MeCN)

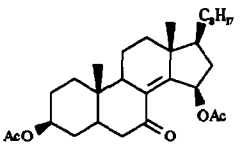
Source of chirality: from natural cholesterol.

$C_{31}H_{48}O_5$

3β,6α-Diacetoxy-5α-cholest-8(14)-en-7-one (**20**)

J. Frelek, W.J. Szczepek, and H.P. Weiß

Tetrahedron: Asymmetry **1993**, *4*, 411



CD [$\Delta\varepsilon(\lambda_{max})$] = -1.05(332), -3.24(248), +1.5(218), +11.3(193)
(MeCN)

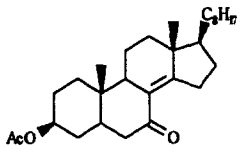
Source of chirality: from natural cholesterol.

$C_{31}H_{48}O_5$

3β,15β-Diacetoxy-5α-cholest-8(14)-en-7-one (**21**)

J. Frelek, W.J. Szczepek, and H.P. Weiß

Tetrahedron: Asymmetry **1993**, *4*, 411



CD [$\Delta\varepsilon(\lambda_{max})$] = -1.26(339), -4.92(259), +5.0(215)
(MeCN)

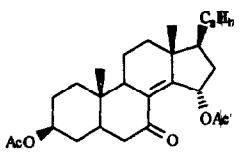
Source of chirality: from natural cholesterol.

$C_{29}H_{45}O_3$

3β-Acetoxy-5α-cholest-8(14)-en-7-one (**22**)

J. Frelek, W.J. Szczepek, and H.P. Weiß

Tetrahedron: Asymmetry **1993**, *4*, 411



CD [$\Delta\varepsilon(\lambda_{max})$] = -1.23(348), -11.85(253), +6.0(218), -4.5(198)
UV [$\varepsilon(\lambda_{max})$] = 11700(257)
(MeCN)

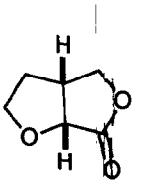
Source of chirality: from natural cholesterol.

$C_{31}H_{48}O_5$

3β,15α-Diacetoxy-5α-cholest-8(14)-en-7-one (**23**)

J. H. Udding, J. Fraanje, K. Goubitz, H. Hiemstra,
W. N. Speckamp, B. Kaptein, H. E. Schoemaker, J. Kamphuis

Tetrahedron: Asymmetry **1993**, *4*, 425



Optical purity: 100%

$[\alpha]_D$ -84.4 (*c* 0.6, $CHCl_3$)

Source of chirality: enzymatic hydrolysis

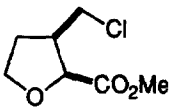
Absolute configuration 3aR, 6aR
(assigned by using X-ray analysis)

$C_6H_8O_3$

tetrahydrofuro[3,4-*b*]furan-6(4*H*)-one

J. H. Udding, J. Fraanje, K. Goubitz, H. Hiemstra,
W. N. Speckamp, B. Kaptein, H. E. Schoemaker, J. Kamphuis

Tetrahedron: Asymmetry **1993**, *4*, 425



$C_7H_{11}O_3Cl$

methyl 3-chloromethyl-2-tetrahydrofurancarboxylate

E.e. = >90% [by ^{1}H NMR with $Eu(hfc)_3$]

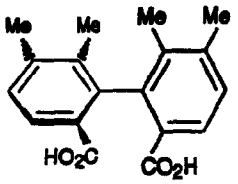
$[\alpha]_D$ +23.4 (*c* 1.3, $CHCl_3$)

Source of chirality: enzymatic hydrolysis

Absolute configuration 2S, 3R
(assigned by X-ray analysis of related compound)

R.Fritsch, E.Hartmann, G.Brandl and A.Mannschreck

Tetrahedron: Asymmetry **1993**, *4*, 433



$C_{18}H_{18}O_4$

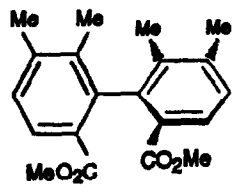
$(-)^{MeCN}_{365}$-(P)-5,5',6,6'-Tetramethyldiphenic acid

Optical purity 43 % (by comparison of [α] with the one of its enantiomer, the enantiomeric purity of which was determined via ^{1}H-NMR with (+)-tris[3-heptafluoro-butyryl-D-camphorato]europium(III))

$[\alpha]^{22}_{365}$ - 47 (0.03 g/100 ml MeCN), calculated for the optical purity of 100%

R.Fritsch, E.Hartmann, G.Brandl and A.Mannschreck

Tetrahedron: Asymmetry **1993**, *4*, 433



$C_{20}H_{22}O_4$

$(-)_{365}$ -(M)-Dimethyl 5,5',6,6'-Tetramethyldiphenate

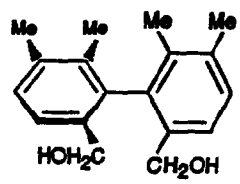
Optical purity 45% (by comparison of [α] and $\Delta\epsilon$ with the ones of its enantiomer, the enantiomeric purity of which was determined via ^{1}H-NMR with (+)-tris[3-heptafluoro-butyryl-D-camphorato]europium(III))

$[\alpha]^{22}_{365}$ - 42 (0.10 g/100 ml MeCN), calculated for the optical purity of 100%

CD: $\Delta\epsilon_{234}$ +4.6, $\Delta\epsilon_{254}$ -2.9, $\Delta\epsilon_{278}$ +0.4, $\Delta\epsilon_{293}$ -0.7 (c 2.18 mmol/l, MeCN)

R.Fritsch, E.Hartmann, G.Brandl and A.Mannschreck

Tetrahedron: Asymmetry **1993**, *4*, 433



$C_{18}H_{22}O_2$

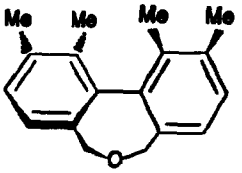
$(-)_{365}$ -(P)-2,2'-Bis(hydroxymethylene)-5,5',6,6'-tetramethylbiphenyl

Optical purity 100% (preparation from optically pure $(-)^{MeCN}_{365}$ (P) -5,5',6,6'-tetramethyldiphenic acid)

$[\alpha]^{22}_{365}$ - 149 (0.03 g/100 ml MeCN)

R.Fritsch, E.Hartmann, G.Brandl and A.Mannschreck

Tetrahedron: Asymmetry **1993**, *4*, 433



$C_{18}H_{20}O$

$(+)_{365}$ -(P)-1",2",3',4'-Tetramethyl-2,7-dihydro-3,4,5,6-dibenzoxepine

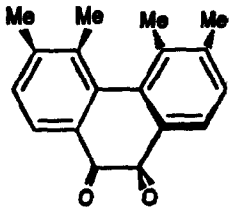
Enantiomeric purity 100% (by LC on triacetylcellulose, EtOH/ H_2O, 96:4)

$[\alpha]_{365}^{22}$ + 1074 (0.04 g/100 ml MeCN)

CD: $\Delta\epsilon_{225}$ -20.3, $\Delta\epsilon_{243}$ -13.0, $\Delta\epsilon_{271}$ +4.3, $\Delta\epsilon_{286}$ -2.0 (c 0.86 mmol/l, MeCN)

R.Fritsch, E.Hartmann, G.Brandl and A.Mannschreck

Tetrahedron: Asymmetry **1993**, *4*, 433



$C_{18}H_{16}O_2$

$(-)_{546}$ -(M)-3,4,5,6-Tetramethyl-9,10-phenanthrenequinone

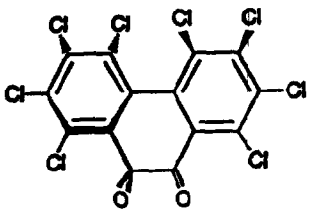
Enantiomeric purity 100% (by ^{1}H-NMR with (+)-tris[3-heptafluorobutyryl-D-camphorato]europium (III))

$[\alpha]_{546}^{22}$ - 843 (0.03 g/100 ml MeCN)

CD: $\Delta\epsilon_{316}$ -4.8, $\Delta\epsilon_{358}$ +0.8, $\Delta\epsilon_{405}$ -1.8, $\Delta\epsilon_{475}$ -1.5 (c 0.23 mmol/l, MeCN)

R.Fritsch, E.Hartmann, G.Brandl and A.Mannschreck

Tetrahedron: Asymmetry **1993**, *4*, 433



$C_{14}Cl_8O_2$

$(+)_{546}$ -(P)-1,2,3,4,5,6,7,8-Octachloro-9,10-phenanthrenequinone

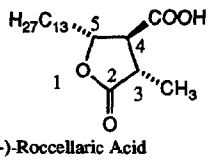
Enantiomeric purity 65% (by LC on triacetylcellulose, EtOH/ H_2O, 96:4)

$[\alpha]_{546}^{22}$ + 500 (0.05 g/100 ml MeCN), calculated for the optical purity of 100%

CD: $\Delta\epsilon_{270}$ -27, $\Delta\epsilon_{321}$ -21, $\Delta\epsilon_{359}$ +3, $\Delta\epsilon_{389}$ -2, $\Delta\epsilon_{468}$ -3, (c 0.09 mmol/l, MeCN)

Tetrahedron: Asymmetry **1993**, *4*, 457

Johann Mulzer*, Nabiollah Salimi, Hans Hartl



(+)-Roccellaric Acid

E.e > 99%

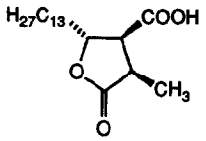
$[\alpha]_D^{20}$ +28.7 (c 1.58, $CDCl_3$)

Source of chirality: Diacetone-D-glucose, (S)-O-THP-lactaldehyde or (R)-2,3-Isopropylidene glyceraldehyde

Absolute configuration: 3S, 4R, 5R

Tetrahedron: Asymmetry **1993**, *4*, 457

Johann Mulzer*, Nabiollah Salimi, Hans Hartl

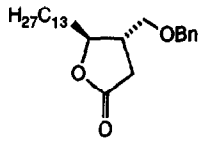


(+)-Dihydroprotolichesterinic Acid

E.e > 99%
$[\alpha]_D^{20}$ +52.4 (c 1.29, $CDCl_3$)
Source of chirality: Diacetone-D-glucose
Absolute configuration: 3R, 4R, 5R

Tetrahedron: Asymmetry **1993**, *4*, 457

Johann Mulzer*, Nabiollah Salimi, Hans Hartl

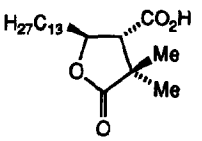


(4S,5S)-4-Benzyloxymethyl-5-tridecyl-oxolan-2-one

E.e > 99%
$[\alpha]_D^{20}$ -16.0 (c 2.30, $CDCl_3$)
Source of chirality: (R)-2,3-Isopropylidene glyceraldehyde
Absolute configuration: 4S, 5S

Tetrahedron: Asymmetry **1993**, *4*, 457

Johann Mulzer*, Nabiollah Salimi, Hans Hartl

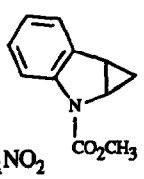


(4R,5S)-4-Carboxy-3,3-dimethyl-5-tridecyl-oxolan-2-one

E.e > 99%
$[\alpha]_D^{20}$ -35.0 (c 2.0, $CDCl_3$)
Source of chirality: (R)-2,3-Isopropylidene glyceraldehyde
Absolute configuration: 4R, 5S

F.-G. Klärner, A. E. Kleine, D. Oebels, F. Scheidt

Tetrahedron: Asymmetry **1993**, *4*, 479



$C_{11}H_{11}NO_2$

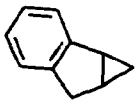
(+)-2-Aza-3,4-benzo-N-carbmethoxy-bicyclo[3.1.0]hex-3-ene

E.e. = 94.0% (by HPLC on tribenzoylcellulose)

Source of chirality: HPLC on triacetylcellulose

F.-G. Klärner, A. E. Kleine, D. Oebels, F. Scheidt

Tetrahedron: Asymmetry **1993,** *4*, 479

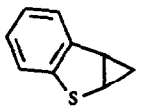


E.e. = 14.2% (by GC on OV 1701/octakis(3-O-butyryl-2,6-di-O-pentyl)-γ-cyclodextrin)
Source of chirality: HPLC on triacetylcellulose

$C_{10}H_{10}$
(-)-2,3-Benzobicyclo[3.1.0]hex-2-ene

F.-G. Klärner, A. E. Kleine, D. Oebels, F. Scheidt

Tetrahedron: Asymmetry **1993,** *4*, 479

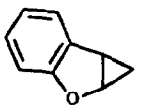


E.e. = 94.5% (by GC on OV 1701/octakis(3-O-butyryl-2,6-di-O-pentyl)-γ-cyclodextrin)
Source of chirality: HPLC on triacetylcellulose

C_9H_8S
(+)-3,4-Benzo-2-thia-bicyclo[3.1.0]hex-3-ene

F.-G. Klärner, A. E. Kleine, D. Oebels, F. Scheidt

Tetrahedron: Asymmetry **1993,** *4*, 479

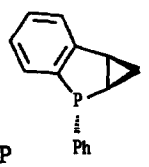


E.e. = 17.1% (by GC on a Ni-R-Cam fused silica OV 110 or OV 1701/octakis(3-O-butyryl-2,6-di-O-pentyl)-γ-cyclodextrin)
Source of chirality: HPLC on triacetylcellulose

C_9H_8O
(-)-3,4-Benzo-2-oxa-bicyclo[3.1.0]hex-3-ene

F.-G. Klärner, A. E. Kleine, D. Oebels, F. Scheidt

Tetrahedron: Asymmetry **1993,** *4*, 479



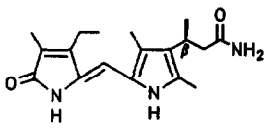
$[\alpha]^{546}$ = +15.51° (c = 0.041 g/ml toluene)

Source of chirality: HPLC on triacetylcellulose

$C_{15}H_{13}P$
(+)-*anti*-3,4-Benzo-2-phenyl-2-phospha-bicyclo[3.1.0]hex-3-ene

S.E. Boiadjiev, R.V. Person and D.A. Lightner

Tetrahedron: Asymmetry **1993**, *4*, 491

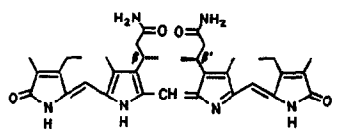


E.e. = 100%
$[\alpha]_D^{20}$ = +35.9 (*c* 0.061, $CHCl_3$)
Source of chirality: synthesis and resolution
Absolute configuration: *S*
(assigned by X-ray of Brucine salt of precursor monopyrrole acid)

$C_{18}H_{25}N_3O_2$
(*βS*)-Methylxanthobilirubic Acid Amide

S.E. Boiadjiev, R.V. Person and D.A. Lightner

Tetrahedron: Asymmetry **1993**, *4*, 491

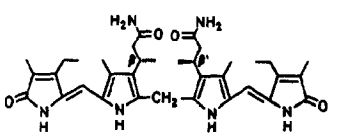


E.e. = 100%
$[\alpha]_{436}^{20}$ = +3210 (*c* 3.0 x10^{-3}, $CHCl_3$)
Source of chirality: synthesis
Absolute configuration: *S,S*
(assigned by X-ray of Brucine salt of precursor monopyrrole acid)

$C_{35}H_{44}N_6O_4$
(*βS,β'S*)-Dimethylmesobiliverdin-XIIIα Diamide

S.E. Boiadjiev, R.V. Person and D.A. Lightner

Tetrahedron: Asymmetry **1993**, *4*, 491

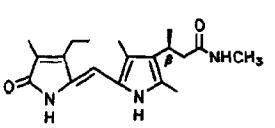


E.e. = 100%
$[\alpha]_D^{20}$ = -5770 (*c* 3.3 x10^{-3}, $CHCl_3$)
CD: $\Delta\epsilon_{429}^{max}$ -403, $\Delta\epsilon_{385}^{max}$ +216 (*c* 1.06 x10^{-5} *M*, $CHCl_3$)
Source of chirality: synthesis
Absolute configuration: *S,S*
(assigned by X-ray of Brucine salt of precursor monopyrrole acid

$C_{35}H_{46}N_6O_4$
(*βS,β'S*)-Dimethylmesobilirubin-XIIIα Diamide

S.E. Boiadjiev, R.V. Person and D.A. Lightner

Tetrahedron: Asymmetry **1993**, *4*, 491

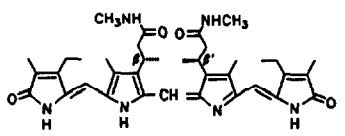


E.e. = 100%
$[\alpha]_D^{20}$ = +62.8 (*c* 0.078, $CHCl_3$)
Source of chirality: synthesis and resolution
Absolute configuration: *S*
(assigned by X-ray of Brucine salt of precursor monopyrrole acid

$C_{19}H_{27}N_3O_2$
(*βS*)-Methylxanthobilirubic Acid N-Methylamide

S.E. Boiadjiev, R.V. Person and D.A. Lightner

Tetrahedron: Asymmetry **1993**, *4*, 491

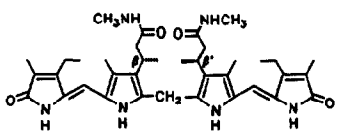


E.e. = 100%
$[\alpha]_{436}^{20}$ = +1050 (*c* 3 x10^{-3}, $CHCl_3$)
Source of chirality: synthesis and resolution
Absolute configuration: *S,S*
(assigned by X-ray of Brucine salt of precursor monopyrrole acid

$C_{37}H_{48}N_6O_4$
(β*S*,β′*S*)-Dimethylmesobiliverdin-XIIIα Bis-N-methylamide

S.E. Boiadjiev, R.V. Person and D.A. Lightner

Tetrahedron: Asymmetry **1993**, *4*, 491

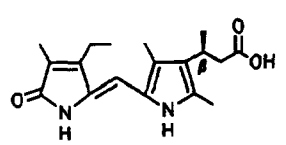


E.e. = 100%
$[\alpha]_D^{20}$ = -5180 (*c* = 4.4 x10^{-3}, $CHCl_3$)
CD: $\Delta\epsilon_{431}^{max}$ -348, $\Delta\epsilon_{386}^{max}$ +187 (*c* 1.35 x10^{-5} *M*, $CHCl_3$)
Source of chirality: synthesis and resolution
Absolute configuration: *S,S*
(assigned by X-ray of Brucine salt of precursor monopyrrole acid

$C_{37}H_{50}N_6O_4$
(β*S*,β′*S*)-Dimethylmesobilirubin-XIIIα Bis-N-methylamide

S.E. Boiadjiev, R.V. Person and D.A. Lightner

Tetrahedron: Asymmetry **1993**, *4*, 491

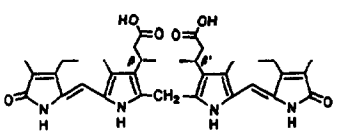


E.e. = 100%
$[\alpha]_D^{20}$ = -314 (*c* 0.069, $CHCl_3$)
Source of chirality: synthesis and resolution
Absolute configuration: *S*
(assigned by X-ray of Brucine salt of precursor monopyrrole acid)

$C_{18}H_{24}N_2O_3$
(β*S*)-Methylxanthobilirubic Acid

S.E. Boiadjiev, R.V. Person and D.A. Lightner

Tetrahedron: Asymmetry **1993**, *4*, 491

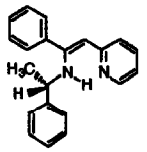


E.e. = 100%
$[\alpha]_D^{20}$ = -4730 (*c* 8.6 x10^{-3}, $CHCl_3$)
CD: $\Delta\epsilon_{434}^{max}$ -337, $\Delta\epsilon_{389}^{max}$ +186 (*c* 5x10^{-5} *M*, $CHCl_3$)
Source of chirality: synthesis and resolution
Absolute configuration: *S,S*
(assigned by X-ray of Brucine salt of precursor monopyrrole acid)

$C_{35}H_{44}N_4O_6$
(β*S*,β′*S*)-Dimethylmesobilirubin-XIIIα

V. Šunjić, D. Šepac, B. Kojić-Prodić, R. Kiralj, K. Mlinarić-Majerski, V. Vinković

Tetrahedron: Asymmetry **1993**, *4*, 575



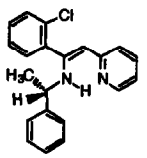
$C_{21}H_{20}N_2$

S- α -Methyl-[1-phenyl-2-(2'-pyrido)-1-ethyliden] benzylamine

$[\alpha]_D$+730 (c 1.0, $CHCl_3$)
Source of chirality: S-(-)-α-Methylbenzylamine
Absolute configuration: S

V. Šunjić, D. Šepac, B. Kojić-Prodić, R. Kiralj, K. Mlinarić-Majerski, V. Vinković

Tetrahedron: Asymmetry **1993**, *4*, 575



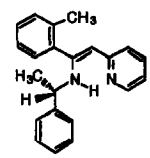
$C_{21}H_{19}N_2Cl$

S- α -Methyl-[1-(2-chlorophenyl)-2-(2'-pyrido)-1-ethyliden] benzylamine

$[\alpha]_D$+784 (c 1.0, $CHCl_3$)
Source of chirality: S-(-)-α-Methylbenzylamine
Absolute configuration: S

V. Šunjić, D. Šepac, B. Kojić-Prodić, R. Kiralj, K. Mlinarić-Majerski, V. Vinković

Tetrahedron: Asymmetry **1993**, *4*, 575



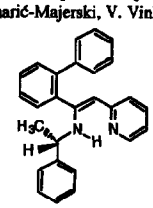
$C_{22}H_{22}N_2$

S- α -Methyl-[1-(2-methylphenyl)-2-(2'-pyrido)-1-ethyliden] benzylamine

$[\alpha]_D$+955 (c 1.0, $CHCl_3$)
Source of chirality: S-(-)-α-Methylbenzylamine
Absolute configuration: S

V. Šunjić, D. Šepac, B. Kojić-Prodić, R. Kiralj, K. Mlinarić-Majerski, V. Vinković

Tetrahedron: Asymmetry **1993**, *4*, 575



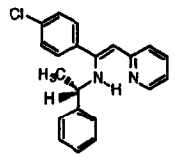
$C_{27}H_{24}N_2$

S- α -Methyl-[1-(2-phenylphenyl)-2-(2'-pyrido)-1-ethyliden] benzylamine

$[\alpha]_D$+760 (c 1.0, $CHCl_3$)
Source of chirality: S-(-)-α-Methylbenzylamine
Absolute configuration: S

V. Šunjić, D. Šepac, B. Kojić-Prodić, R. Kiralj, K. Mlinarić-Majerski, V. Vinković

Tetrahedron: Asymmetry **1993**, *4*, 575



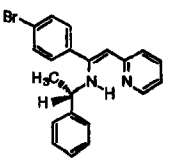
$C_{21}H_{19}N_2Cl$

S- α -Methyl-[1-(4-clorophenyl)-2-(2'-pyrido)-1-ethyliden] benzylamine

$[\alpha]_D$+707 (c 1.0, $CHCl_3$)
Source of chirality: S-(-)-α-Methylbenzylamine
Absolute configuration: S

V. Šunjić, D. Šepac, B. Kojić-Prodić, R. Kiralj, K. Mlinarić-Majerski, V. Vinković

Tetrahedron: Asymmetry **1993**, *4*, 575



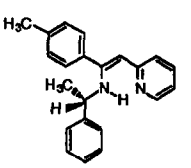
$C_{21}H_{19}N_2Br$

S- α -Methyl-[1-(4-bromophenyl)-2-(2'-pyrido)-1-ethyliden] benzylamine

$[\alpha]_D$+563 (c 1.0, $CHCl_3$)
Source of chirality: S-(-)-α-Methylbenzylamine
Absolute configuration: S

V. Šunjić, D. Šepac, B. Kojić-Prodić, R. Kiralj, K. Mlinarić-Majerski, V. Vinković

Tetrahedron: Asymmetry **1993**, *4*, 575



$C_{22}H_{22}N_2$

S- α -Methyl-[1-(4-methylphenyl)-2-(2'-pyrido)-1-ethyliden] benzylamine

$[\alpha]_D$+631 (c 1.0, $CHCl_3$)
Source of chirality: S-(-)-α-Methylbenzylamine
Absolute configuration: S

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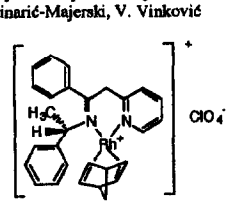

$C_{28}H_{26}N_2RhClO_4$

Rh(I)-[S- α -Methyl-[(phenyl)-2-(2'-pyrido)-1-ethyliden] benzylamine, norbornadiene] perchlorate

$[\alpha]_D$ −40 (c 1.0, $CHCl_3$)
Source of chirality: S-(-)-α-Methylbenzylamine
Absolute configuration: S

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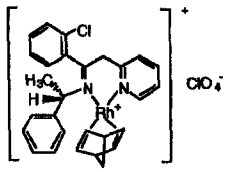

$C_{28}H_{27}N_2RhClO_4$

Rh(I)-[S- α -Methyl-[(2-chlorophenyl)-2-(2'-pyrido)-1-ethyliden] benzylamine, norbornadiene] perchlorate

$[\alpha]_D$ –66 (c 1.0, $CHCl_3$)
Source of chirality: S-(-)-α-Methylbenzylamine
Absolute configuration: S

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K. Mlinarić-Majerski, V. Vinković

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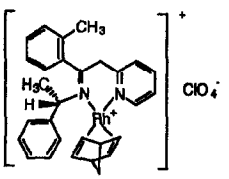

$C_{29}H_{30}N_2RhClO_4$

Rh(I)-[S- α -Methyl-[(2-methylphenyl)-2-(2'-pyrido)-1-ethyliden] benzylamine, norbornadiene] perchlorate

$[\alpha]_D$ –58 (c 1.0, $CHCl_3$)
Source of chirality: S-(-)-α-Methylbenzylamine
Absolute configuration: S

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K. Mlinarić-Majerski, V. Vinković

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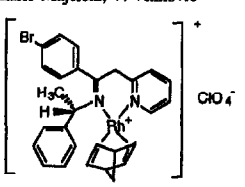

$C_{28}H_{27}N_2RhBrClO_4$

Rh(I)-[S- α -Methyl-[(4-bromophenyl)-2-(2'-pyrido)-1-ethyliden] benzylamine, norbornadiene] perchlorate

$[\alpha]_D$ –46 (c 1.0, $CHCl_3$)
Source of chirality: S-(-)-α-Methylbenzylamine
Absolute configuration: S

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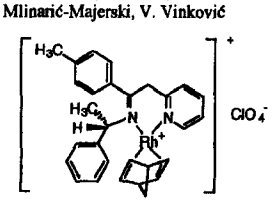
K. Mlinarić-Majerski, V. Vinković

Tetrahedron: Asymmetry **1993,** *4*, 575



$C_{29}H_{30}N_2RhClO_4$

Rh(I)-[S- α -Methyl-[(4-methylphenyl)-2-(2'-pyrido)-1-ethyliden] benzylamine, norbornadiene] perchlorate

$[\alpha]_D$ +16 (c 1.0, $CHCl_3$)
Source of chirality: S-(-)-α-Methylbenzylamine
Absolute configuration: S

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K. Mlinarić-Majerski, V. Vinković

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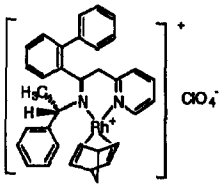

$C_{34}H_{32}N_2RhClO_4$

Rh(I)-[S- α -Methyl-[(2-phenylphenyl)-2-(2'-pyrido)-1-ethyliden] benzylamine, norbornadiene] perchlorate

$[\alpha]_D$ −62 (c 1.0, $CHCl_3$)
Source of chirality: S-(-)-α-Methylbenzylamine
Absolute configuration: S

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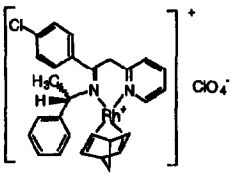

$C_{28}H_{27}N_2RhCl_2O_4$

Rh(I)-[S- α -Methyl-[(4-chlorophenyl)-2-(2'-pyrido)-1-ethyliden] benzylamine, norbornadiene] perchlorate

$[\alpha]_D$ −20 (c 0.1, $CHCl_3$)
Source of chirality: S-(-)-α-Methylbenzylamine
Absolute configuration: S