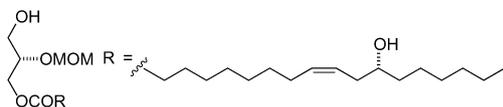


Stereochemistry abstracts

Iwao Hachiya, Yoshihumi Sugiura, Hiromasa Araki, Osamu Inaoka, Makoto Shimizu,\* Masatsugu Akita and Takashi Hamaguchi

*Tetrahedron: Asymmetry 18 (2007) 915*



De = 94%

$[\alpha]_D^{21} = +8.2$  (c 0.093, CHCl<sub>3</sub>)

Source of chirality: enzymatic hydrolysis

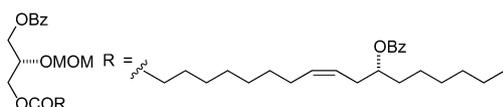
Absolute configuration: (2'S,12R)

C<sub>23</sub>H<sub>44</sub>O<sub>6</sub>

(9Z,2'S,12R)-3'-Hydroxy-2'-(methoxymethoxy)propyl 12-hydroxyoctadec-9-enoate

Iwao Hachiya, Yoshihumi Sugiura, Hiromasa Araki, Osamu Inaoka, Makoto Shimizu,\* Masatsugu Akita and Takashi Hamaguchi

*Tetrahedron: Asymmetry 18 (2007) 915*



De = 94%

$[\alpha]_D^{20} = +14.6$  (c 0.091, CHCl<sub>3</sub>)

Source of chirality: enzymatic hydrolysis

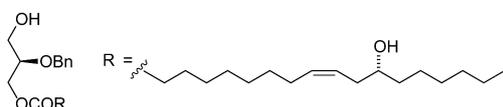
Absolute configuration: (2'R,12R)

C<sub>37</sub>H<sub>52</sub>O<sub>8</sub>

(9Z,2'R,12R)-3'-Benzoyloxy-2'-(methoxymethoxy)propyl 12-benzoyloxyoctadec-9-enoate

Iwao Hachiya, Yoshihumi Sugiura, Hiromasa Araki, Osamu Inaoka, Makoto Shimizu,\* Masatsugu Akita and Takashi Hamaguchi

*Tetrahedron: Asymmetry 18 (2007) 915*



De = 96%

$[\alpha]_D^{24} = -8.5$  (c 0.218, CHCl<sub>3</sub>)

Source of chirality: enzymatic transesterification

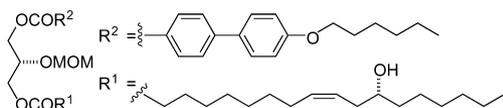
Absolute configuration: (2'R,12R)

C<sub>28</sub>H<sub>46</sub>O<sub>5</sub>

(9Z,2'R,12R)-2'-Benzyloxy-3'-hydroxypropyl 12-hydroxyoctadec-9-enoate

Iwao Hachiya, Yoshihumi Sugiura, Hiromasa Araki, Osamu Inaoka, Makoto Shimizu,\* Masatsugu Akita and Takashi Hamaguchi

*Tetrahedron: Asymmetry 18 (2007) 915*



De = 94%

$[\alpha]_D^{26} = +0.91$  (c 0.29, CHCl<sub>3</sub>)

Source of chirality: enzymatic hydrolysis

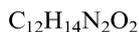
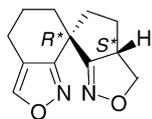
Absolute configuration: (2'R,12R)

C<sub>42</sub>H<sub>64</sub>O<sub>8</sub>

(9Z,2'R,12R)-3'-4-(4-hexyloxyloxyphenyl)benzoyl-2'-(methoxymethoxy)propyl 12-hydroxyoctadec-9-enoate

Priti S. Koranne, Tetsuya Tsujihara, Midori A. Arai, Gan B. Bajracharya,  
Takeyuki Suzuki, Kiyotaka Onitsuka and Hiroaki Sasai\*

*Tetrahedron: Asymmetry 18 (2007) 919*



(*R^\**,*S^\**)-3',3a',4',5,5',6-hexahydro-4*H*-spiro[2,1-benzisoxazole-7,6'-cyclopenta[*c*]isoxazole]

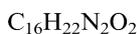
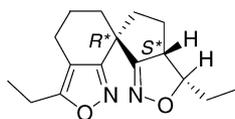
Ee = >99%

$[\alpha]_D^{29} = -134$  (c 0.11,  $CHCl_3$ )

Relative configuration: (*R^\**,*S^\**)

Priti S. Koranne, Tetsuya Tsujihara, Midori A. Arai, Gan B. Bajracharya,  
Takeyuki Suzuki, Kiyotaka Onitsuka and Hiroaki Sasai\*

*Tetrahedron: Asymmetry 18 (2007) 919*



(*R^\**,*S^\**)-3,3'-diethyl-3',3a',4',5,5',6-hexahydro-4*H*-spiro[2,1-benzisoxazole-7,6'-cyclopenta[*c*]isoxazole]

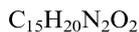
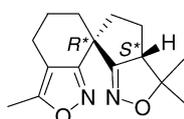
Ee = >99%

$[\alpha]_D^{29} = -186$  (c 0.10,  $CHCl_3$ )

Relative configuration: (*R^\**,*S^\**)

Priti S. Koranne, Tetsuya Tsujihara, Midori A. Arai, Gan B. Bajracharya,  
Takeyuki Suzuki, Kiyotaka Onitsuka and Hiroaki Sasai\*

*Tetrahedron: Asymmetry 18 (2007) 919*



(*R^\**,*S^\**)-3,3',3'-trimethyl-3',3a',4',5,5',6-hexahydro-4*H*-spiro[2,1-benzisoxazole-7,6'-cyclopenta[*c*]isoxazole]

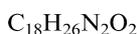
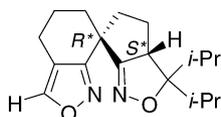
Ee = >99%

$[\alpha]_D^{29} = -202$  (c 0.10,  $CHCl_3$ )

Relative configuration: (*R^\**,*S^\**)

Priti S. Koranne, Tetsuya Tsujihara, Midori A. Arai, Gan B. Bajracharya,  
Takeyuki Suzuki, Kiyotaka Onitsuka and Hiroaki Sasai\*

*Tetrahedron: Asymmetry 18 (2007) 919*



(*R^\**,*S^\**)-3',3'-diisopropyl-3',3a',4',5,5',6-hexahydro-4*H*-spiro[2,1-benzisoxazole-7,6'-cyclopenta[*c*]isoxazole]

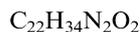
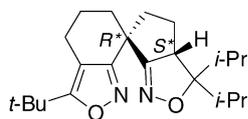
Ee = >99%

$[\alpha]_D^{29} = -178$  (c 0.11,  $CHCl_3$ )

Relative configuration: (*R^\**,*S^\**)

Priti S. Koranne, Tetsuya Tsujihara, Midori A. Arai, Gan B. Bajracharya, Takeyuki Suzuki, Kiyotaka Onitsuka and Hiroaki Sasai\*

*Tetrahedron: Asymmetry 18 (2007) 919*



(*R*\*,*S*\*)-3-*tert*-Butyl-3',3'-diisopropyl-3',3a',4',5,5',6-hexahydro-4*H*-spiro[2,1-benzisoxazole-7,6'-cyclopenta[*c*]isoxazole]

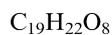
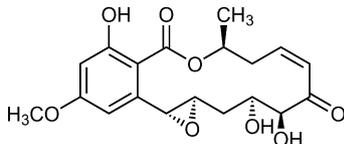
$E_e = >99\%$

$[\alpha]_D^{29} = -114$  (*c* 0.10,  $CHCl_3$ )

Relative configuration: (*R*\*,*S*\*)

Hidayat Hussain, Karsten Krohn,\* Ulrich Flörke, Barbara Schulz, Siegfried Draeger, Gennaro Pescitelli, Piero Salvadori, Sándor Antus and Tibor Kurtán

*Tetrahedron: Asymmetry 18 (2007) 925*

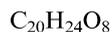
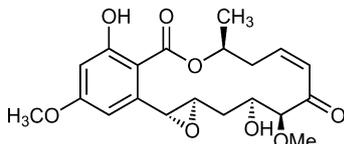


Hypothemycin

$[\alpha]_D^{20} = +18$  (*c* 0.50,  $CHCl_3$ )

Hidayat Hussain, Karsten Krohn,\* Ulrich Flörke, Barbara Schulz, Siegfried Draeger, Gennaro Pescitelli, Piero Salvadori, Sándor Antus and Tibor Kurtán

*Tetrahedron: Asymmetry 18 (2007) 925*

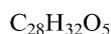
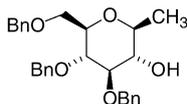


5'-*O*-Methylhypothemycin 2

$[\alpha]_D^{20} = +21.0$  (*c* 0.50,  $CHCl_3$ , 5%  $CH_3OH$ )

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



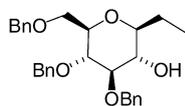
2,6-Anhydro-4,5,7-tri-*O*-benzyl-1-deoxy-*D*-glycero-*D*-gulo-heptitol

$[\alpha]_D = +42.9$  (*c* 1.1,  $CHCl_3$ )

Source of chirality: *D*-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



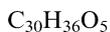
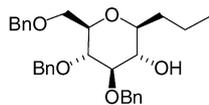
3,7-Anhydro-5,6,8-tri-*O*-benzyl-1,2-dideoxy-D-glycero-D-gulo-octitol

$[\alpha]_D = +35.8$  (*c* 1.1,  $CHCl_3$ )

Source of chirality: D-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



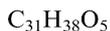
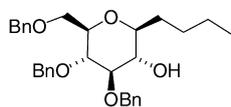
4,8-Anhydro-6,7,9-tri-*O*-benzyl-1,2,3-trideoxy-D-glycero-D-gulo-nonitol

$[\alpha]_D = +30.2$  (*c* 1.1,  $CHCl_3$ )

Source of chirality: D-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



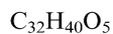
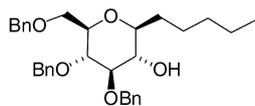
5,9-Anhydro-7,8,10-tri-*O*-benzyl-1,2,3,4-tetradecoxy-D-glycero-D-gulo-decitol

$[\alpha]_D = +29.0$  (*c* 1.0,  $CHCl_3$ )

Source of chirality: D-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



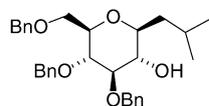
6,10-Anhydro-8,9,11-tri-*O*-benzyl-1,2,3,4,5-pentadeoxy-D-glycero-D-gulo-undecitol

$[\alpha]_D = +24.8$  (*c* 1.0,  $CHCl_3$ )

Source of chirality: D-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



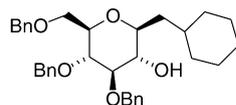
4,8-Anhydro-6,7,9-tri-*O*-benzyl-1,2,3-trideoxy-2-methyl-*D*-glycero-*D*-gulo-nonitol

$[\alpha]_D = +18.2$  (*c* 1.1,  $CHCl_3$ )

Source of chirality: *D*-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



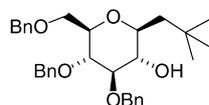
2,6-Anhydro-4,5,7-tri-*O*-benzyl-1-cyclohexyl-1-deoxy-*D*-glycero-*D*-gulo-heptitol

$[\alpha]_D = +22.3$  (*c* 1.1,  $CHCl_3$ )

Source of chirality: *D*-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



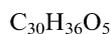
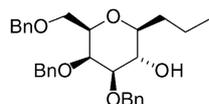
4,8-Anhydro-6,7,9-tri-*O*-benzyl-1,2,3-trideoxy-2,2-dimethyl-*D*-glycero-*D*-gulo-nonitol

$[\alpha]_D = +18.1$  (*c* 1.1,  $CHCl_3$ )

Source of chirality: *D*-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



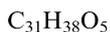
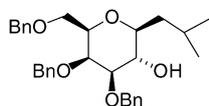
4,8-Anhydro-6,7,9-tri-*O*-benzyl-1,2,3-trideoxy-*D*-glycero-*L*-manno-nonitol

$[\alpha]_D = +152.7$  (*c* 1.1,  $CHCl_3$ )

Source of chirality: *D*-(+)-galactal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



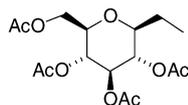
4,8-Anhydro-6,7,9-tri-*O*-benzyl-1,2,3-trideoxy-2-methyl-*D*-glycero-*L*-manno-nonitol

$[\alpha]_D = +155.1$  (*c* 1.0,  $CHCl_3$ )

Source of chirality: *D*-(+)-galactal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



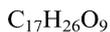
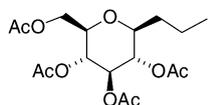
4,5,6,8-Tetra-*O*-acetyl-3,7-anhydro-1,2-dideoxy-*D*-glycero-*D*-gulo-octitol

$[\alpha]_D = -8.7$  (*c* 0.5,  $CHCl_3$ )

Source of chirality: *D*-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



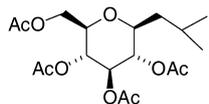
5,6,7,9-Tetra-*O*-acetyl-4,8-anhydro-1,2,3-trideoxy-*D*-glycero-*D*-gulo-nonitol

$[\alpha]_D = -13.0$  (*c* 0.7,  $CHCl_3$ )

Source of chirality: *D*-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



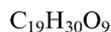
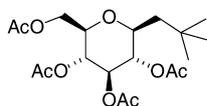
5,6,7,9-Tetra-*O*-acetyl-4,8-anhydro-2-methyl-*D*-glycero-*D*-gulo-nonitol

$[\alpha]_D = -14.5$  (*c* 0.5,  $CHCl_3$ )

Source of chirality: *D*-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



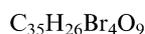
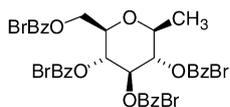
5,6,7,9-Tetra-*O*-acetyl-4,8-anhydro-1,2,3-trideoxy-2,2-dimethyl-*D*-glycero-*D*-gulo-nonitol

$[\alpha]_D = -7.8$  (*c* 0.4,  $CHCl_3$ )

Source of chirality: *D*-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



2,6-Anhydro-3,4,5,7-tetra-*O*-(*p*-bromobenzoyl)-1-deoxy-*D*-glycero-*D*-gulo-heptitol

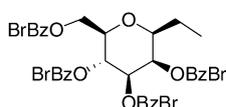
$[\alpha]_D = +50.0$  (*c* 1.1,  $CHCl_3$ )

CD ( $CH_3CN$ )  $\lambda_{ext}$  ( $\Delta\epsilon$ ) 251 nm (22.4), 234 nm (-6.5)

Source of chirality: *D*-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



3,7-Anhydro-4,5,6,8-tetra-*O*-(*p*-bromobenzoyl)-1,2-dideoxy-*D*-glycero-*D*-gulo-octitol

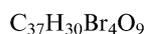
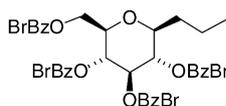
$[\alpha]_D = +42.8$  (*c* 1.4,  $CHCl_3$ )

CD ( $CH_3CN$ )  $\lambda_{ext}$  ( $\Delta\epsilon$ ) 251 nm (21.0), 234 nm (-6.0)

Source of chirality: *D*-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



4,8-Anhydro-5,6,7,9-tetra-*O*-(*p*-bromobenzoyl)-1,2,3-trideoxy-*D*-glycero-*D*-gulo-nonitol

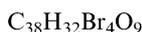
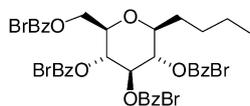
$[\alpha]_D = +37.7$  (*c* 1.0,  $CHCl_3$ )

CD ( $CH_3CN$ )  $\lambda_{ext}$  ( $\Delta\epsilon$ ) 251 nm (18.8), 234 nm (-6.3)

Source of chirality: *D*-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



5,9-Anhydro-6,7,8,10-tetra-*O*-(*p*-bromobenzoyl)-1,2,3,4-tetra-deoxy-*D*-glycero-*D*-gulo-decitol

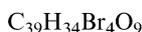
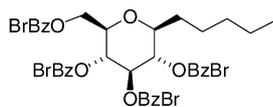
$[\alpha]_D = +33.2$  (*c* 1.0,  $CHCl_3$ )

CD ( $CH_3CN$ )  $\lambda_{ext}$  ( $\Delta\epsilon$ ) 251 nm (17.6), 234 nm (−5.9)

Source of chirality: *D*-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



6,10-Anhydro-7,8,9,11-tetra-*O*-(*p*-bromobenzoyl)-1,2,3,4,5-pentadeoxy-*D*-glycero-*D*-gulo-undecitol

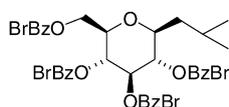
$[\alpha]_D = +34.2$  (*c* 1.2,  $CHCl_3$ )

CD( $CH_3CN$ )  $\lambda_{ext}$  ( $\Delta\epsilon$ ) 251 nm (17.4), 234 nm (−6.0)

Source of chirality: *D*-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



4,8-Anhydro-5,6,7,9-tetra-*O*-(*p*-bromobenzoyl)-2-methyl-*D*-glycero-*D*-gulo-nonitol

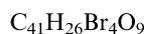
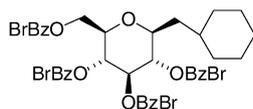
$[\alpha]_D = +28.9$  (*c* 1.1,  $CHCl_3$ )

CD ( $CH_3CN$ )  $\lambda_{ext}$  ( $\Delta\epsilon$ ) 251 nm (16.7), 234 nm (−5.2)

Source of chirality: *D*-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



2,6-Anhydro-3,4,5,7-tetra-*O*-(*p*-bromobenzoyl)-1-cyclohexyl-1-deoxy-*D*-glycero-*D*-gulo-heptitol

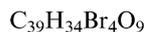
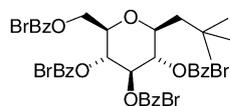
$[\alpha]_D = +22.1$  (*c* 1.1,  $CHCl_3$ )

CD ( $CH_3CN$ )  $\lambda_{ext}$  ( $\Delta\epsilon$ ) 251 nm (12.2), 234 nm (−3.8)

Source of chirality: *D*-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



4,8-Anhydro-5,6,7,9-tetra-*O*-(*p*-bromobenzoyl)-1,2,3-trideoxy-2,2-dimethyl-*D*-glycero-*D*-gulo-nonitol

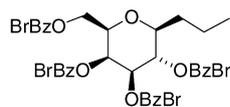
$[\alpha]_D = +14.7$  (*c* 1.1,  $CHCl_3$ )

CD ( $CH_3CN$ )  $\lambda_{ext}$  ( $\Delta\epsilon$ ) 251 nm (10.6), 234 nm (-3.7)

Source of chirality: *D*-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



4,8-Anhydro-5,6,7,9-tetra-*O*-(*p*-bromobenzoyl)-1,2,3-trideoxy-*D*-glycero-*L*-manno-nonitol

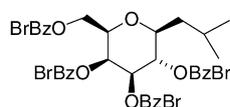
$[\alpha]_D = +152.7$  (*c* 1.1,  $CHCl_3$ )

CD ( $CH_3CN$ )  $\lambda_{ext}$  ( $\Delta\epsilon$ ) 251 nm (66.9), 234 nm (-23.5)

Source of chirality: *D*-(+)-galactal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



4,8-Anhydro-5,6,7,9-tetra-*O*-(*p*-bromobenzoyl)-2-methyl-*D*-glycero-*L*-manno-nonitol

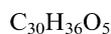
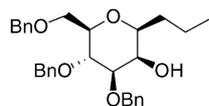
$[\alpha]_D = +155.1$  (*c* 1.0,  $CHCl_3$ )

CD ( $CH_3CN$ )  $\lambda_{ext}$  ( $\Delta\epsilon$ ) 251 nm (70.4), 234 nm (-25.7)

Source of chirality: *D*-(+)-galactal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



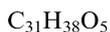
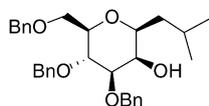
4,8-Anhydro-6,7,9-tri-*O*-benzyl-1,2,3-trideoxy-*D*-glycero-*D*-galacto-nonitol

$[\alpha]_D = -165.3$  (*c* 1.0,  $CHCl_3$ )

Source of chirality: *D*-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



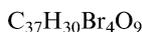
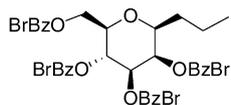
4,8-Anhydro-6,7,9-tri-*O*-benzyl-1,2,3-trideoxy-2-methyl-*D*-glycero-*D*-galacto-nonitol

$[\alpha]_D = -170.6$  (*c* 1.1,  $CHCl_3$ )

Source of chirality: *D*-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



4,8-Anhydro-5,6,7,9-tetra-*O*-(*p*-bromobenzoyl)-1,2,3-trideoxy-*D*-glycero-*D*-galacto-nonitol

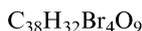
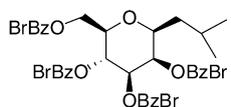
$[\alpha]_D = -165.3$  (*c* 1.0,  $CHCl_3$ )

CD ( $CH_3CN$ )  $\lambda_{ext}$  ( $\Delta\epsilon$ ) 251 nm (-70.2), 234 nm (20.0)

Source of chirality: *D*-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



4,8-Anhydro-5,6,7,9-tetra-*O*-(*p*-bromobenzoyl)-2-methyl-*D*-glycero-*D*-galacto-nonitol

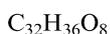
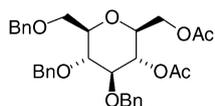
$[\alpha]_D = -170.6$  (*c* 1.1,  $CHCl_3$ )

CD ( $CH_3CN$ )  $\lambda_{ext}$  ( $\Delta\epsilon$ ) 251 nm (-71.3), 234 nm (22.9)

Source of chirality: *D*-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



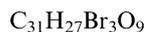
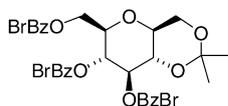
1,3-Di-*O*-acetyl-2,6-anhydro-4,5,7-tri-*O*-benzyl-*D*-glycero-*D*-gulo-heptitol

$[\alpha]_D = +19.9$  (*c* 1.1,  $CHCl_3$ )

Source of chirality: *D*-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



2,6-Anhydro-4,5,7-penta-*O*-(*p*-bromobenzoyl)-1,3-*O*-iso-propylidene-*D*-glycero-*D*-gulo-heptitol

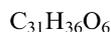
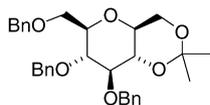
$[\alpha]_D = -33.0$  (*c* 1.2,  $CHCl_3$ )

CD ( $CH_3CN$ )  $\Delta\epsilon$  254 (−18.4), 237 nm (10.5)

Source of chirality: *D*-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



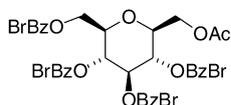
2,6-Anhydro-4,5,7-tri-*O*-benzyl-1,3-*O*-iso-propylidene-*D*-glycero-*D*-gulo-heptitol

$[\alpha]_D = +18.7$  (*c* 1.4,  $CHCl_3$ )

Source of chirality: *D*-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



1-*O*-Acetyl-2,6-anhydro-3,4,5,7-tetra-*O*-(*p*-bromobenzoyl)-*D*-glycero-*D*-gulo-heptitol

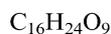
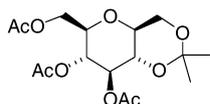
$[\alpha]_D = +32.9$  (*c* 1.1,  $CHCl_3$ )

CD ( $CH_3CN$ )  $\Delta\epsilon$  251 nm (20.9), 234 nm (−6.6)

Source of chirality: *D*-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



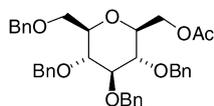
4,5,7-Tri-*O*-acetyl-2,6-anhydro-1,3-*O*-iso-propylidene-*D*-glycero-*D*-gulo-heptitol

$[\alpha]_D = +42.3$  (*c* 1.0,  $CHCl_3$ )

Source of chirality: *D*-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez\*

*Tetrahedron: Asymmetry 18 (2007) 931*



$C_{37}H_{40}O_7$

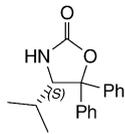
1-O-Acetyl-2,6-anhydro-3,4,5,7-tetra-O-benzyl-D-glycero-D-gulo-heptitol

$[\alpha]_D = -6.0$  (*c* 0.5,  $CHCl_3$ )

Source of chirality: D-(+)-glucal

Luo-Ting Yu, Meng-Tsung Ho, Ching-Yao Chang and Teng-Kuei Yang\*

*Tetrahedron: Asymmetry 18 (2007) 949*



$C_{18}H_{19}NO_2$

(S)-4-(1-Methylethyl)-5,5-diphenyl-2-oxazolidinone

Ee >99%

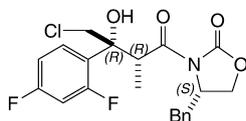
$[\alpha]_D^{25} = -255.2$  (*c* 0.2,  $CHCl_3$ )

Source of chirality: L-valine

Absolute configuration: (S)

Luo-Ting Yu, Meng-Tsung Ho, Ching-Yao Chang and Teng-Kuei Yang\*

*Tetrahedron: Asymmetry 18 (2007) 949*



$C_{21}H_{20}ClF_2NO_4$

[3(2*R*,3*R*),4*S*]-4-Benzyl-3-[4-chloro-3-(2,4-difluorophenyl)-3-hydroxy-2-methyl-1-oxobutyl]-2-oxazolidinone

De >98%

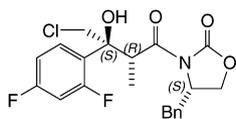
$[\alpha]_D^{25} = +9.9$  (*c* 1.0,  $CH_2Cl_2$ )

Source of chirality: L-phenylalanine

Absolute configuration: (R,R,S)

Luo-Ting Yu, Meng-Tsung Ho, Ching-Yao Chang and Teng-Kuei Yang\*

*Tetrahedron: Asymmetry 18 (2007) 949*



$C_{21}H_{20}ClF_2NO_4$

[3(2*R*,3*S*),4*S*]-4-Benzyl-3-[4-chloro-3-(2,4-difluorophenyl)-3-hydroxy-2-methyl-1-oxobutyl]-2-oxazolidinone

De >98%

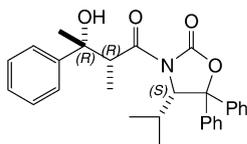
$[\alpha]_D^{25} = +32.8$  (*c* 1.0,  $CH_2Cl_2$ )

Source of chirality: L-phenylalanine

Absolute configuration: (S,R,S)

Luo-Ting Yu, Meng-Tsung Ho, Ching-Yao Chang and Teng-Kuei Yang\*

*Tetrahedron: Asymmetry 18 (2007) 949*



$C_{29}H_{31}NO_4$

[3(2*R*,3*R*),4*S*]-5,5-Diphenyl-4-isopropyl-3-(3-phenyl-3-hydroxy-2-methyl-1-oxobutyl)-2-oxazolidinone

De >98%

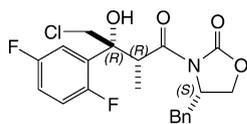
$[\alpha]_D^{25} = -127.3$  (*c* 1.0,  $CH_2Cl_2$ )

Source of chirality: L-valine

Absolute configuration: (*R,R,S*)

Luo-Ting Yu, Meng-Tsung Ho, Ching-Yao Chang and Teng-Kuei Yang\*

*Tetrahedron: Asymmetry 18 (2007) 949*



$C_{21}H_{20}ClF_2NO_4$

[3(2*R*,3*R*),4*S*]-4-Benzyl-3-[4-chloro-3-(2,5-difluorophenyl)-3-hydroxy-2-methyl-1-oxobutyl]-2-oxazolidinone

De >98%

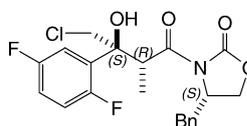
$[\alpha]_D^{25} = +7.7$  (*c* 1.0,  $CH_2Cl_2$ )

Source of chirality: L-phenylalanine

Absolute configuration: (*R,R,S*)

Luo-Ting Yu, Meng-Tsung Ho, Ching-Yao Chang and Teng-Kuei Yang\*

*Tetrahedron: Asymmetry 18 (2007) 949*



$C_{21}H_{20}ClF_2NO_4$

[3(2*R*,3*S*),4*S*]-4-Benzyl-3-[4-chloro-3-(2,5-difluorophenyl)-3-hydroxy-2-methyl-1-oxobutyl]-2-oxazolidinone

De >98%

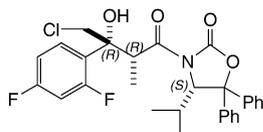
$[\alpha]_D^{25} = +41.4$  (*c* 1.0,  $CH_2Cl_2$ )

Source of chirality: L-phenylalanine

Absolute configuration: (*S,R,S*)

Luo-Ting Yu, Meng-Tsung Ho, Ching-Yao Chang and Teng-Kuei Yang\*

*Tetrahedron: Asymmetry 18 (2007) 949*



$C_{29}H_{28}ClF_2NO_4$

[3(2*R*,3*R*),4*S*]-5,5-Diphenyl-4-isopropyl-3-[4-chloro-3-(2,4-difluorophenyl)-3-hydroxy-2-methyl-1-oxobutyl]-2-oxazolidinone

De >98%

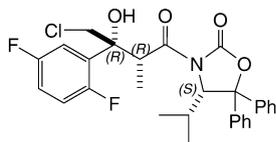
$[\alpha]_D^{25} = -110.7$  (*c* 1.0,  $CH_2Cl_2$ )

Source of chirality: L-valine

Absolute configuration: (*R,R,S*)

Luo-Ting Yu, Meng-Tsung Ho, Ching-Yao Chang and Teng-Kuei Yang\*

*Tetrahedron: Asymmetry 18 (2007) 949*



$C_{29}H_{28}ClF_2NO_4$

[3(2*R*,3*R*),4*S*]-5,5-Diphenyl-4-isopropyl-3-[4-chloro-3-(2,5-difluorophenyl)]-3-hydroxy-2-methyl-1-oxobutyl]-2-oxazolidinone

De >98%

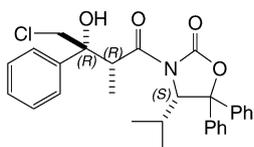
$[\alpha]_D^{25} = -109.1$  (*c* 1.0,  $CH_2Cl_2$ )

Source of chirality: L-valine

Absolute configuration: (*R,R,S*)

Luo-Ting Yu, Meng-Tsung Ho, Ching-Yao Chang and Teng-Kuei Yang\*

*Tetrahedron: Asymmetry 18 (2007) 949*



$C_{29}H_{30}ClNO_4$

[3(2*R*,3*R*),4*S*]-5,5-Diphenyl-4-isopropyl-3-(4-chloro-3-phenyl)-3-hydroxy-2-methyl-1-oxobutyl]-2-oxazolidinone

De >98%

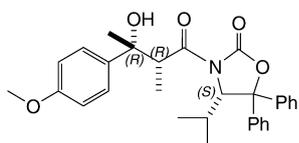
$[\alpha]_D^{25} = -112.5$  (*c* 1.0,  $CH_2Cl_2$ )

Source of chirality: L-valine

Absolute configuration: (*R,R,S*)

Luo-Ting Yu, Meng-Tsung Ho, Ching-Yao Chang and Teng-Kuei Yang\*

*Tetrahedron: Asymmetry 18 (2007) 949*



$C_{30}H_{33}NO_5$

[3(2*R*,3*R*),4*S*]-5,5-Diphenyl-4-isopropyl-3-[3-(4-methoxyphenyl)]-3-hydroxy-2-methyl-1-oxobutyl]-2-oxazolidinone

De >98%

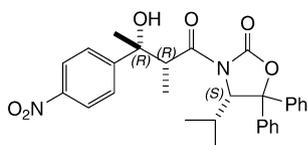
$[\alpha]_D^{25} = -124.2$  (*c* 1.0,  $CH_2Cl_2$ )

Source of chirality: L-valine

Absolute configuration: (*R,R,S*)

Luo-Ting Yu, Meng-Tsung Ho, Ching-Yao Chang and Teng-Kuei Yang\*

*Tetrahedron: Asymmetry 18 (2007) 949*



$C_{29}H_{30}N_2O_6$

[3(2*R*,3*R*),4*S*]-5,5-Diphenyl-4-isopropyl-3-[3-(4-nitrophenyl)]-3-hydroxy-2-methyl-1-oxobutyl]-2-oxazolidinone

De >98%

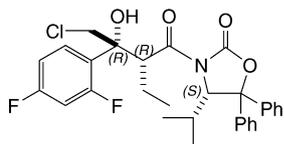
$[\alpha]_D^{25} = -101.4$  (*c* 1.0,  $CH_2Cl_2$ )

Source of chirality: L-valine

Absolute configuration: (*R,R,S*)

Luo-Ting Yu, Meng-Tsung Ho, Ching-Yao Chang and Teng-Kuei Yang\*

*Tetrahedron: Asymmetry 18 (2007) 949*



[3(2*R*,3*R*),4*S*]-5,5-Diphenyl-4-isopropyl-3-[4-chloro-3-(2,4-difluorophenyl)-3-hydroxy-2-ethyl-1-oxobutyl]-2-oxazolidinone

De >98%

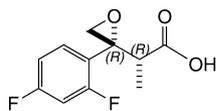
$[\alpha]_D^{25} = -148.6$  (c 1.0,  $CH_2Cl_2$ )

Source of chirality: L-valine

Absolute configuration: (*R,R,S*)

Luo-Ting Yu, Meng-Tsung Ho, Ching-Yao Chang and Teng-Kuei Yang\*

*Tetrahedron: Asymmetry 18 (2007) 949*



(2*R*,3*R*)-3-[3-(2,4-Difluorophenyl)-3,4-epoxy-2-methyl]butanoic acid

De >97%

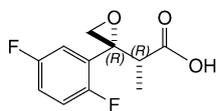
$[\alpha]_D^{25} = -42.7$  (c 1.0,  $CH_2Cl_2$ )

Source of chirality: L-valine

Absolute configuration: (*R,R*)

Luo-Ting Yu, Meng-Tsung Ho, Ching-Yao Chang and Teng-Kuei Yang\*

*Tetrahedron: Asymmetry 18 (2007) 949*



(2*R*,3*R*)-3-[3-(2,5-Difluorophenyl)-3,4-epoxy-2-methyl]butanoic acid

De >97%

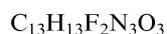
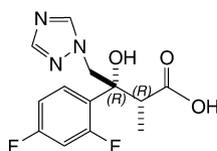
$[\alpha]_D^{25} = -41.5$  (c 1.0,  $CH_2Cl_2$ )

Source of chirality: L-valine

Absolute configuration: (*R,R*)

Luo-Ting Yu, Meng-Tsung Ho, Ching-Yao Chang and Teng-Kuei Yang\*

*Tetrahedron: Asymmetry 18 (2007) 949*



(2*R*,3*R*)-3-[3-(2,4-Difluorophenyl)-3-hydroxy-2-methyl-3-(1*H*-1,2,4-triazol-1-yl)]butanoic acid

De >97%

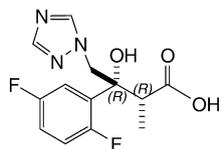
$[\alpha]_D^{25} = -52.4$  (c 1.0,  $CH_3OH$ )

Source of chirality: L-valine

Absolute configuration: (*R,R*)

Luo-Ting Yu, Meng-Tsung Ho, Ching-Yao Chang and Teng-Kuei Yang\*

*Tetrahedron: Asymmetry 18 (2007) 949*



$C_{13}H_{13}F_2N_3O_3$

(2*R*,3*R*)-3-[3-(2,5-Difluorophenyl)-3-hydroxy-2-methyl-3-(1*H*-1,2,4-triazol-1-yl)]butanoic acid

De >97%

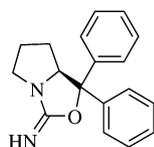
$[\alpha]_D^{25} = -43.1$  (*c* 1.0,  $CH_2Cl_2$ )

Source of chirality: L-valine

Absolute configuration: (*R,R*)

Deevi Basavaiah,\* Kalapala Venkateswara Rao and Bhavanam Sekhara Reddy

*Tetrahedron: Asymmetry 18 (2007) 963*



$C_{18}H_{18}N_2O$

(5*S*)-1-Aza-2-imino-3-oxa-4,4-diphenylbicyclo(3.3.0)octane

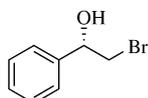
$[\alpha]_D^{25} = -221.9$  (*c* 1.14,  $CHCl_3$ )

Source of chirality: (*S*)-2-(diphenylhydroxy-methyl)pyrrolidine

Absolute configuration: (*S*)

Deevi Basavaiah,\* Kalapala Venkateswara Rao and Bhavanam Sekhara Reddy

*Tetrahedron: Asymmetry 18 (2007) 963*



$C_8H_9OBr$

(*S*)-2-Bromo-1-phenylethanol

Ee = 92%

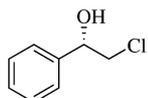
$[\alpha]_D^{25} = +40.1$  (*c* 1.8,  $CHCl_3$ )

Source of chirality: asymmetric reduction

Absolute configuration: (*S*)

Deevi Basavaiah,\* Kalapala Venkateswara Rao and Bhavanam Sekhara Reddy

*Tetrahedron: Asymmetry 18 (2007) 963*



$C_8H_9OCl$

(*S*)-2-Chloro-1-phenylethanol

Ee = 91%

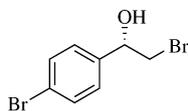
$[\alpha]_D^{25} = +44.7$  (*c* 1.1,  $C_6H_{12}$ )

Source of chirality: asymmetric reduction

Absolute configuration: (*S*)

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*Tetrahedron: Asymmetry 18 (2007) 963*



(*S*)-2-Bromo-1-(4-bromophenyl)ethanol

Ee = 92%

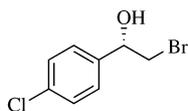
$[\alpha]_D^{25} = +31.9$  (c 1.2,  $CHCl_3$ )

Source of chirality: asymmetric reduction

Absolute configuration: (*S*)

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*Tetrahedron: Asymmetry 18 (2007) 963*



(*S*)-2-Bromo-1-(4-chlorophenyl)ethanol

Ee = 93%

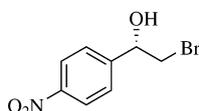
$[\alpha]_D^{25} = +39.3$  (c 1.0,  $CHCl_3$ )

Source of chirality: asymmetric reduction

Absolute configuration: (*S*)

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*Tetrahedron: Asymmetry 18 (2007) 963*



(*S*)-2-Bromo-1-(4-nitrophenyl)ethanol

Ee = 88%

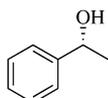
$[\alpha]_D^{25} = +32.3$  (c 1.3,  $CHCl_3$ )

Source of chirality: asymmetric reduction

Absolute configuration: (*S*)

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*Tetrahedron: Asymmetry 18 (2007) 963*



(*R*)-1-Phenylethanol

Ee = 80%

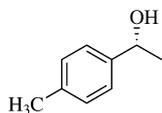
$[\alpha]_D^{25} = +35.5$  (c 1.2, MeOH)

Source of chirality: asymmetric reduction

Absolute configuration: (*R*)

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*Tetrahedron: Asymmetry 18 (2007) 963*



C<sub>9</sub>H<sub>12</sub>O

(*R*)-1-(4-Methylphenyl)ethanol

Ee = 70%

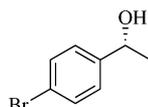
[ $\alpha$ ]<sub>D</sub><sup>25</sup> = +29.2 (*c* 1.5, MeOH)

Source of chirality: asymmetric reduction

Absolute configuration: (*R*)

Deevi Basavaiah,\* Kalapala Venkateswara Rao and Bhavanam Sekhara Reddy

*Tetrahedron: Asymmetry 18 (2007) 963*



C<sub>8</sub>H<sub>9</sub>OBr

(*R*)-1-(4-Bromophenyl)ethanol

Ee = 73%

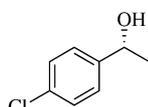
[ $\alpha$ ]<sub>D</sub><sup>25</sup> = +27.5 (*c* 1.1, CHCl<sub>3</sub>)

Source of chirality: asymmetric reduction

Absolute configuration: (*R*)

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*Tetrahedron: Asymmetry 18 (2007) 963*



C<sub>8</sub>H<sub>9</sub>OCl

(*R*)-1-(4-Chlorophenyl)ethanol

Ee = 78%

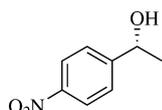
[ $\alpha$ ]<sub>D</sub><sup>25</sup> = +38.5 (*c* 1.3, Et<sub>2</sub>O)

Source of chirality: asymmetric reduction

Absolute configuration: (*R*)

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*Tetrahedron: Asymmetry 18 (2007) 963*



C<sub>8</sub>H<sub>9</sub>NO<sub>3</sub>

(*R*)-1-(4-Nitrophenyl)ethanol

Ee = 87%

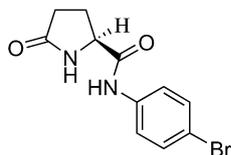
[ $\alpha$ ]<sub>D</sub><sup>25</sup> = +27.2 (*c* 1.2, EtOH)

Source of chirality: asymmetric reduction

Absolute configuration: (*R*)

Deevi Basavaiah,\* Kalapala Venkateswara Rao and  
Bhavanam Sekhara Reddy

*Tetrahedron: Asymmetry 18 (2007) 968*



(2S)-5-Oxo-2-(4-bromoanilino)carbonylpyrrolidine

$$[\alpha]_D^{25} = +13.0 (c 1.09, \text{MeOH})$$

Source of chirality: (S)-pyroglutamic acid

Absolute configuration: (S)

Deevi Basavaiah,\* Kalapala Venkateswara Rao and  
Bhavanam Sekhara Reddy

*Tetrahedron: Asymmetry 18 (2007) 968*



(2S)-5-Oxo-2-(4-chloroanilino)carbonylpyrrolidine

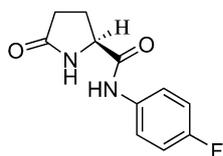
$$[\alpha]_D^{25} = +14.1 (c 1.04, \text{MeOH})$$

Source of chirality: (S)-pyroglutamic acid

Absolute configuration: (S)

Deevi Basavaiah,\* Kalapala Venkateswara Rao and  
Bhavanam Sekhara Reddy

*Tetrahedron: Asymmetry 18 (2007) 968*



(2S)-5-Oxo-2-(4-fluoroanilino)carbonylpyrrolidine

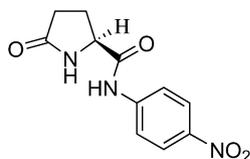
$$[\alpha]_D^{25} = +14.0 (c 1.08, \text{MeOH})$$

Source of chirality: (S)-pyroglutamic acid

Absolute configuration: (S)

Deevi Basavaiah,\* Kalapala Venkateswara Rao and  
Bhavanam Sekhara Reddy

*Tetrahedron: Asymmetry 18 (2007) 968*



(2S)-5-Oxo-2-(4-nitroanilino)carbonylpyrrolidine

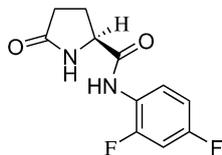
$$[\alpha]_D^{25} = +21.0 (c 0.60, \text{MeOH})$$

Source of chirality: (S)-pyroglutamic acid

Absolute configuration: (S)

Deevi Basavaiah,\* Kalapala Venkateswara Rao and Bhavanam Sekhara Reddy

*Tetrahedron: Asymmetry 18 (2007) 968*



(2*S*)-5-Oxo-2-(2,4-difluoroanilino)carbonylpyrrolidine

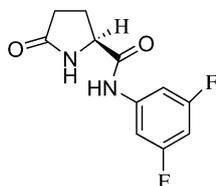
$$[\alpha]_D^{25} = +12.9 (c 1.02, \text{MeOH})$$

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: (*S*)

Deevi Basavaiah,\* Kalapala Venkateswara Rao and Bhavanam Sekhara Reddy

*Tetrahedron: Asymmetry 18 (2007) 968*



(2*S*)-5-Oxo-2-(3,5-difluoroanilino)carbonylpyrrolidine

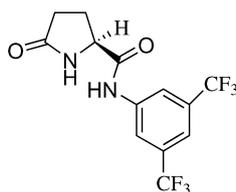
$$[\alpha]_D^{25} = +13.4 (c 1.08, \text{MeOH})$$

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: (*S*)

Deevi Basavaiah,\* Kalapala Venkateswara Rao and Bhavanam Sekhara Reddy

*Tetrahedron: Asymmetry 18 (2007) 968*



(2*S*)-5-Oxo-2-[3,5-bis(trifluoromethyl)anilino]carbonylpyrrolidine

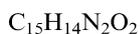
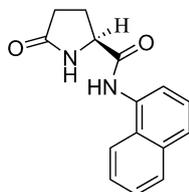
$$[\alpha]_D^{25} = +4.9 (c 2.09, \text{MeOH})$$

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: (*S*)

Deevi Basavaiah,\* Kalapala Venkateswara Rao and Bhavanam Sekhara Reddy

*Tetrahedron: Asymmetry 18 (2007) 968*



(2*S*)-5-Oxo-2-(1-naphthylamino)carbonylpyrrolidine

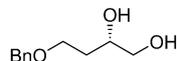
$$[\alpha]_D^{25} = +15.0 (c 1.09, \text{MeOH})$$

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: (*S*)

Shyla George and Arumugam Sudalai\*

*Tetrahedron: Asymmetry 18 (2007) 975*



(+)-(S)-4-(Benzyloxy)butane-1,2-diol

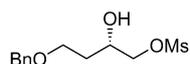
$$[\alpha]_D^{25} = +5.0 (c 1, CHCl_3)$$

Source of chirality: proline-catalyzed  $\alpha$ -asymmetric aminooxylation

Absolute configuration: (S)

Shyla George and Arumugam Sudalai\*

*Tetrahedron: Asymmetry 18 (2007) 975*



(+)-(S)-4-(Benzyloxy)-2-hydroxybutyl methanesulfonate

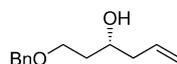
$$[\alpha]_D^{25} = +0.4 (c 0.5, CHCl_3)$$

Source of chirality: proline-catalyzed  $\alpha$ -asymmetric aminooxylation

Absolute configuration: (S)

Shyla George and Arumugam Sudalai\*

*Tetrahedron: Asymmetry 18 (2007) 975*



(-)-(S)-4-(Benzyloxy)-1,2-epoxybutane

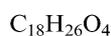
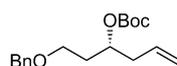
$$[\alpha]_D^{25} = +1.55 (c 1.1, CHCl_3)$$

Source of chirality: proline-catalyzed  $\alpha$ -asymmetric aminooxylation

Absolute configuration: (S)

Shyla George and Arumugam Sudalai\*

*Tetrahedron: Asymmetry 18 (2007) 975*



*tert*-Butyl(R)-1-(benzyloxy)hex-5-en-3-yl carbonate

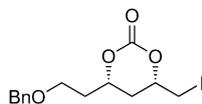
$$[\alpha]_D^{25} = +33.3 (c 0.6, CHCl_3)$$

Source of chirality: proline-catalyzed  $\alpha$ -asymmetric aminooxylation

Absolute configuration: (R)

Shyla George and Arumugam Sudalai\*

*Tetrahedron: Asymmetry 18 (2007) 975*



(-)-(4*S*,6*S*)-4-[2-(Benzyloxy)ethyl]-6-(iodomethyl)-1,3-dioxan-2-one

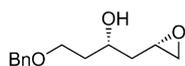
$$[\alpha]_D^{25} = -3.1 \text{ (} c \text{ 1.3, CHCl}_3\text{)}$$

Source of chirality: proline-catalyzed  $\alpha$ -asymmetric aminooxylation

Absolute configuration: (4*S*,6*S*)

Shyla George and Arumugam Sudalai\*

*Tetrahedron: Asymmetry 18 (2007) 975*



(+)-(2*S*,4*S*)-6-(Benzyloxy)-1,2-epoxyhexan-4-ol

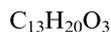
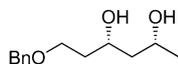
$$[\alpha]_D^{25} = +8.0 \text{ (} c \text{ 1.25, CHCl}_3\text{)}$$

Source of chirality: proline-catalyzed  $\alpha$ -asymmetric aminooxylation

Absolute configuration: (1*S*,4*S*)

Shyla George and Arumugam Sudalai\*

*Tetrahedron: Asymmetry 18 (2007) 975*



(+)-(2*R*,4*S*)-6-(Benzyloxy)hexane-2,4-diol

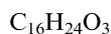
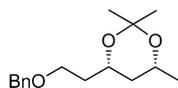
$$[\alpha]_D^{25} = +3.0 \text{ (} c \text{ 1, CHCl}_3\text{)}$$

Source of chirality: proline-catalyzed  $\alpha$ -asymmetric aminooxylation

Absolute configuration: (2*R*,4*S*)

Shyla George and Arumugam Sudalai\*

*Tetrahedron: Asymmetry 18 (2007) 975*



(+)-(4*S*,6*R*)-4-[2-(Benzyloxy)ethyl]-2,2,6-trimethyl-1,3-dioxane

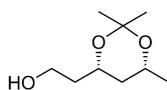
$$[\alpha]_D^{25} = +4.0 \text{ (} c \text{ 0.5, CHCl}_3\text{)}$$

Source of chirality: proline-catalyzed  $\alpha$ -asymmetric aminooxylation

Absolute configuration: (4*S*,6*R*)

Shyla George and Arumugam Sudalai\*

*Tetrahedron: Asymmetry 18 (2007) 975*



(-)-(4*S*,6*R*)-2-(2,2,6-Trimethyl-1,3-dioxan-4-yl)ethanol

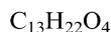
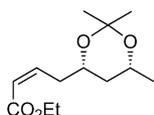
$$[\alpha]_D^{25} = -15 \text{ (} c \text{ 0.4, CHCl}_3\text{)}$$

Source of chirality: proline-catalyzed  $\alpha$ -asymmetric aminooxylation

Absolute configuration: (4*S*,6*R*)

Shyla George and Arumugam Sudalai\*

*Tetrahedron: Asymmetry 18 (2007) 975*



(-)-(5*S*,7*R*,2*Z*)-Ethyl-5,7-(isopropylidenedioxy)octenoate

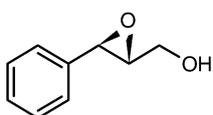
$$[\alpha]_D^{25} = -23.5 \text{ (} c \text{ 0.17, CHCl}_3\text{)}$$

Source of chirality: proline-catalyzed  $\alpha$ -asymmetric aminooxylation

Absolute configuration: (5*S*,7*R*)

Shijo K. Cherian and Pradeep Kumar\*

*Tetrahedron: Asymmetry 18 (2007) 982*



(2*R*,3*R*)-(3-Phenyl-oxiranyl)-methanol

Ee >99%

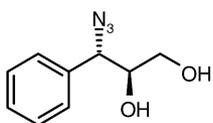
$$[\alpha]_D^{27} = +48.7 \text{ (} c \text{ 2.4, CHCl}_3\text{)}$$

Source of chirality: Sharpless asymmetric epoxidation

Absolute configuration: (2*R*,3*R*)

Shijo K. Cherian and Pradeep Kumar\*

*Tetrahedron: Asymmetry 18 (2007) 982*



(2*S*,3*S*)-3-Azido-3-phenyl-propane-1,2-diol

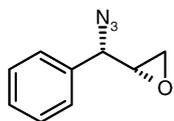
$$[\alpha]_D^{27} = +166.3 \text{ (} c \text{ 1.2, CHCl}_3\text{)}$$

Source of chirality: Sharpless asymmetric epoxidation

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

Shijo K. Cherian and Pradeep Kumar\*

*Tetrahedron: Asymmetry 18 (2007) 982*



C<sub>9</sub>H<sub>9</sub>N<sub>3</sub>O

(2*R*,3*S*)-2-(Azido-phenyl-methyl)-oxirane

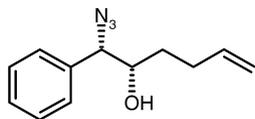
$[\alpha]_D^{27} = +139.0$  (*c* 1.1, CHCl<sub>3</sub>)

Source of chirality: Sharpless asymmetric epoxidation

Absolute configuration: (2*R*,3*S*)

Shijo K. Cherian and Pradeep Kumar\*

*Tetrahedron: Asymmetry 18 (2007) 982*



C<sub>12</sub>H<sub>15</sub>N<sub>3</sub>O

(1*S*,2*S*)-1-Azido-1-phenyl-hex-5-en-2-ol

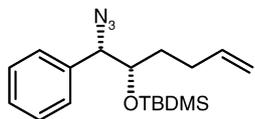
$[\alpha]_D^{27} = +178.4$  (*c* 1.0, CHCl<sub>3</sub>)

Source of chirality: Sharpless asymmetric epoxidation

Absolute configuration: (1*S*,2*S*)

Shijo K. Cherian and Pradeep Kumar\*

*Tetrahedron: Asymmetry 18 (2007) 982*



C<sub>18</sub>H<sub>29</sub>N<sub>3</sub>OSi

(1*S*,2*S*)-[1-(Azido-phenyl-methyl)-pent-4-enyloxy]-*tert*-butyl-dimethyl-silane

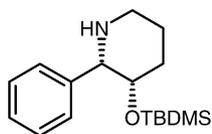
$[\alpha]_D^{27} = +75.3$  (*c* 1.1, CHCl<sub>3</sub>)

Source of chirality: Sharpless asymmetric epoxidation

Absolute configuration: (1*S*,2*S*)

Shijo K. Cherian and Pradeep Kumar\*

*Tetrahedron: Asymmetry 18 (2007) 982*



C<sub>17</sub>H<sub>29</sub>NOSi

(2*S*,3*S*)-3-(*tert*-Butyl-dimethyl-silyloxy)-2-phenyl-piperidine

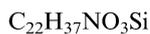
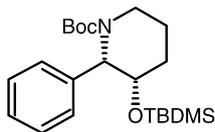
$[\alpha]_D^{27} = +51.5$  (*c* 1.1, MeOH)

Source of chirality: Sharpless asymmetric epoxidation

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

Shijo K. Cherian and Pradeep Kumar\*

*Tetrahedron: Asymmetry 18 (2007) 982*



(2*S*,3*S*)-1-[3-(*tert*-Butyl-dimethyl-silyloxy)-2-phenyl-piperidin-1-yl]-2,2-dimethyl-propan-1-one

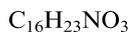
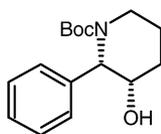
$$[\alpha]_D^{27} = +18.4 (c 1.1, CHCl_3)$$

Source of chirality: Sharpless asymmetric epoxidation

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

Shijo K. Cherian and Pradeep Kumar\*

*Tetrahedron: Asymmetry 18 (2007) 982*



(2*S*,3*S*)-1-(3-Hydroxy-2-phenyl-piperidin-1-yl)-2,2-dimethyl-propan-1-one

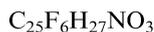
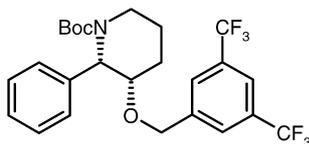
$$[\alpha]_D^{27} = +37.5 (c 1.0, CHCl_3)$$

Source of chirality: Sharpless asymmetric epoxidation

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

Shijo K. Cherian and Pradeep Kumar\*

*Tetrahedron: Asymmetry 18 (2007) 982*



(2*S*,3*S*)-1-(*tert*-Butyloxycarbonyl)-2-phenyl-3-[(3,5)-bis(trifluoromethyl)benzyloxy]piperidine

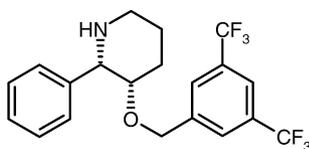
$$[\alpha]_D^{25} = +31.4 (c 1.0, CHCl_3)$$

Source of chirality: Sharpless asymmetric epoxidation

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

Shijo K. Cherian and Pradeep Kumar\*

*Tetrahedron: Asymmetry 18 (2007) 982*



(2*S*,3*S*)-2-Phenyl-3-[(3,5)-bis(trifluoromethyl)benzyloxy]piperidine [(+)-L-733,060]

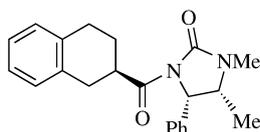
$$[\alpha]_D^{25} = +36.2 (c 0.66, CHCl_3)$$

Source of chirality: Sharpless asymmetric epoxidation

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

Naoki Kise\* and Ryousuke Mimura

*Tetrahedron: Asymmetry 18 (2007) 988*



(4*S*,5*R*)-1,5-Dimethyl-4-phenyl-3-((*R*)-1,2,3,4-tetrahydronaphthalene-2-carbonyl)imidazolidin-2-one

Ee >99%

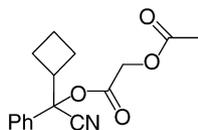
$[\alpha]_D^{20} = -41.2$  (*c* 1.05,  $CHCl_3$ )

Source of chirality: (1*S*,2*R*)-(+)-norephedrine

Absolute configuration: (4*S*,5*R*,2'*R*)

Verónica Recuero, Miguel Ferrero, Vicente Gotor-Fernández,  
Rosario Brieva and Vicente Gotor\*

*Tetrahedron: Asymmetry 18 (2007) 994*



(+)-1-(1-Cyano-1-cyclobutyl-1-phenylmethoxy)carbonylmethyl acetate

Ee = 70%

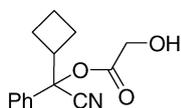
$[\alpha]_D^{20} = +39$  (*c* 0.10,  $CHCl_3$ )

Source of chirality: lipase-catalyzed hydrolysis

Absolute configuration: (*R*)

Verónica Recuero, Miguel Ferrero, Vicente Gotor-Fernández,  
Rosario Brieva and Vicente Gotor\*

*Tetrahedron: Asymmetry 18 (2007) 994*



(-)-1-(1-Cyano-1-cyclobutyl-1-phenylmethyl) hydroxyacetate

Ee = 99%

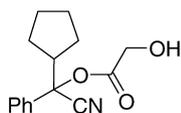
$[\alpha]_D^{20} = -49$  (*c* 0.12,  $CHCl_3$ )

Source of chirality: lipase-catalyzed hydrolysis

Absolute configuration: (*S*)

Verónica Recuero, Miguel Ferrero, Vicente Gotor-Fernández,  
Rosario Brieva and Vicente Gotor\*

*Tetrahedron: Asymmetry 18 (2007) 994*



(+)-1-(1-Cyano-1-cyclopentyl-1-phenylmethyl) hydroxyacetate

Ee = 66%

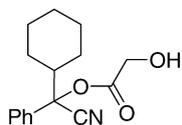
$[\alpha]_D^{20} = +13$  (*c* 0.10,  $CHCl_3$ )

Source of chirality: lipase-catalyzed acylation

Absolute configuration: (*S*)

Verónica Recuero, Miguel Ferrero, Vicente Gotor-Fernández,  
Rosario Brieva and Vicente Gotor\*

*Tetrahedron: Asymmetry 18 (2007) 994*



$C_{16}H_{19}NO_3$

(+)-1-Cyano-1-cyclohexyl-1-phenylmethyl hydroxyacetate

Ee = 83%

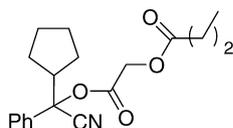
$[\alpha]_D^{20} = +7.5$  (c 0.10,  $CHCl_3$ )

Source of chirality: lipase-catalyzed acylation

Absolute configuration: (S)

Verónica Recuero, Miguel Ferrero, Vicente Gotor-Fernández,  
Rosario Brieva and Vicente Gotor\*

*Tetrahedron: Asymmetry 18 (2007) 994*



$C_{19}H_{23}NO_4$

(-)-(1-Cyano-1-cyclopentyl-1-phenylmethoxy)carbonylmethyl butyrate

Ee = 64%

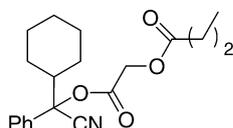
$[\alpha]_D^{20} = -5$  (c 0.10,  $CHCl_3$ )

Source of chirality: lipase-catalyzed acylation

Absolute configuration: (R)

Verónica Recuero, Miguel Ferrero, Vicente Gotor-Fernández,  
Rosario Brieva and Vicente Gotor\*

*Tetrahedron: Asymmetry 18 (2007) 994*



$C_{20}H_{25}NO_4$

(-)-(1-Cyano-1-cyclohexyl-1-phenylmethoxy)carbonylmethyl butyrate

Ee = 90%

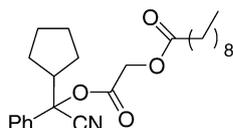
$[\alpha]_D^{20} = -6$  (c 0.10,  $CHCl_3$ )

Source of chirality: lipase-catalyzed acylation

Absolute configuration: (R)

Verónica Recuero, Miguel Ferrero, Vicente Gotor-Fernández,  
Rosario Brieva and Vicente Gotor\*

*Tetrahedron: Asymmetry 18 (2007) 994*



$C_{25}H_{35}NO_4$

(-)-(1-Cyano-1-cyclopentyl-1-phenylmethoxy)carbonylmethyl decanoate

Ee = 92%

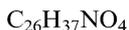
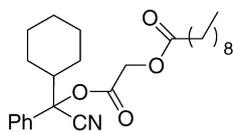
$[\alpha]_D^{20} = -26$  (c 0.15,  $CHCl_3$ )

Source of chirality: lipase-catalyzed acylation

Absolute configuration: (R)

Verónica Recuero, Miguel Ferrero, Vicente Gotor-Fernández,  
Rosario Brieva and Vicente Gotor\*

*Tetrahedron: Asymmetry 18 (2007) 994*



(-)-(1-Cyano-1-cyclohexyl-1-phenylmethoxy)carbonylmethyl decanoate

Ee = 72%

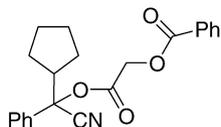
$[\alpha]_D^{20} = -7$  (c 0.10,  $CHCl_3$ )

Source of chirality: lipase-catalyzed acylation

Absolute configuration: (R)

Verónica Recuero, Miguel Ferrero, Vicente Gotor-Fernández,  
Rosario Brieva and Vicente Gotor\*

*Tetrahedron: Asymmetry 18 (2007) 994*



(-)-(1-Cyano-1-cyclopentyl-1-phenylmethoxy)carbonylmethyl benzoate

Ee = 70%

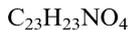
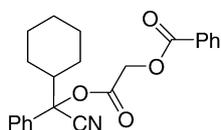
$[\alpha]_D^{20} = -6$  (c 0.10,  $CHCl_3$ )

Source of chirality: lipase-catalyzed acylation

Absolute configuration: (R)

Verónica Recuero, Miguel Ferrero, Vicente Gotor-Fernández,  
Rosario Brieva and Vicente Gotor\*

*Tetrahedron: Asymmetry 18 (2007) 994*



(-)-(1-Cyano-1-cyclohexyl-1-phenylmethoxy)carbonylmethyl benzoate

Ee = 96%

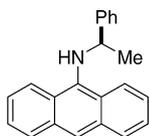
$[\alpha]_D^{20} = -12$  (c 0.10,  $CHCl_3$ )

Source of chirality: lipase-catalyzed acylation

Absolute configuration: (R)

Harry Adams, Ramadan A. Bawa, Keith G. McMillan and Simon Jones\*

*Tetrahedron: Asymmetry 18 (2007) 1003*



(R)-9-(N-α-Methylbenzylamino)anthracene

Ee = 93%

$[\alpha]_D = +198$  (c 0.5,  $CHCl_3$ )

Source of chirality: commercial (R)-α-methyl benzylamine

Absolute configuration: (R)

Harry Adams, Ramadan A. Bawa, Keith G. McMillan and Simon Jones\*

*Tetrahedron: Asymmetry 18 (2007) 1003*



C<sub>9</sub>H<sub>11</sub>NO

(*R*)-(+)- $\alpha$ -Methylbenzyl formamide

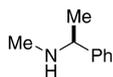
$[\alpha]_D = +168.6$  (*c* 1, CHCl<sub>3</sub>)

Source of chirality: commercial (*R*)- $\alpha$ -methyl benzylamine

Absolute configuration: (*R*)

Harry Adams, Ramadan A. Bawa, Keith G. McMillan and Simon Jones\*

*Tetrahedron: Asymmetry 18 (2007) 1003*



C<sub>9</sub>H<sub>13</sub>N

(*R*)-(+)-*N*-Methyl- $\alpha$ -methylbenzylamine

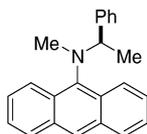
$[\alpha]_D = +77.7$  (*c* 1, CHCl<sub>3</sub>)

Source of chirality: commercial (*R*)- $\alpha$ -methyl benzylamine

Absolute configuration: (*R*)

Harry Adams, Ramadan A. Bawa, Keith G. McMillan and Simon Jones\*

*Tetrahedron: Asymmetry 18 (2007) 1003*



C<sub>23</sub>H<sub>21</sub>N

9-[*N*-Methyl-*N*-(*R*)- $\alpha$ -methylbenzylamino]anthracene

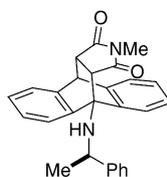
$[\alpha]_D = +70$  (*c* 1, CHCl<sub>3</sub>)

Source of chirality: commercial (*R*)- $\alpha$ -methyl benzylamine

Absolute configuration: (*R*)

Harry Adams, Ramadan A. Bawa, Keith G. McMillan and Simon Jones\*

*Tetrahedron: Asymmetry 18 (2007) 1003*



C<sub>27</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub>

(3*aS*,9*aS*)-3*a*,4,9,9*a*-Tetrahydro-4-[(*R*)- $\alpha$ -methylbenzylamino]-2-methyl-4,9-[1',2']benzo-1*H*-benzo[*f*]isoindole-1,3-(2*H*)-dione

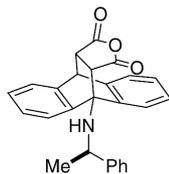
$[\alpha]_D = +50$  (*c* 0.5, CHCl<sub>3</sub>)

Source of chirality: commercial (*R*)- $\alpha$ -methyl benzylamine

Absolute configuration: (3*S*,9*S*, $\alpha$ *R*)

Harry Adams, Ramadan A. Bawa, Keith G. McMillan and Simon Jones\*

*Tetrahedron: Asymmetry 18 (2007) 1003*



$C_{26}H_{21}NO_3$

(11*S*,15*S*)-9,10,11,15-Tetrahydro-9-[(*R*)- $\alpha$ -methylbenzylamino]-9,10[3',4']-furanoanthracene-12,14- dione

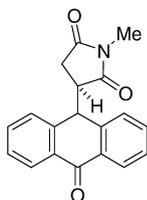
$[\alpha]_D = +26$  (*c* 1,  $CHCl_3$ )

Source of chirality: commercial (*R*)- $\alpha$ -methyl benzyl-amine

Absolute configuration: (3*S*,9*S*, $\alpha$ *R*)

Harry Adams, Ramadan A. Bawa, Keith G. McMillan and Simon Jones\*

*Tetrahedron: Asymmetry 18 (2007) 1003*



$C_{19}H_{15}NO_3$

1-Methyl-(3*R*)-(10-oxo-9,10-dihydroanthracen-9-yl) pyrrolidine-2,5-dione

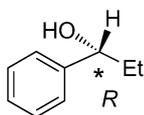
$[\alpha]_D = +125$  (*c* 0.08,  $CHCl_3$ )

Source of chirality: commercial (*R*)- $\alpha$ -methyl benzyl-amine

Absolute configuration: (*R*)

Adnan Bulut, Ayhan Aslan, Enver Çağrı Izgü and Özdemir Dogan\*

*Tetrahedron: Asymmetry 18 (2007) 1013*



$C_9H_{12}O$

(*R*)-1-Phenyl-1-propanol

Ee = 96%

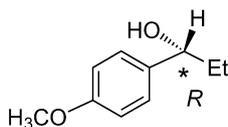
$[\alpha]_D^{20} = +30.2$  (*c* 2.2,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Adnan Bulut, Ayhan Aslan, Enver Çağrı Izgü and Özdemir Dogan\*

*Tetrahedron: Asymmetry 18 (2007) 1013*



$C_{10}H_{14}O_2$

(*R*)-1-(4-Methoxyphenyl)-1-propanol

Ee = 90%

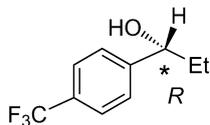
$[\alpha]_D^{20} = +34.0$  (*c* 2.6,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Adnan Bulut, Ayhan Aslan, Enver Çağrı Izgü and Özdemir Dogan\*

*Tetrahedron: Asymmetry 18 (2007) 1013*



(*R*)-1-(4-Trifluoromethylphenyl)-1-propanol

Ee = 98%

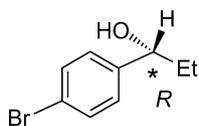
$[\alpha]_D^{20} = +18.6$  (c 3.4,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Adnan Bulut, Ayhan Aslan, Enver Çağrı Izgü and Özdemir Dogan\*

*Tetrahedron: Asymmetry 18 (2007) 1013*



(*R*)-1-(4-Bromophenyl)-1-propanol

Ee = 98%

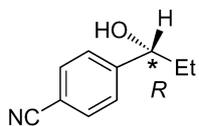
$[\alpha]_D^{20} = +26.7$  (c 1.5,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Adnan Bulut, Ayhan Aslan, Enver Çağrı Izgü and Özdemir Dogan\*

*Tetrahedron: Asymmetry 18 (2007) 1013*



(*R*)-1-(4-Cyanophenyl)-1-propanol

Ee = 93%

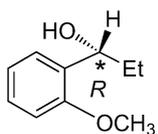
$[\alpha]_D^{20} = +31.6$  (c 0.5,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Adnan Bulut, Ayhan Aslan, Enver Çağrı Izgü and Özdemir Dogan\*

*Tetrahedron: Asymmetry 18 (2007) 1013*



(*R*)-1-(2-Methoxyphenyl)-1-propanol

Ee = 86%

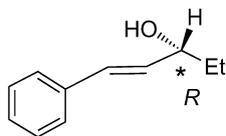
$[\alpha]_D^{20} = +17.6$  (c 4.1,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Adnan Bulut, Ayhan Aslan, Enver Çağrı Izgü and Özdemir Dogan\*

*Tetrahedron: Asymmetry 18 (2007) 1013*



C<sub>11</sub>H<sub>14</sub>O

(*R*)-1-Phenyl-1-penten-3-ol

Ee = 84%

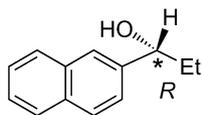
$[\alpha]_D^{20} = +4.3$  (*c* 2.1, CHCl<sub>3</sub>)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Adnan Bulut, Ayhan Aslan, Enver Çağrı Izgü and Özdemir Dogan\*

*Tetrahedron: Asymmetry 18 (2007) 1013*



C<sub>13</sub>H<sub>14</sub>O

(*R*)-1-(2-Naphthyl)-1-propanol

Ee = 92%

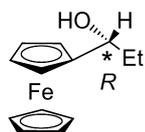
$[\alpha]_D^{20} = +35.1$  (*c* 2.4, CHCl<sub>3</sub>)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Adnan Bulut, Ayhan Aslan, Enver Çağrı Izgü and Özdemir Dogan\*

*Tetrahedron: Asymmetry 18 (2007) 1013*



C<sub>13</sub>H<sub>16</sub>FeO

(*R*)-1-Ferrocenyl-1-propanol

Ee = 98%

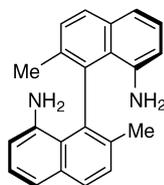
$[\alpha]_D^{20} = -66.5$  (*c* 4.9, CHCl<sub>3</sub>)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Kazunori Tsubaki,\* Dinh T. T. Hai, Valluru K. Reddy, Hiroshi Ohnishi, Kaoru Fuji and Takeo Kawabata

*Tetrahedron: Asymmetry 18 (2007) 1017*



C<sub>22</sub>H<sub>20</sub>N<sub>2</sub>

(*S*)-2,2'-Dimethyl-1,1'-binaphthyl-8,8'-diamine

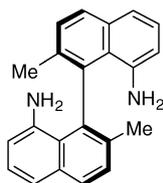
$[\alpha]_D^{20} = -43$  (*c* 0.5, CHCl<sub>3</sub>)

Source of chirality: resolution

Absolute configuration: (*S*)

Kazunori Tsubaki,\* Dinh T. T. Hai, Valluru K. Reddy, Hiroshi Ohnishi,  
Kaoru Fuji and Takeo Kawabata

*Tetrahedron: Asymmetry 18 (2007) 1017*



(*R*)-2,2'-Dimethyl-1,1'-binaphthyl-8,8'-diamine

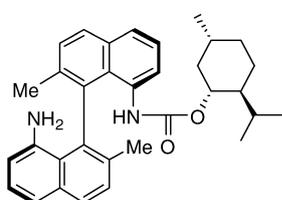
$[\alpha]_D^{20} = +43$  (*c* 0.50,  $CHCl_3$ )

Source of chirality: resolution

Absolute configuration: (*R*)

Kazunori Tsubaki,\* Dinh T. T. Hai, Valluru K. Reddy, Hiroshi Ohnishi,  
Kaoru Fuji and Takeo Kawabata

*Tetrahedron: Asymmetry 18 (2007) 1017*



(*1R,2S,5R*)-2-Isopropyl-5-methylcyclohexyl (*S*)-8'-amino-2,2'-dimethyl-1,1'-binaphthyl-8-ylcarbamate

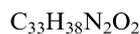
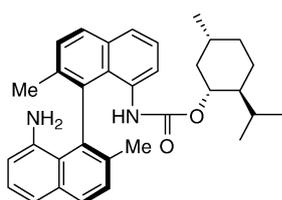
$[\alpha]_D^{20} = -103$  (*c* 0.5,  $CHCl_3$ )

Source of chirality: resolution

Absolute configuration: (*1R,2S,5R*)

Kazunori Tsubaki,\* Dinh T. T. Hai, Valluru K. Reddy, Hiroshi Ohnishi,  
Kaoru Fuji and Takeo Kawabata

*Tetrahedron: Asymmetry 18 (2007) 1017*



(*1R,2S,5R*)-2-Isopropyl-5-methylcyclohexyl (*R*)-8'-amino-2,2'-dimethyl-1,1'-binaphthyl-8-ylcarbamate

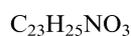
$[\alpha]_D^{20} = -109$  (*c* 0.9,  $CHCl_3$ )

Source of chirality: resolution

Absolute configuration: (*1R,2S,5R*)

Leonardo Cappannini, Cristina Cimarelli, Sandra Giuli,  
Gianni Palmieri\* and Marino Petrini

*Tetrahedron: Asymmetry 18 (2007) 1022*



1-((*S*)-Benzylamino[(*4S*)-2,2-dimethyl-1,3-dioxolan-4-yl]methyl)-2-naphthol

Ee = 98%

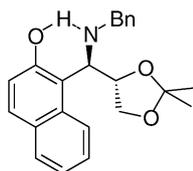
$[\alpha]_D^{20} = -26.2$  (*c* 0.38,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (*S,S*)

Leonardo Cappannini, Cristina Cimarelli, Sandra Giuli,  
Gianni Palmieri\* and Marino Petrini

*Tetrahedron: Asymmetry 18 (2007) 1022*



$C_{23}H_{25}NO_3$

1-((*R*)-Benzylamino[(4*S*)-2,2-dimethyl-1,3-dioxolan-4-yl]methyl)-2-naphthol

Ee = 98%

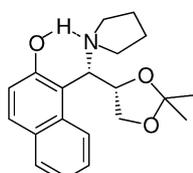
$[\alpha]_D^{20} = -12.9$  (*c* 0.39,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (1*R*,4*S*)

Leonardo Cappannini, Cristina Cimarelli, Sandra Giuli,  
Gianni Palmieri\* and Marino Petrini

*Tetrahedron: Asymmetry 18 (2007) 1022*



$C_{20}H_{25}NO_3$

1-(*S*)-(4*S*)-2,2-Dimethyl-1,3-dioxolan-4-yl(pyrrolidin-1-yl)methyl-2-naphthol

Ee = 98%

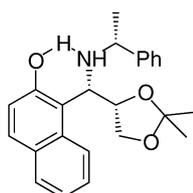
$[\alpha]_D^{20} = +0.6$  (*c* 0.49,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (*S,S*)

Leonardo Cappannini, Cristina Cimarelli, Sandra Giuli,  
Gianni Palmieri\* and Marino Petrini

*Tetrahedron: Asymmetry 18 (2007) 1022*



$C_{24}H_{27}NO_3$

1-((*S*)-(4*S*)-2,2-Dimethyl-1,3-dioxolan-4-yl){[(1*R*)-1-phenylethyl]amino}methyl)-2-naphthol

Ee = 98%

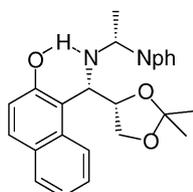
$[\alpha]_D^{20} = -44.5$  (*c* 0.74,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (1*S*,4*S*,1'*R*)

Leonardo Cappannini, Cristina Cimarelli, Sandra Giuli,  
Gianni Palmieri\* and Marino Petrini

*Tetrahedron: Asymmetry 18 (2007) 1022*



$C_{28}H_{29}NO_3$

1-((*S*)-(1*R*)-1-(1-Naphthyl)ethan-1-amine[(4*S*)-2,2-dimethyl-1,3-dioxolan-4-yl]methyl)-2-naphthol

Ee = 98%

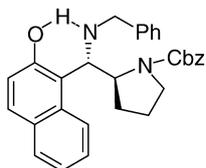
$[\alpha]_D^{20} = -111.9$  (*c* 1.15,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (1*S*,4*S*,1'*R*)

Leonardo Cappannini, Cristina Cimarelli, Sandra Giuli,  
Gianni Palmieri\* and Marino Petrini

*Tetrahedron: Asymmetry 18 (2007) 1022*



$C_{30}H_{30}N_2O_3$

Benzyl (2*S*)-2-[(*S*)-benzylamino(2-hydroxy-1-naphthyl)methyl]pyrrolidine-1-carboxylate

Ee = 98%

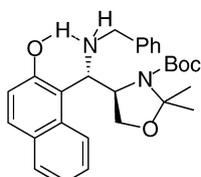
$[\alpha]_D^{20} = -15.8$  (*c* 3.65,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (*S,S*)

Leonardo Cappannini, Cristina Cimarelli, Sandra Giuli,  
Gianni Palmieri\* and Marino Petrini

*Tetrahedron: Asymmetry 18 (2007) 1022*



$C_{28}H_{34}N_2O_4$

*tert*-Butyl (4*R*)-4-[(*S*)-benzylamino(2-hydroxy-1-naphthyl)methyl]-2,2-dimethyl-1,3-oxazolidine-3-carboxylate

Ee = 98%

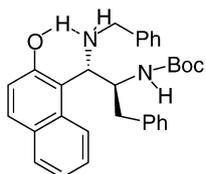
$[\alpha]_D^{20} = +3.5$  (*c* 1.44,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (1'*S*,4*R*)

Leonardo Cappannini, Cristina Cimarelli, Sandra Giuli,  
Gianni Palmieri\* and Marino Petrini

*Tetrahedron: Asymmetry 18 (2007) 1022*



$C_{31}H_{34}N_2O_3$

*tert*-Butyl-*N*-[(*S,S*)-1-benzyl-2-(benzylamino)-2-(2-hydroxy-1-naphthyl)ethyl]carbamate

Ee = 98%

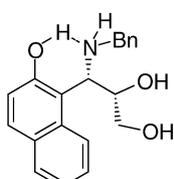
$[\alpha]_D^{20} = +3.75$  (*c* 2.21,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (*S,S*)

Leonardo Cappannini, Cristina Cimarelli, Sandra Giuli,  
Gianni Palmieri\* and Marino Petrini

*Tetrahedron: Asymmetry 18 (2007) 1022*



$C_{20}H_{21}NO_3$

(2*S*,3*S*)-3-(Benzylamino)-3-(2-hydroxy-1-naphthyl)propane-1,2-diol

Ee = 98%

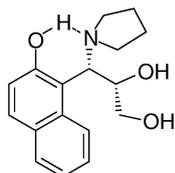
$[\alpha]_D^{20} = -0.9$  (*c* 0.64,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (*S,S*)

Leonardo Cappannini, Cristina Cimarrelli, Sandra Giuli,  
Gianni Palmieri\* and Marino Petrini

*Tetrahedron: Asymmetry 18 (2007) 1022*



$C_{17}H_{21}NO_3$

(*S,S*)-3-(2-Hydroxy-1-naphthyl)-3-pyrrolidin-1-ylpropane-1,2-diol

Ee = 98%

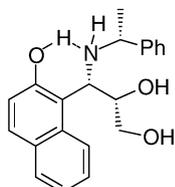
$[\alpha]_D^{20} = -0.8$  (c 0.91,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (*S,S*)

Leonardo Cappannini, Cristina Cimarrelli, Sandra Giuli,  
Gianni Palmieri\* and Marino Petrini

*Tetrahedron: Asymmetry 18 (2007) 1022*



$C_{21}H_{23}NO_3$

(*S,S*)-3-(2-Hydroxy-1-naphthyl)-3-[(1'*R*)-1'-phenylethylamino]propane-1,2-diol

Ee = 98%

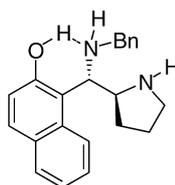
$[\alpha]_D^{20} = -0.8$  (c 1.5,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (*2S,3S,1'R*)

Leonardo Cappannini, Cristina Cimarrelli, Sandra Giuli,  
Gianni Palmieri\* and Marino Petrini

*Tetrahedron: Asymmetry 18 (2007) 1022*



$C_{22}H_{24}N_2O$

1-[(*S*)-(Benzylamino)][(*2S*)pyrrolidin-2-yl]methyl]-2-naphthol

Ee = 98%

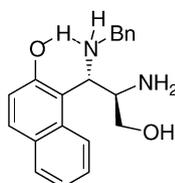
$[\alpha]_D^{20} = +2.7$  (c 1.30,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (*S,S*)

Leonardo Cappannini, Cristina Cimarrelli, Sandra Giuli,  
Gianni Palmieri\* and Marino Petrini

*Tetrahedron: Asymmetry 18 (2007) 1022*



$C_{20}H_{22}N_2O_2$

1-[(*1S,2R*)-2-Amino-1-(benzylamino)-3-hydroxypropyl]-2-naphthol

Ee = 98%

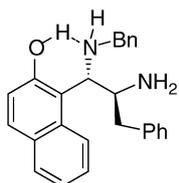
$[\alpha]_D^{20} = +1.1$  (c 0.46,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (*1S,2R*)

Leonardo Cappannini, Cristina Cimorelli, Sandra Giuli,  
Gianni Palmieri\* and Marino Petrini

*Tetrahedron: Asymmetry 18 (2007) 1022*



$C_{26}H_{26}N_2O$

1-[(*S,S*)-2-Amino-1-(benzylamino)-3-phenylpropyl]-2-naphthol

Ee = 98%

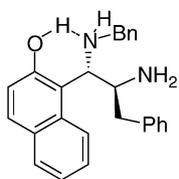
$[\alpha]_D^{20} = +1.9$  (*c* 1.2,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (*S,S*)

Leonardo Cappannini, Cristina Cimorelli, Sandra Giuli,  
Gianni Palmieri\* and Marino Petrini

*Tetrahedron: Asymmetry 18 (2007) 1022*



$C_{26}H_{26}N_2O$

1-[(*1R,2S*)-2-Amino-1-(benzylamino)-3-phenylpropyl]-2-naphthol

Ee = 98%

$[\alpha]_D^{20} = -0.5$  (*c* 1.44,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (*1R,2S*)