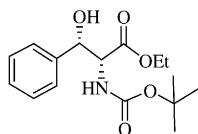


Stereochemistry abstracts

Lisa H. Bourdon, David J. Fairfax,* Gregory S. Martin,
Casey J. Mathison and Pavel Zhichkin

Tetrahedron: Asymmetry 15 (2004) 3485



$C_{16}H_{23}NO_5$

Ethyl (2*R*,3*S*)-2-*tert*-butoxycarbonylamino-3-hydroxy-3-phenylpropionate

Ee = 85%

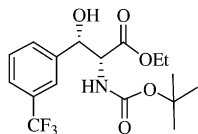
$[\alpha]_D^{25} = +20.4$ (*c* 1.1, EtOH)

Source of chirality: asymmetric synthesis

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

Lisa H. Bourdon, David J. Fairfax,* Gregory S. Martin,
Casey J. Mathison and Pavel Zhichkin

Tetrahedron: Asymmetry 15 (2004) 3485



$C_{17}H_{22}F_3NO_5$

Ethyl (2*R*,3*S*)-2-*tert*-butoxycarbonylamino-3-hydroxy-3-(3-trifluoromethylphenyl)propionate

Ee = 81%

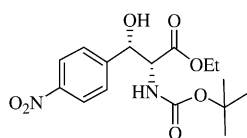
$[\alpha]_D^{25} = +16.6$ (*c* 0.5, EtOH)

Source of chirality: asymmetric synthesis

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

Lisa H. Bourdon, David J. Fairfax,* Gregory S. Martin,
Casey J. Mathison and Pavel Zhichkin

Tetrahedron: Asymmetry 15 (2004) 3485



$C_{16}H_{22}N_2O_7$

Ethyl (2*R*,3*S*)-2-*tert*-butoxycarbonylamino-3-hydroxy-3-(4-nitrophenyl)propionate

Ee = 84%

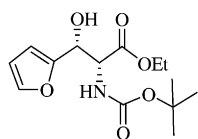
$[\alpha]_D^{25} = +29.7$ (*c* 0.5, EtOH)

Source of chirality: asymmetric synthesis

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

Lisa H. Bourdon, David J. Fairfax,* Gregory S. Martin,
Casey J. Mathison and Pavel Zhichkin

Tetrahedron: Asymmetry 15 (2004) 3485



$C_{14}H_{21}NO_6$

Ethyl (2*R*,3*S*)-2-*tert*-butoxycarbonylamino-3-hydroxy-3-(2-furyl)propionate

Ee = 42%

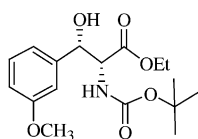
$[\alpha]_D^{25} = +9.1$ (*c* 0.5, EtOH)

Source of chirality: asymmetric synthesis

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

Lisa H. Bourdon, David J. Fairfax,* Gregory S. Martin,
Casey J. Mathison and Pavel Zhichkin

Tetrahedron: Asymmetry 15 (2004) 3485



$C_{17}H_{25}NO_6$

Ethyl (2*R*,3*S*)-2-*tert*-butoxycarbonylamino-3-hydroxy-3-(3-methoxyphenyl)propionate

Ee = 83%

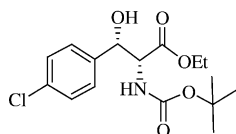
$[\alpha]_D^{25} = +15.9$ (*c* 0.5, EtOH)

Source of chirality: asymmetric synthesis

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

Lisa H. Bourdon, David J. Fairfax,* Gregory S. Martin,
Casey J. Mathison and Pavel Zhichkin

Tetrahedron: Asymmetry 15 (2004) 3485



$C_{16}H_{22}ClNO_5$

Ethyl (2*R*,3*S*)-2-*tert*-butoxycarbonylamino-3-hydroxy-3-(4-chlorophenyl)propionate

Ee = 84%

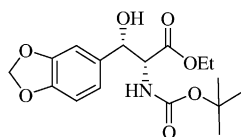
$[\alpha]_D^{25} = +26.3$ (*c* 0.5, EtOH)

Source of chirality: asymmetric synthesis

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

Lisa H. Bourdon, David J. Fairfax,* Gregory S. Martin,
Casey J. Mathison and Pavel Zhichkin

Tetrahedron: Asymmetry 15 (2004) 3485



$C_{17}H_{23}NO_7$

Ethyl (2*R*,3*S*)-2-*tert*-butoxycarbonylamino-3-hydroxy-3-(3,4-methylenedioxyphenyl)propionate

Ee = 87%

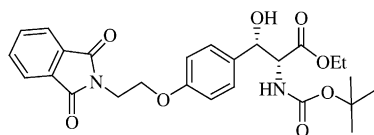
$[\alpha]_D^{25} = +15.8$ (*c* 0.5, EtOH)

Source of chirality: asymmetric synthesis

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

Lisa H. Bourdon, David J. Fairfax,* Gregory S. Martin,
Casey J. Mathison and Pavel Zhichkin

Tetrahedron: Asymmetry 15 (2004) 3485



$C_{26}H_{30}N_2O_8$

Ethyl (2*R*,3*S*)-2-*tert*-butoxycarbonylamino-3-hydroxy-3-{4-(2-phthalimido)ethoxy}phenylpropionate

Ee = 85%

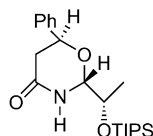
$[\alpha]_D^{25} = +20.9$ (*c* 1.1, EtOH)

Source of chirality: asymmetric synthesis

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

Mauro Panunzio,* Katia Rossi, Emiliano Tamanini,* Eileen Campana and Giorgio Martelli

Tetrahedron: Asymmetry 15 (2004) 3489



$C_{21}H_{35}NO_3Si$

(2*R*,6*S*)-2-[(*S*)-1-Triisopropylsilyloxyethyl]-6-phenyl-1,3-oxazinan-4-one

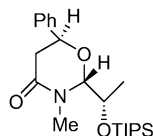
$$[\alpha]_D^{20} = +49.5 \text{ (} c \text{ 0.80, CHCl}_3 \text{)}$$

Source of chirality: (*S*)-2-triisopropylsilyloxypropanal

Absolute configuration: 2*R*,6*S*,(1*S*)

Mauro Panunzio,* Katia Rossi, Emiliano Tamanini,* Eileen Campana and Giorgio Martelli

Tetrahedron: Asymmetry 15 (2004) 3489



$C_{22}H_{37}NO_3Si$

(2*R*,6*S*)-2-[(*S*)-1-Triisopropylsilyloxyethyl]-3-methyl-6-phenyl-1,3-oxazinan-4-one

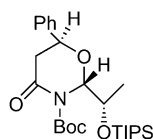
$$[\alpha]_D^{20} = -15.2 \text{ (} c \text{ 1.50, MeOH)}$$

Source of chirality: (*S*)-2-triisopropylsilyloxypropanal

Absolute configuration: 2*R*,6*S*,(1*S*)

Mauro Panunzio,* Katia Rossi, Emiliano Tamanini,* Eileen Campana and Giorgio Martelli

Tetrahedron: Asymmetry 15 (2004) 3489



$C_{26}H_{43}NO_5Si$

(2*R*,6*S*)-*tert*-Butyl 2-((*S*)-1-triisopropylsilyloxyethyl)-4-oxo-6-phenyl-1,3-oxazinane-3-carboxylate

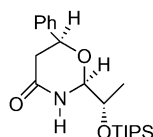
$$[\alpha]_D^{20} = +20.3 \text{ (} c \text{ 0.89, CHCl}_3 \text{)}$$

Source of chirality: (*S*)-2-triisopropylsilyloxypropanal

Absolute configuration: 2*R*,6*S*,(1*S*)

Mauro Panunzio,* Katia Rossi, Emiliano Tamanini,* Eileen Campana and Giorgio Martelli

Tetrahedron: Asymmetry 15 (2004) 3489



$C_{21}H_{35}NO_3Si$

(2*S*,6*S*)-2-[(*S*)-1-Triisopropylsilyloxyethyl]-6-phenyl-1,3-oxazinan-4-one

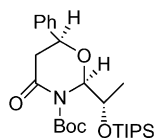
$$[\alpha]_D^{20} = -37.3 \text{ (} c \text{ 0.82, CHCl}_3 \text{)}$$

Source of chirality: (*S*)-2-triisopropylsilyloxypropanal

Absolute configuration: 2*S*,6*S*,(1*S*)

Mauro Panunzio,* Katia Rossi, Emiliano Tamanini,* Eileen Campana and Giorgio Martelli

Tetrahedron: Asymmetry 15 (2004) 3489



$C_{26}H_{43}NO_5Si$

(2*S*,6*S*)-*tert*-Butyl 2-[(*S*)-1-triisopropylsilyloxyethyl]-4-oxo-6-phenyl-1,3-oxazinane-3-carboxylate

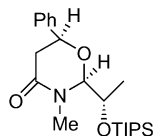
$[\alpha]_D^{20} = -103.9$ (*c* 0.79, $CHCl_3$)

Source of chirality: (*S*)-2-triisopropylsilyloxypropanal

Absolute configuration: 2*S*,6*S*,(1*S*)

Mauro Panunzio,* Katia Rossi, Emiliano Tamanini,* Eileen Campana and Giorgio Martelli

Tetrahedron: Asymmetry 15 (2004) 3489



$C_{22}H_{37}NO_3Si$

(2*S*,6*S*)-2-[(*S*)-1-Triisopropylsilyloxyethyl]-3-methyl-6-phenyl-1,3-oxazinan-4-one

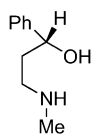
$[\alpha]_D^{20} = -62.5$ (*c* 0.92, $CHCl_3$)

Source of chirality: (*S*)-2-triisopropylsilyloxypropanal

Absolute configuration: 2*S*,6*S*,(1*S*)

Mauro Panunzio,* Katia Rossi, Emiliano Tamanini,* Eileen Campana and Giorgio Martelli

Tetrahedron: Asymmetry 15 (2004) 3489



$C_{10}H_{15}NO$

(*R*)-3-(Methylamino)-1-phenylpropan-1-ol

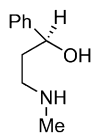
$[\alpha]_D^{20} = +37.5$ (*c* 1.2, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: 3*R*

Mauro Panunzio,* Katia Rossi, Emiliano Tamanini,* Eileen Campana and Giorgio Martelli

Tetrahedron: Asymmetry 15 (2004) 3489



$C_{10}H_{15}NO$

(*S*)-3-(Methylamino)-1-phenylpropan-1-ol

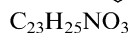
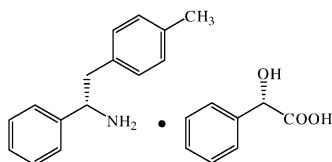
$[\alpha]_D^{20} = -36.0$ (*c* 1.0, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: 3*S*

Kenichi Sakai,* Rumiko Sakurai, Hiroyuki Nohira,
Rumiko Tanaka and Noriaki Hirayama*

Tetrahedron: Asymmetry 15 (2004) 3495



(*R*)-1-Phenyl-2-(4-methylphenyl)ethylamine/(*S*)-mandelic acid

$$[\alpha]_D^{20} = -45.7 \text{ (} c \text{ 1.03, EtOH)}$$

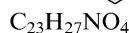
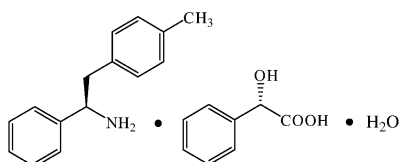
De >99.9%

Source of chirality: resolution

Absolute configuration: *R,S*

Kenichi Sakai,* Rumiko Sakurai, Hiroyuki Nohira,
Rumiko Tanaka and Noriaki Hirayama*

Tetrahedron: Asymmetry 15 (2004) 3495



(*S*)-1-Phenyl-2-(4-methylphenyl)ethylamine/(*S*)-mandelic acid/ H_2O

$$[\alpha]_D^{20} = +126.5 \text{ (} c \text{ 1.04, EtOH)}$$

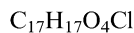
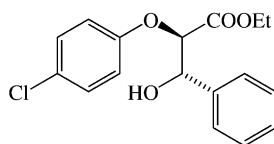
De = 99.6%

Source of chirality: resolution

Absolute configuration: *S,S*

Maria Grazia Perrone, Ernesto Santandrea, Antonio Scilimati,*
Vincenzo Tortorella, Francesco Capitelli and Valerio Bertolasi

Tetrahedron: Asymmetry 15 (2004) 3501



Ethyl 2-(4-chlorophenoxy)-3-hydroxy-3-phenylbutanoate

Ee >99% (by HPLC)

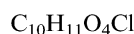
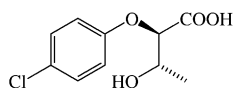
$$[\alpha]_D^{20} = +27.2 \text{ (} c \text{ 1.0, } CHCl_3)$$

Source of chirality: baker's yeast

Absolute configuration: (*2R,3S*)
established by single crystal X-ray analysis

Maria Grazia Perrone, Ernesto Santandrea, Antonio Scilimati,*
Christoph Sydtk, Vincenzo Tortorella, Francesco Capitelli and
Valerio Bertolasi

Tetrahedron: Asymmetry 15 (2004) 3511



2-(4-Chlorophenoxy)-3-hydroxybutanoic acid

Ee >99%

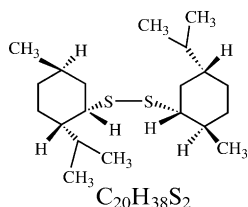
$$[\alpha]_D^{20} = +12.4 \text{ (} c \text{ 1.0, } CHCl_3)$$

Source of chirality: *Kluyveromyces marxianus*

Absolute configuration: (*2R,3S*) established by
single crystal X-ray analysis

Wiesława Perlikowska, Maryse Gouygou, Marian Mikołajczyk* and Jean-Claude Daran*

Tetrahedron: Asymmetry 15 (2004) 3519



(+)-(R,S,S)-Bis-neomenthyl disulfide

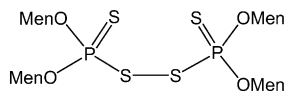
$$[\alpha]_D^{20} = +371.3 \text{ (c 1.1, CHCl}_3\text{)}$$

Source of chirality: asymmetric synthesis

Absolute configuration: (RSS,RSS)

Wiesława Perlikowska, Maryse Gouygou, Marian Mikołajczyk* and Jean-Claude Daran*

Tetrahedron: Asymmetry 15 (2004) 3519



(-)-Bis[(R,R,S)-dimenthoxyphosphorothionyl]disulfide

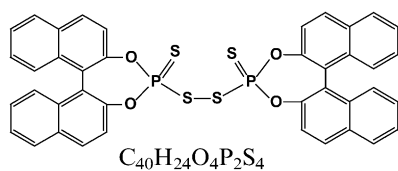
$$[\alpha]_D^{20} = -47.7 \text{ (c 0.95, CHCl}_3\text{)}$$

Source of chirality: asymmetric synthesis

Absolute configuration: (RRS,RRS,RRS,RRS)

Wiesława Perlikowska, Maryse Gouygou, Marian Mikołajczyk* and Jean-Claude Daran*

Tetrahedron: Asymmetry 15 (2004) 3519



(-)-(R,R)-Bis-(1,1-di-2-naphthoxyphosphinothioyl)disulfide

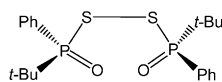
$$[\alpha]_D^{20} = -401.7 \text{ (c 2.3, CH}_3\text{OH)}$$

Source of chirality: asymmetric synthesis

Absolute configuration: (R,R)

Wiesława Perlikowska, Maryse Gouygou, Marian Mikołajczyk* and Jean-Claude Daran*

Tetrahedron: Asymmetry 15 (2004) 3519



(+)-(R,R)-Bis-(tert-butylphenylphosphinoyl)disulfide

$$[\alpha]_D^{20} = +183.8 \text{ (c 0.77, C}_6\text{H}_6\text{)}$$

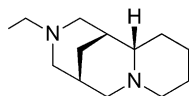
Source of chirality: asymmetric synthesis

Absolute configuration: (R,R)

X-ray structural analyses

Magnus J. Johansson, Lennart Schwartz, Mohamed Amedjkouh and Nina Kann*

Tetrahedron: Asymmetry 15 (2004) 3531



$C_{13}H_{24}N_2$

(+)-*N*-Ethyl-decahydro-1,5-methano-pyrido[1,2-*a*][1,5]diazocine

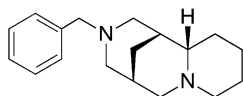
$[\alpha]_D^{20} = +40.9$ (*c* 1.10, $CHCl_3$)

Source of chirality: (–)-cytisine

Absolute configuration: 1*R*,5*S*,12*S*

Magnus J. Johansson, Lennart Schwartz, Mohamed Amedjkouh and Nina Kann*

Tetrahedron: Asymmetry 15 (2004) 3531



$C_{18}H_{26}N_2$

(+)-*N*-Benzyl-decahydro-1,5-methano-pyrido[1,2-*a*][1,5]diazocine

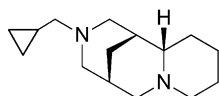
$[\alpha]_D^{20} = +44.6$ (*c* 2.79, $CHCl_3$)

Source of chirality: (–)-cytisine

Absolute configuration: 1*R*,5*S*,12*S*

Magnus J. Johansson, Lennart Schwartz, Mohamed Amedjkouh and Nina Kann*

Tetrahedron: Asymmetry 15 (2004) 3531



$C_{15}H_{26}N_2$

(+)-*N*-Cyclopropylmethyl-decahydro-1,5-methano-pyrido[1,2-*a*][1,5]diazocine

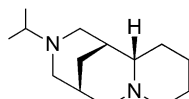
$[\alpha]_D^{20} = +21.7$ (*c* 1.0, $CHCl_3$)

Source of chirality: (–)-cytisine

Absolute configuration: 1*R*,5*S*,12*S*

Magnus J. Johansson, Lennart Schwartz, Mohamed Amedjkouh and Nina Kann*

Tetrahedron: Asymmetry 15 (2004) 3531



$C_{14}H_{26}N_2$

(+)-*N*-Isopropyl-decahydro-1,5-methano-pyrido[1,2-*a*][1,5]diazocine

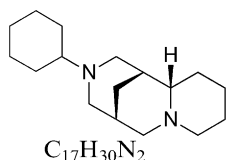
$[\alpha]_D^{20} = +31.6$ (*c* 0.55, $CHCl_3$)

Source of chirality: (–)-cytisine

Absolute configuration: 1*R*,5*S*,12*S*

Magnus J. Johansson, Lennart Schwartz, Mohamed Amedjkouh and Nina Kann*

Tetrahedron: Asymmetry 15 (2004) 3531

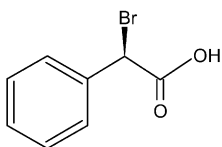


$C_{17}H_{30}N_2$
(+)-N-Ethyl-decahydro-1,5-methano-pyrido[1,2-a][1,5]diazocine

$[\alpha]_D^{20} = +25.6$ (c 0.75, $CHCl_3$)
Source of chirality: (–)-cytisine
Absolute configuration: 1*R*,5*S*,12*S*

David Guieysse, Georgina Sandoval, Laetitia Faure, Jean-Marc Nicaud, Pierre Monsan and Alain Marty*

Tetrahedron: Asymmetry 15 (2004) 3539

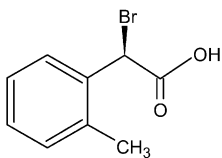


$C_8H_7BrO_2$
(2*R*)-Bromo phenylacetic acid

Ee = 97% (by Chiral HPLC)
 $[\alpha]_D^{20} = -92$ (c 0.5, diethyl ether)
Absolute configuration: (2*R*)

David Guieysse, Georgina Sandoval, Laetitia Faure, Jean-Marc Nicaud, Pierre Monsan and Alain Marty*

Tetrahedron: Asymmetry 15 (2004) 3539

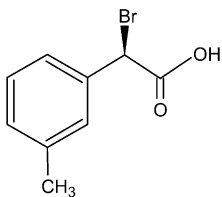


$C_9H_9BrO_2$
(2*R*)-Bromo-*o*-tolylacetic acid

Ee = 96% (by Chiral HPLC)
 $[\alpha]_D^{20} = -3.6$ (c 0.1, diethyl ether)
Absolute configuration: (2*R*)

David Guieysse, Georgina Sandoval, Laetitia Faure, Jean-Marc Nicaud, Pierre Monsan and Alain Marty*

Tetrahedron: Asymmetry 15 (2004) 3539

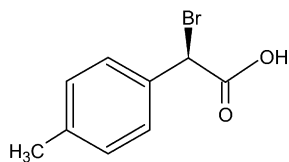


$C_9H_9BrO_2$
(2*R*)-Bromo-*m*-tolylacetic acid

Ee = 95% (by Chiral HPLC)
 $[\alpha]_D^{20} = -101$ (c 0.6, diethyl ether)
Absolute configuration: (2*R*)

David Guieysse, Georgina Sandoval, Laetitia Faure,
Jean-Marc Nicaud, Pierre Monsan and Alain Marty*

Tetrahedron: Asymmetry 15 (2004) 3539



$C_9H_9BrO_2$

(2*R*)-Bromo-*p*-tolylacetic acid

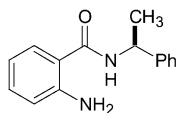
Ee = 95% (by Chiral HPLC)

$[\alpha]_D^{20} = -76$ (*c* 0.5, diethyl ether)

Absolute configuration: (2*R*)

Jaime Priego, Patricia Flores, Claudia Ortiz-Nava and Jaime Escalante*

Tetrahedron: Asymmetry 15 (2004) 3545



$C_{15}H_{16}N_2O$

2-Amino-*N*-[(*S*)- α -methylbenzyl]-benzamide

Ee = 98%

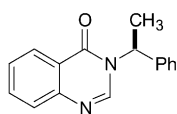
$[\alpha]_D^{24} = +110.9$ (*c* 1.0, $CHCl_3$)

Source of chirality: (*S*)-(-)- α -methylbenzylamine

Absolute configuration: *S*

Jaime Priego, Patricia Flores, Claudia Ortiz-Nava and Jaime Escalante*

Tetrahedron: Asymmetry 15 (2004) 3545



$C_{16}H_{14}N_2O$

3,4-Dihydro-3-[(*S*)- α -methylbenzyl]-4-quinazolinone

Ee = 98%

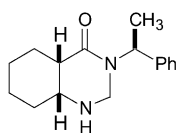
$[\alpha]_D^{24} = -277$ (*c* 0.50, CH_3OH)

Source of chirality: (*S*)-(-)- α -methylbenzylamine

Absolute configuration: *S*

Jaime Priego, Patricia Flores, Claudia Ortiz-Nava and Jaime Escalante*

Tetrahedron: Asymmetry 15 (2004) 3545



$C_{16}H_{22}N_2O$

(4*aS*,8*aR*)-3-[(*S*)- α -Methylbenzyl]-1,2,4*a*,5,6,7,8,8*a*-octahydroquinazolin-4-one

Ee = 98%

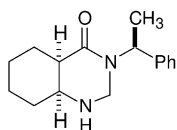
$[\alpha]_D^{24} = -112.8$ (*c* 1.0, CH_3OH)

Source of chirality: asymmetric synthesis

Absolute configuration: (4*aS*,8*aR*)-3(*S*)

Jaime Priego, Patricia Flores, Claudia Ortiz-Nava and Jaime Escalante*

Tetrahedron: Asymmetry 15 (2004) 3545



$C_{16}H_{22}N_2O$

(4a*R*,8a*S*)-3-[(*S*)- α -Methylbenzyl]-1,2,4a,5,6,7,8,8a-octahydroquinazolin-4-one

Ee = 98%

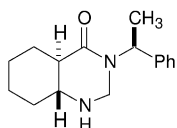
$[\alpha]_D^{24} = -126.0$ (*c* 1.0, CH₃OH)

Source of chirality: asymmetric synthesis

Absolute configuration: (4a*R*,8a*S*)-3(*S*)

Jaime Priego, Patricia Flores, Claudia Ortiz-Nava and Jaime Escalante*

Tetrahedron: Asymmetry 15 (2004) 3545



$C_{16}H_{22}N_2O$

(4a*R*,8a*R*)-3-[(*S*)- α -Methylbenzyl]-1,2,4a,5,6,7,8,8a-octahydroquinazolin-4-one

Ee = 98%

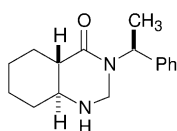
$[\alpha]_D^{24} = -83.7$ (*c* 1.0, CH₃OH)

Source of chirality: asymmetric synthesis

Absolute configuration: (4a*R*,8a*R*)-3(*S*)

Jaime Priego, Patricia Flores, Claudia Ortiz-Nava and Jaime Escalante*

Tetrahedron: Asymmetry 15 (2004) 3545



$C_{16}H_{22}N_2O$

(4a*S*,8a*S*)-3-[(*S*)- α -Methylbenzyl]-1,2,4a,5,6,7,8,8a-octahydroquinazolin-4-one

Ee = 98%

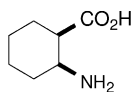
$[\alpha]_D^{24} = -87.0$ (*c* 1.0, CH₃OH)

Source of chirality: asymmetric synthesis

Absolute configuration: (4a*S*,8a*S*)-3(*S*)

Jaime Priego, Patricia Flores, Claudia Ortiz-Nava and Jaime Escalante*

Tetrahedron: Asymmetry 15 (2004) 3545



$C_7H_{13}NO_2$

(1*R*,2*S*)-(-)-*cis*-2-Aminocyclohexane-1-carboxylic acid

Ee = 98%

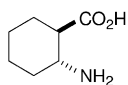
$[\alpha]_D^{24} = -23.0$ (*c* 0.25, H₂O)

Source of chirality: asymmetric synthesis

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

Jaime Priego, Patricia Flores, Claudia Ortiz-Nava and Jaime Escalante*

Tetrahedron: Asymmetry 15 (2004) 3545



$C_7H_{13}NO_2$

(1*R*,2*R*)-(-)-*trans*-2-Aminocyclohexane-1-carboxylic acid

Ee = 98%

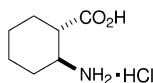
$[\alpha]_D^{24} = -57.0$ (c 0.5, H₂O)

Source of chirality: asymmetric synthesis

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

Jaime Priego, Patricia Flores, Claudia Ortiz-Nava and Jaime Escalante*

Tetrahedron: Asymmetry 15 (2004) 3545



$C_7H_{13}NO_2 \cdot HCl$

(1*S*,2*S*)-(-)-*cis*-2-Aminocyclohexane-1-carboxylic acid hydrochloride salt

Ee = 98%

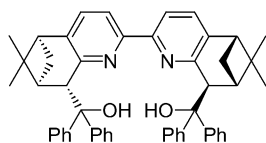
$[\alpha]_D^{24} = +42.0$ (c 0.5, H₂O)

Source of chirality: asymmetric synthesis

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

Yi-Jing Chen, Rong-Xin Lin and Chinpiao Chen*

Tetrahedron: Asymmetry 15 (2004) 3561



$C_{50}H_{48}N_2O_2$

[8'-(Hydroxy-diphenyl-methyl)-10,10,10',10'-tetramethyl-[5,5']bi[6-aza-tricyclo[7.1.1.0^{2,7}]]undecyl]-2(7),3,5,2',4',6'-hexaen-8-yl]-diphenyl-methanol

Ee = 97%

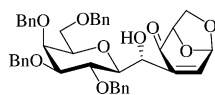
$[\alpha]_D^{16} = -427.5$ (c 0.32, CH₂Cl₂)

Source of chirality: (1*R*)-(+)- α -pinene

Absolute configuration: (1*S*,1'*S*,8*R*,8'*R*,9*S*,9'*S*)

Raynald Demange, Loay Awad and Pierre Vogel*

Tetrahedron: Asymmetry 15 (2004) 3573

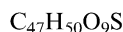
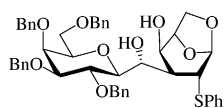


$C_{41}H_{42}O_9$

1,6-Anhydro-3-C-[(1*R*)-2,6-anhydro-3,4,5,7-tetra-*O*-benzyl-*D*-glycero-*L*-manno-heptitol-1-*C*-yl]-2,3-dideoxy- β -*D*-glycero-hex-2-en-4-ulopyranose

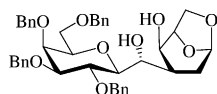
$[\alpha]_D^{25} = +78$ (c 0.12, CHCl₃)

Source of chirality: *D*-galactose and *D*-glucose, and stereoselective synthesis



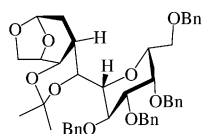
1,6-Anhydro-3-C-[(1*R*)-2,6-anhydro-3,4,5,7-tetra-*O*-benzyl-D-glycero-L-manno-heptitol-1-*C*-yl]-2,3-dideoxy-2-phenylthio-β-D-galacto-pyranose

$$[\alpha]_{\text{D}}^{25} = +60 \text{ (} c \text{ 1.5, CHCl}_3 \text{)}$$



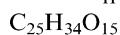
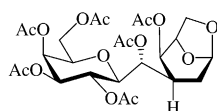
1,6-Anhydro-3-C-[(1*R*)-2,6-anhydro-3,4,5,7-tetra-*O*-benzyl-D-glycero-L-manno-heptitol-1-*C*-yl]-2,3-dideoxy-β-D-lyxo-hexopyranose

$$[\alpha]_{\text{D}}^{25} = -3 \text{ (} c \text{ 0.15, CHCl}_3 \text{)}$$



1,6-Anhydro-3-C-[(1*R*)-2,6-anhydro-3,4,5,7-tetra-*O*-benzyl-D-glycero-L-manno-heptitol-1-*C*-yl]-2,3-dideoxy-β-D-lyxo-hexopyranose-1',4'-acetonide

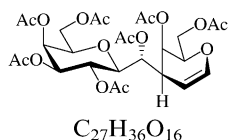
$$[\alpha]_{\text{D}}^{25} = +1 \text{ (} c \text{ 0.24, CHCl}_3 \text{)}$$



4-*O*-Acetyl-1,6-anhydro-3-C-[(1*R*)-1,3,4,5,7-penta-*O*-acetyl-2,6-anhydro-D-glycero-L-manno-heptitol-1-*C*-yl]-2,3-dideoxy-β-D-lyxo-hexopyranose

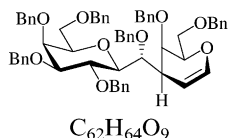
$$[\alpha]_{\text{D}}^{25} = +24 \text{ (} c \text{ 0.28, CHCl}_3 \text{)}$$

$$[\alpha]_{\text{D}}^{25} = +17 \text{ (} c \text{ 0.25, CHCl}_3 \text{)}$$



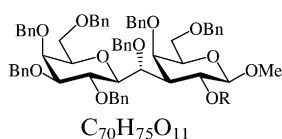
4,6-Di-*O*-acetyl-3-*C*-[(1*R*)-1,3,4,5,7-penta-*O*-acetyl-2,6-anhydro-*D*-glycero-*L*-manno-heptitol-1-*C*-yl]-3-deoxy-*D*-galactal

$$[\alpha]_{\text{D}}^{25} = -2 \text{ (} c \text{ 0.26, CHCl}_3 \text{)}$$



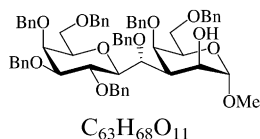
4,6-Di-*O*-benzyl-3-*C*-[(1*R*)-1,3,4,5,7-penta-*O*-benzyl-2,6-anhydro-*D*-glycero-*L*-manno-heptitol-1-*C*-yl]-3-deoxy-*D*-galactal

$$[\alpha]_{\text{D}}^{25} = +24 \text{ (} c \text{ 0.25, CHCl}_3 \text{)}$$



Methyl 2,4,6-tri-*O*-benzyl-3-*C*-[(1*R*)-1,3,4,5,7-penta-*O*-benzyl-2,6-anhydro-*D*-glycero-*L*-manno-heptitol-1-*C*-yl]-3-deoxy- β -*D*-galacto-pyranoside

$$[\alpha]_{\text{D}}^{25} = +29 \text{ (} c \text{ 0.11, CHCl}_3 \text{)}$$

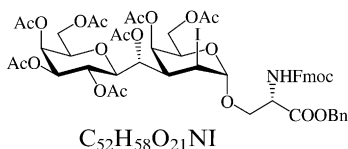


Methyl 4,6-di-*O*-benzyl-1,3-*C*-[(1*R*)-1,3,4,5,7-penta-*O*-benzyl-2,6-anhydro-*D*-glycero-*L*-manno-heptitol-1-*C*-yl]-3-deoxy- α -*D*-talo-pyranoside

Raynald Demange, Loay Awad and Pierre Vogel*

Tetrahedron: Asymmetry 15 (2004) 3573

$$[\alpha]_{\text{D}}^{25} = +45 \text{ (} c \text{ 0.19, CHCl}_3 \text{)}$$

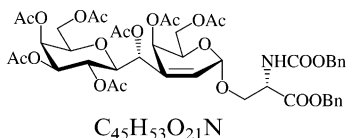


N-[(9*H*-Fluoren-9-ylmethoxy)carbonyl]-*O*-{4,6-di-*O*-acetyl-3-*C*-[(1*R*)-1,3,4,5,7-penta-*O*-acetyl-2,6-anhydro-*D*-glycero-*L*-manno-heptitol-1-*C*-yl]-2,3-dideoxy-2-iodo- α -*D*-talo-pyranosyl}-*L*-serine phenylmethyl ester

Raynald Demange, Loay Awad and Pierre Vogel*

Tetrahedron: Asymmetry 15 (2004) 3573

$$[\alpha]_{\text{D}}^{25} = -42 \text{ (} c \text{ 0.094, CHCl}_3 \text{)}$$

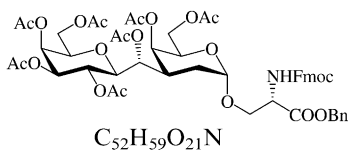


N-[(Benzyloxy)carbonyl]-*O*-{4,6-di-*O*-acetyl-3-*C*-[(1*R*)-1,3,4,5,7-penta-*O*-acetyl-2,6-anhydro-*D*-glycero-*L*-manno-heptitol-1-*C*-yl]-2,3-dideoxy- α -*D*-threo-hex-2-enopyranosyl}-*L*-serine phenylmethyl ester

Raynald Demange, Loay Awad and Pierre Vogel*

Tetrahedron: Asymmetry 15 (2004) 3573

$$[\alpha]_{\text{D}}^{25} = +31 \text{ (} c \text{ 0.18, CHCl}_3 \text{)}$$

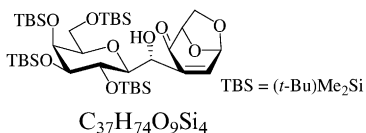


N-[(9*H*-Fluoren-9-ylmethoxy)carbonyl]-*O*-[4,6-di-*O*-acetyl-3-*C*-[(1*R*)-1,3,4,5,7-penta-*O*-acetyl-2,6-anhydro-*D*-glycero-*L*-manno-heptitol-1-*C*-yl]-2,3-dideoxy- α -*D*-lyxo-hexopyranosyl]-*L*-serine phenylmethyl ester

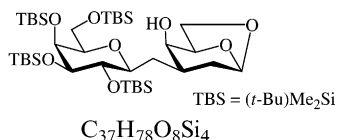
Raynald Demange, Loay Awad and Pierre Vogel*

Tetrahedron: Asymmetry 15 (2004) 3573

$$[\alpha]_{\text{D}}^{25} = +79 \text{ (} c \text{ 0.21, CHCl}_3 \text{)}$$

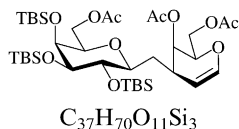


1,6-Anhydro-3-*C*-[(1*R*)-2,6-anhydro-3,4,5,7-tetra-*O*-[(*tert*-butyl)dimethylsilyl]-*D*-glycero-*L*-manno-heptitol-1-*C*-yl]-2,3-dideoxy- β -*D*-glycero-hex-2-enopyran-4-ulose



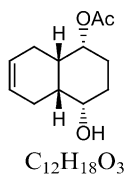
1,6-Anhydro-3-C-{2,6-anhydro-1-deoxy-3,4,5,7-tetrakis-*O*-[(*tert*-butyl)dimethylsilyl]-*D*-glycero-*L*-manno-heptitol-1-*C*-yl}-2,3-dideoxy- β -*D*-lyxo-hexopyranose

$$[\alpha]_{\text{D}}^{25} = +4 \text{ (} c \text{ 0.02, CHCl}_3 \text{)}$$



4,6-Di-*O*-acetyl-3-C-{7-*O*-acetyl-2,6-anhydro-1-deoxy-3,4,5-tri-*O*-[(*tert*-butyl)dimethylsilyl]-*D*-glycero-*L*-manno-heptitol-1-*C*-yl}-3-deoxy-*D*-galactal

$$[\alpha]_{\text{D}}^{25} = -7 \text{ (} c \text{ 0.09, CHCl}_3 \text{)}$$



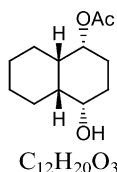
(1*R*,4*S*,4*aR*,8*aS*)-4-Hydroxy-1,2,3,4,4*a*,8,8*a*-octahydronaphthalen-1-yl acetate

Ee $\geq$ 98%

$$[\alpha]_{\text{D}}^{22} = +44.7 \text{ (} c \text{ 2.10, CHCl}_3 \text{)}$$

Source of chirality: enzymatic desymmetrization

Absolute configuration: 1*R*,4*S*,4*aR*,8*aS*



(1*R*,4*S*,4*aR*,8*aS*)-4-Hydroxydecahydronaphthalen-1-yl acetate

Ee $\geq$ 98%

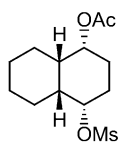
$$[\alpha]_{\text{D}}^{22} = -26.5 \text{ (} c \text{ 4.0, CHCl}_3 \text{)}$$

Source of chirality: enzymatic desymmetrization

Absolute configuration: 1*R*,4*S*,4*aR*,8*aS*

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C₁₃H₂₂O₅S

(1*R*,4*S*,4*aR*,8*aS*)-4-[(Methylsulfonyl)oxy]decahydronaphthalen-1-yl acetate

Ee ≥98%

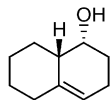
[α]_D²² = −17.2 (c 1.0, CHCl₃)

Source of chirality: enzymatic desymmetrization

Absolute configuration: 1*R*,4*S*,4*aR*,8*aS*

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C₁₀H₁₆O

(1*R*,8*aS*)-1,2,3,5,6,7,8,8*a*-Octahydronaphthalen-1-ol

Ee ≥98%

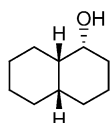
[α]_D²² = +22.0 (c 1.0, CHCl₃)

Source of chirality: enzymatic desymmetrization

Absolute configuration: (1*R*,8*aS*)

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Tetrahedron: Asymmetry 15 (2004) 3587



C₁₀H₁₈O

(1*R*,4*aS*,8*aS*)-Decahydronaphthalen-1-ol

Ee ≥98%

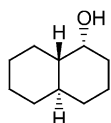
[α]_D²² = +24.0 (c 1.25, CHCl₃)

Source of chirality: enzymatic desymmetrization

Absolute configuration: (1*R*,4*aS*,8*aS*)

Robert Chênevert,* Gabriel Courchesne and Frédéric Jacques

Tetrahedron: Asymmetry 15 (2004) 3587



C₁₀H₁₈O

(1*R*,4*aR*,8*aS*)-Decahydronaphthalen-1-ol

Ee ≥98%

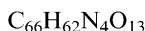
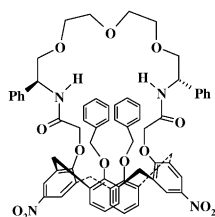
[α]_D²² = −34.0 (c 0.55, CHCl₃)

Source of chirality: enzymatic desymmetrization

Absolute configuration: (1*R*,4*aR*,8*aS*)

Abdulkadir Sirit, Aysegul Karakucuk, Shahabuddin Memon,
Erdal Kocabas and Mustafa Yilmaz*

Tetrahedron: Asymmetry 15 (2004) 3595



(4' *R*, 14' *R*)-5,17-Dinitro-25,27-bis(benzyloxy)-26,28-(4',14'-diphenyl-3',15'-diaz-6',9',12'-trioxaheptadecane)-calix[4]arene

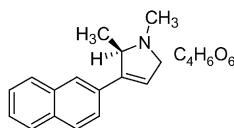
$$[\alpha]_D^{22} = -47.5 \text{ (} c \text{ 3.3, CHCl}_3 \text{)}$$

Source of chirality: D-(−)-α-phenylglycine

Absolute configuration: (*R,R*)

Simona Collina,* Guya Loddo, Annalisa Barbieri, Laura Linati,
Stefano Alcaro, Paola Chimenti and Ornella Azzolina

Tetrahedron: Asymmetry 15 (2004) 3601



1,2-Dimethyl-3-(2-naphthyl)-2*H*,5*H*-pyrroline L-tartrate

Ee = 99.9% (HPLC)

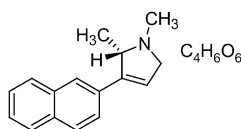
$$[\alpha]_{589} = -23.4 \text{ (} c \text{ 0.5, MeOH)}$$

Source of chirality: enantioselective synthesis

Absolute configuration: (*R*)

Simona Collina,* Guya Loddo, Annalisa Barbieri, Laura Linati,
Stefano Alcaro, Paola Chimenti and Ornella Azzolina

Tetrahedron: Asymmetry 15 (2004) 3601



1,2-Dimethyl-3-(2-naphthyl)-2*H*,5*H*-pyrroline D-tartrate

Ee = 99.9% (HPLC)

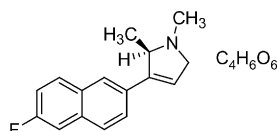
$$[\alpha]_{589} = +23.3 \text{ (} c \text{ 0.5, MeOH)}$$

Source of chirality: enantioselective synthesis

Absolute configuration: (*S*)

Simona Collina,* Guya Loddo, Annalisa Barbieri, Laura Linati,
Stefano Alcaro, Paola Chimenti and Ornella Azzolina

Tetrahedron: Asymmetry 15 (2004) 3601



1,2-Dimethyl-3-[2-(6-fluoronaphthyl)]-2*H*,5*H*-pyrroline L-tartrate

Ee = 99.9% (HPLC)

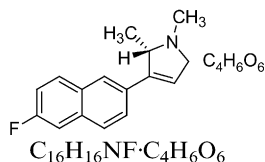
$$[\alpha]_{589} = -26.6 \text{ (} c \text{ 0.5, MeOH)}$$

Source of chirality: enantioselective synthesis

Absolute configuration: (*R*)

Simona Collina,* Guya Loddo, Annalisa Barbieri, Laura Linati,
Stefano Alcaro, Paola Chimenti and Ornella Azzolina

Tetrahedron: Asymmetry 15 (2004) 3601



1,2-Dimethyl-3-[2-(6-fluoronaphthyl)]-2*H*,5*H*-pyrroline D-tartrate

Ee = 92.1% (HPLC)

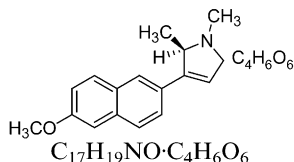
$[\alpha]_{589} = +23.2$ (*c* 0.5, MeOH)

Source of chirality: enantioselective synthesis

Absolute configuration: (*S*)

Simona Collina,* Guya Loddo, Annalisa Barbieri, Laura Linati,
Stefano Alcaro, Paola Chimenti and Ornella Azzolina

Tetrahedron: Asymmetry 15 (2004) 3601



1,2-Dimethyl-3-[2-(6-methoxynaphthyl)]-2*H*,5*H*-pyrroline L-tartrate

Ee = 99.9% (HPLC)

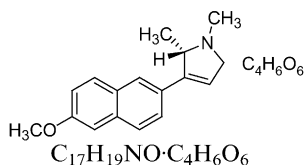
$[\alpha]_{589} = -26.2$ (*c* 0.5, MeOH)

Source of chirality: enantioselective synthesis

Absolute configuration: (*R*)

Simona Collina,* Guya Loddo, Annalisa Barbieri, Laura Linati,
Stefano Alcaro, Paola Chimenti and Ornella Azzolina

Tetrahedron: Asymmetry 15 (2004) 3601



1,2-Dimethyl-3-[2-(6-methoxynaphthyl)]-2*H*,5*H*-pyrroline D-tartrate

Ee = 92.8%(HPLC)

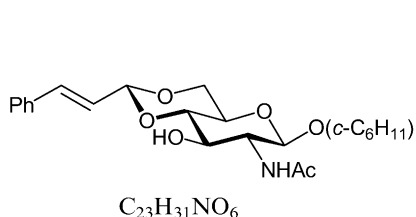
$[\alpha]_{589} = +24.5$ (*c* 0.5, MeOH)

Source of chirality: enantioselective synthesis

Absolute configuration: (*S*)

José M. Vega-Pérez,* Margarita Vega, Eugenia Blanco
and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry 15 (2004) 3617



c-Hexyl 2-acetamido-2-deoxy-(*R*)-4,6-*O*-(*E*-3-phenyl-2-propenylidene)-β-*D*-glucopyranoside

Ee = 100%

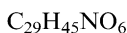
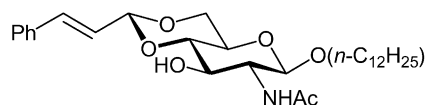
$[\alpha]_D^{25} = -108.0$ (*c* 0.5, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-(*E*)-, β-*D*-gluco

José M. Vega-Pérez,* Margarita Vega, Eugenia Blanco
and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry 15 (2004) 3617



1-Dodecyl 2-acetamido-2-deoxy-(*R*)-4,6-*O*-(*E*-3-phenyl-2-propenylidene)-β-D-glucopyranoside

Ee = 100%

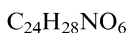
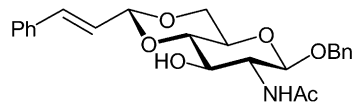
$[\alpha]_D^{25} = -68.0$ (*c* 1.0, EtOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-(*E*)-, β-D-glucoside

José M. Vega-Pérez,* Margarita Vega, Eugenia Blanco
and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry 15 (2004) 3617



Benzyl 2-acetamido-2-deoxy-(*R*)-4,6-*O*-(*E*-3-phenyl-2-propenylidene)-β-D-glucopyranoside

Ee = 100%

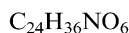
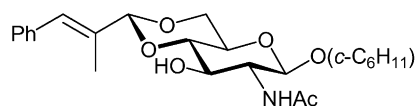
$[\alpha]_D^{25} = -54.2$ (*c* 1.0, DMF)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-(*E*)-, β-D-glucoside

José M. Vega-Pérez,* Margarita Vega, Eugenia Blanco
and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry 15 (2004) 3617



c-Hexyl 2-acetamido-2-deoxy-(*R*)-4,6-*O*-(*E*-2-methyl-3-phenyl-2-propenylidene)-β-D-glucopyranoside

Ee = 100%

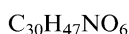
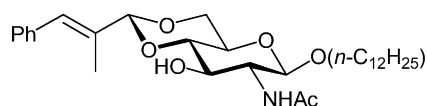
$[\alpha]_D^{25} = -155.6$ (*c* 0.3, EtOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-(*E*)-, β-D-glucoside

José M. Vega-Pérez,* Margarita Vega, Eugenia Blanco
and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry 15 (2004) 3617



1-Dodecyl 2-acetamido-2-deoxy-(*R*)-4,6-*O*-(*E*-2-methyl-3-phenyl-2-propenylidene)-β-D-glucopyranoside

Ee = 100%

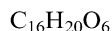
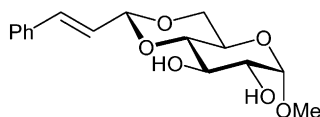
$[\alpha]_D^{25} = -53.3$ (*c* 0.8, EtOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-(*E*)-, β-D-glucoside

José M. Vega-Pérez,* Margarita Vega, Eugenia Blanco
and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry 15 (2004) 3617



Methyl (*R*)-4,6-*O*-(*E*-3-phenyl-2-propenylidene)- α -D-glucopyranoside

Ee = 100%

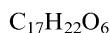
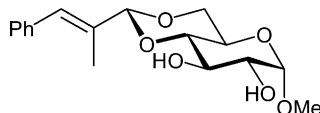
$[\alpha]_D^{25} = +97.2$ (*c* 1.4, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-(*E*)-, α -D-glucopyranoside

José M. Vega-Pérez,* Margarita Vega, Eugenia Blanco
and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry 15 (2004) 3617



Methyl (*R*)-4,6-*O*-(*E*-2-methyl-3-phenyl-2-propenylidene)- α -D-glucopyranoside

Ee = 100%

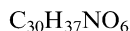
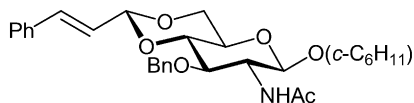
$[\alpha]_D^{25} = +119.1$ (*c* 1.1, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-(*E*)-, α -D-glucopyranoside

José M. Vega-Pérez,* Margarita Vega, Eugenia Blanco
and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry 15 (2004) 3617



c-Hexyl 2-acetamido-3-*O*-benzyl-2-deoxy-(*R*)-4,6-*O*-(*E*-3-phenyl-2-propenylidene)- β -D-glucopyranoside

Ee = 100%

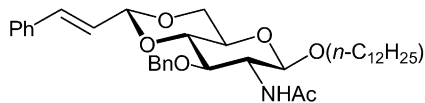
$[\alpha]_D^{25} = +5.5$ (*c* 1.1, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-(*E*)-, β -D-glucopyranoside

José M. Vega-Pérez,* Margarita Vega, Eugenia Blanco
and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry 15 (2004) 3617



1-Dodecyl 2-acetamido-3-*O*-benzyl-2-deoxy-(*R*)-4,6-*O*-(*E*-3-phenyl-2-propenylidene)- β -D-glucopyranoside

Ee = 100%

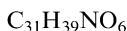
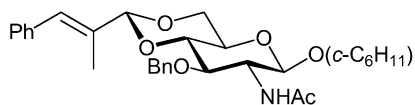
$[\alpha]_D^{25} = +48.0$ (*c* 0.5, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-(*E*)-, β -D-glucopyranoside

José M. Vega-Pérez,* Margarita Vega, Eugenia Blanco
and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry 15 (2004) 3617



c-Hexyl 2-acetamido-3-*O*-benzyl-2-deoxy-(*R*)-4,6-*O*-(*E*-2-methyl-3-phenyl-2-propenylidene)-β-*D*-glucopyranoside

Ee = 100%

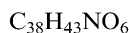
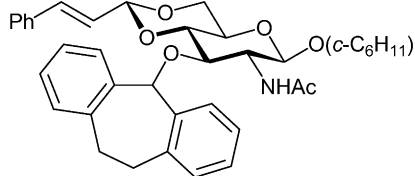
$[\alpha]_D^{25} = +17.5$ (*c* 1.1, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-(*E*)-, β-*D*-gluco

José M. Vega-Pérez,* Margarita Vega, Eugenia Blanco
and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry 15 (2004) 3617



c-Hexyl 2-acetamido-2-deoxy-3-*O*-(5-dibenzosuberyl)-(*R*)-4,6-*O*-(*E*-3-phenyl-2-propenylidene)-β-*D*-glucopyranoside

Ee = 100%

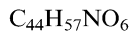
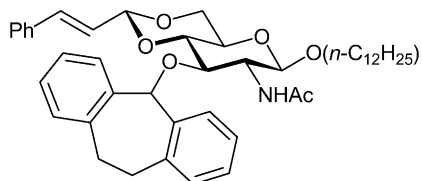
$[\alpha]_D^{25} = -44.1$ (*c* 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-(*E*)-, β-*D*-gluco

José M. Vega-Pérez,* Margarita Vega, Eugenia Blanco
and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry 15 (2004) 3617



1-Dodecyl 2-acetamido-2-deoxy-3-*O*-(5-dibenzosuberyl)-(*R*)-4,6-*O*-(*E*-3-phenyl-2-propenylidene)-β-*D*-glucopyranoside

Ee = 100%

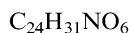
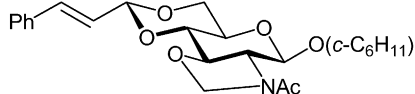
$[\alpha]_D^{25} = -41.6$ (*c* 1.1, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-(*E*)-, β-*D*-gluco

José M. Vega-Pérez,* Margarita Vega, Eugenia Blanco
and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry 15 (2004) 3617



c-Hexyl 2-acetamido-2-deoxy-2-*N*-3-*O*-methylidene-(*R*)-4,6-*O*-(*E*-3-phenyl-2-propenylidene)-β-*D*-glucopyranoside

Ee = 100%

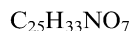
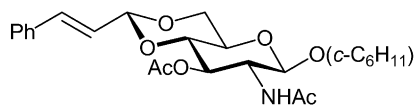
$[\alpha]_D^{25} = -17.9$ (*c* 1.3, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-(*E*)-, β-*D*-gluco

José M. Vega-Pérez,* Margarita Vega, Eugenia Blanco
and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry 15 (2004) 3617



c-Hexyl 2-acetamido-3-*O*-acetyl-2-deoxy-(*R*)-4,6-*O*-(*E*-3-phenyl-2-propenylidene)-β-D-glucopyranoside

Ee = 100%

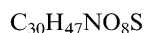
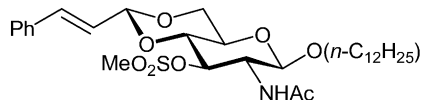
$[\alpha]_D^{25} = -70.4$ (*c* 1.1, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-(*E*)-, β-D-*gluco*

José M. Vega-Pérez,* Margarita Vega, Eugenia Blanco
and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry 15 (2004) 3617



1-Dodecyl 2-acetamido-2-deoxy-3-*O*-methanesulfonyl-(*R*)-4,6-*O*-(*E*-3-phenyl-2-propenylidene)-β-D-glucopyranoside

Ee = 100%

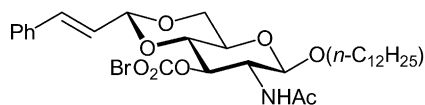
$[\alpha]_D^{25} = -68.0$ (*c* 1.0, EtOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-(*E*)-, β-D-*gluco*

José M. Vega-Pérez,* Margarita Vega, Eugenia Blanco
and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry 15 (2004) 3617



1-Dodecyl 2-acetamido-3-*O*-benzyloxycarbonyl-2-deoxy-(*R*)-4,6-*O*-(*E*-3-phenyl-2-propenylidene)-β-D-glucopyranoside

Ee = 100%

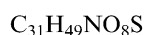
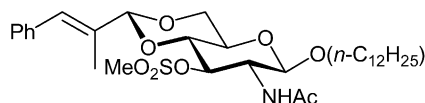
$[\alpha]_D^{25} = -58.2$ (*c* 0.8, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-(*E*)-, β-D-*gluco*

José M. Vega-Pérez,* Margarita Vega, Eugenia Blanco
and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry 15 (2004) 3617



1-Dodecyl 2-acetamido-2-deoxy-3-*O*-methanesulfonyl-(*R*)-4,6-*O*-(*E*-2-methyl-3-phenyl-2-propenylidene)-β-D-glucopyranoside

Ee = 100%

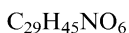
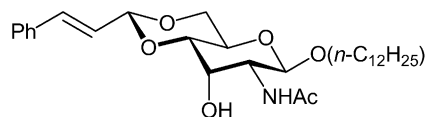
$[\alpha]_D^{25} = -19.4$ (*c* 0.8, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-(*E*)-, β-D-*gluco*

José M. Vega-Pérez,* Margarita Vega, Eugenia Blanco
and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry 15 (2004) 3617



1-Dodecyl 2-acetamido-2-deoxy-(*R*)-4,6-*O*-(*E*-3-phenyl-2-propenylidene)-β-*D*-allopyranoside

Ee = 100%

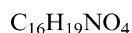
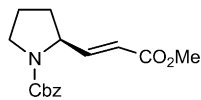
$[\alpha]_D^{25} = +20.0$ (*c* 1.0, EtOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-(*E*)-, β-*D*-*allo*

Isidoro Izquierdo,* María T. Plaza and Juan A. Tamayo

Tetrahedron: Asymmetry 15 (2004) 3635



Methyl (*E*)-3-[(2'*S*)-*N*-benzyloxycarbonylpyrrolidin-2'-yl]propenoate

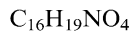
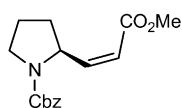
$[\alpha]_D = -67$ (*c* 1.1, chloroform)

Source of chirality: L-proline and stereoselective synthesis

Absolute configuration: *E*,2'*S* (assigned by NMR spectroscopic)

Isidoro Izquierdo,* María T. Plaza and Juan A. Tamayo

Tetrahedron: Asymmetry 15 (2004) 3635



Methyl (*Z*)-3-[(2'*S*)-*N*-benzyloxycarbonylpyrrolidin-2'-yl]propenoate

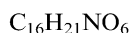
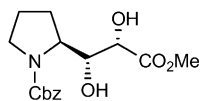
$[\alpha]_D = +32$ (*c* 1, chloroform)

Source of chirality: L-proline and stereoselective synthesis

Absolute configuration: *Z*,2'*S* (assigned by NMR spectroscopic)

Isidoro Izquierdo,* María T. Plaza and Juan A. Tamayo

Tetrahedron: Asymmetry 15 (2004) 3635



Methyl (2*S*,3*R*)-2,3-dihydroxy-3-[(2'*S*)-*N*-benzyloxycarbonylpyrrolidin-2'-yl]propanoate

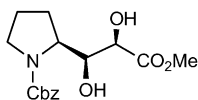
$[\alpha]_D = -51$ (*c* 1, chloroform)

Source of chirality: L-proline and stereoselective synthesis

Absolute configuration: 2*S*,3*R*,2'*S* (assigned by chemical correlation)

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Tetrahedron: Asymmetry 15 (2004) 3635



$C_{16}H_{21}NO_6$

Methyl (2*R*,3*S*)-2,3-dihydroxy-3-[(2'*S*)-*N*-benzyloxycarbonylpyrrolidin-2'-yl]propanoate

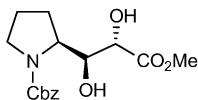
$[\alpha]_D = -55$ (*c* 1, methanol)

Source of chirality: L-proline and stereoselective synthesis

Absolute configuration: 2*R*,3*S*,2'*S* (assigned by chemical correlation)

Isidoro Izquierdo,* María T. Plaza and Juan A. Tamayo

Tetrahedron: Asymmetry 15 (2004) 3635



$C_{16}H_{21}NO_6$

Methyl (2*S*,3*S*)-2,3-dihydroxy-3-[(2'*S*)-*N*-benzyloxycarbonylpyrrolidin-2'-yl]propanoate

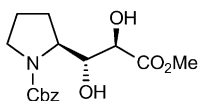
$[\alpha]_D = -51$ (*c* 1.25, chloroform)

Source of chirality: L-proline and stereoselective synthesis

Absolute configuration: 2*S*,3*S*,2'*S* (assigned by chemical correlation)

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Tetrahedron: Asymmetry 15 (2004) 3635



$C_{16}H_{21}NO_6$

Methyl (2*R*,3*R*)-2,3-dihydroxy-3-[(2'*S*)-*N*-benzyloxycarbonylpyrrolidin-2'-yl]propanoate

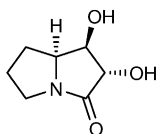
$[\alpha]_D = -48$ (*c* 1, chloroform)

Source of chirality: L-proline and stereoselective synthesis

Absolute configuration: 2*R*,3*R*,2'*S* (assigned by chemical correlation)

Isidoro Izquierdo,* María T. Plaza and Juan A. Tamayo

Tetrahedron: Asymmetry 15 (2004) 3635



$C_7H_{11}NO_3$

(1*R*,2*S*,7*aS*)-1,2-Dihydroxypyrrolizidin-3-one

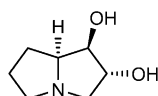
$[\alpha]_D = +6.3$ (*c* 1, methanol)

Source of chirality: L-proline and stereoselective synthesis

Absolute configuration: 1*R*,2*S*,7*aS* (assigned by NMR spectroscopic and sample correlation)

Isidoro Izquierdo,* María T. Plaza and Juan A. Tamayo

Tetrahedron: Asymmetry 15 (2004) 3635



$C_7H_{13}NO_2$

(1*R*,2*R*,7*aS*)-1,2-Dihydroxypyrrolizidine

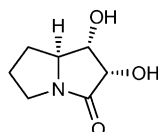
$[\alpha]_D = -16$ (*c* 1, methanol)

Source of chirality: L-proline and stereoselective synthesis

Absolute configuration: 1*R*,2*R*,7*aS* (assigned by NMR spectroscopic and sample correlation)

Isidoro Izquierdo,* María T. Plaza and Juan A. Tamayo

Tetrahedron: Asymmetry 15 (2004) 3635



$C_7H_{11}NO_3$

(1*S*,2*S*,7*aS*)-1,2-Dihydroxypyrrolizidin-3-one

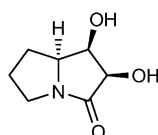
$[\alpha]_D = +7$ (*c* 0.6, methanol)

Source of chirality: L-proline and stereoselective synthesis

Absolute configuration: 1*S*,2*S*,7*aS* (assigned by NMR spectroscopic and sample correlation)

Isidoro Izquierdo,* María T. Plaza and Juan A. Tamayo

Tetrahedron: Asymmetry 15 (2004) 3635



$C_7H_{11}NO_3$

(1*R*,2*R*,7*aS*)-1,2-Dihydroxypyrrolizidin-3-one

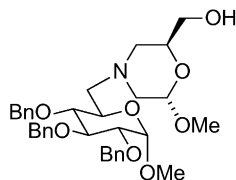
$[\alpha]_D = +11.8$ (*c* 1, methanol)

Source of chirality: L-proline and stereoselective synthesis

Absolute configuration: 1*R*,2*R*,7*aS* (assigned by NMR spectroscopic and chemical correlation)

Stuart M. Clark and Helen M. I. Osborn*

Tetrahedron: Asymmetry 15 (2004) 3643



$C_{34}H_{43}NO_8$

Methyl 2,3,4-tri-*O*-benzyl-6-deoxy-6-((2*S*,6*S*)-2-hydroxymethyl-6-methoxy-morpholin-4-yl)- α -D-glucopyranoside

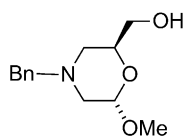
Ee = 100%

$[\alpha]_D^{20} = +61.5$ (*c* 1.0, $CHCl_3$)

Source of chirality: methyl α -D-glucopyranoside

Stuart M. Clark and Helen M. I. Osborn*

Tetrahedron: Asymmetry 15 (2004) 3643



$C_{13}H_{19}O_3N$

(2*S*,6*S*)-4-Benzyl-6-methoxy-morpholin-2-yl-methanol glucopyranoside

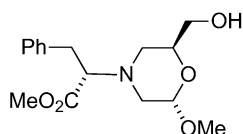
Ee = 100%

$[\alpha]_D^{20} = +91.5$ (*c* 1.0, $CHCl_3$)

Source of chirality: methyl α -D-glucopyranoside

Stuart M. Clark and Helen M. I. Osborn*

Tetrahedron: Asymmetry 15 (2004) 3643



$C_{16}H_{23}NO_5$

(2*R*)-((2*S*,6*S*)-2-Hydroxymethyl-6-methoxy-morpholin-4-yl)-3-phenyl-propionic acid methyl ester

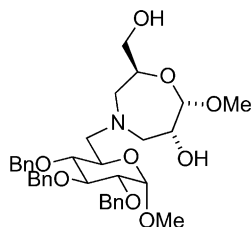
Ee = 100%

$[\alpha]_D^{20} = +39.7$ (*c* 0.9, $CHCl_3$)

Source of chirality: methyl α -D-glucopyranoside

Stuart M. Clark and Helen M. I. Osborn*

Tetrahedron: Asymmetry 15 (2004) 3643



$C_{35}H_{45}NO_6$

Methyl 2,3,4-tri-*O*-benzyl-6-deoxy-6-((2*S*,6*R*,7*S*)-6-hydroxy-2-hydroxymethyl-7-methoxy-[1,4]-oxazepan-4-yl)- α -D-glucopyranoside

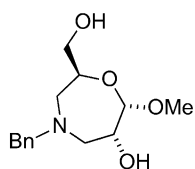
Ee = 100%

$[\alpha]_D^{20} = +21.0$ (*c* 1.0, $CHCl_3$)

Source of chirality: methyl α -D-glucopyranoside

Stuart M. Clark and Helen M. I. Osborn*

Tetrahedron: Asymmetry 15 (2004) 3643



$C_{14}H_{21}NO_4$

(2*S*,6*R*,7*S*)-4-Benzyl-2-hydroxymethyl-7-methoxy-[1,4]-oxazepan-6-ol

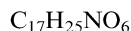
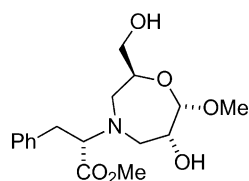
Ee = 100%

$[\alpha]_D^{20} = +66.0$ (*c* 0.7, $CHCl_3$)

Source of chirality: methyl α -D-glucopyranoside

Stuart M. Clark and Helen M. I. Osborn*

Tetrahedron: Asymmetry 15 (2004) 3643



(2*R*)-[(2*S*,6*R*,7*S*)-6-Hydroxy-2-(hydroxymethyl)-7-methoxy-[1,4]-oxazepan-4-yl]-3-phenyl-propionic acid methyl ester

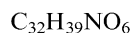
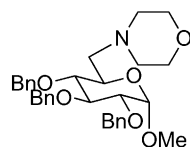
Ee = 100%

$[\alpha]_{\text{D}}^{20} = +23.7$ (c 1.0, CHCl_3)

Source of chirality: methyl α -D-glucopyranoside

Stuart M. Clark and Helen M. I. Osborn*

Tetrahedron: Asymmetry 15 (2004) 3643



Methyl 6-deoxy-6-(morpholin-4-yl)-2,3,4-tri-*O*-benzyl- α -D-glucopyranoside

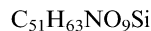
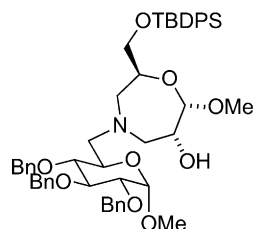
Ee = 100%

$[\alpha]_{\text{D}}^{20} = +25.0$ (c 1.0, CHCl_3)

Source of chirality: methyl α -D-glucopyranoside

Stuart M. Clark and Helen M. I. Osborn*

Tetrahedron: Asymmetry 15 (2004) 3643



Methyl 2,3,4-tri-*O*-benzyl-6-deoxy-6-[(2*S*,6*R*,7*S*)-2-(*tert*butyldiphenylsilyloxymethyl)-6-hydroxy-7-methoxy-[1,4]-oxazepan-4-yl]- α -D-glucopyranoside

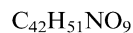
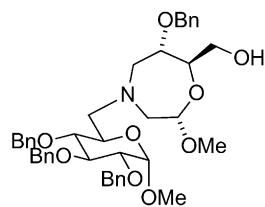
Ee = 100%

$[\alpha]_{\text{D}}^{20} = +21.0$ (c 1.0, CHCl_3)

Source of chirality: methyl α -D-glucopyranoside

Stuart M. Clark and Helen M. I. Osborn*

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Methyl 2,3,4-tri-*O*-benzyl-6-deoxy-6-((2*S*,6*S*,7*R*)-6-benzyloxy-7-hydroxymethyl-2-methoxy-[1,4]-oxazepan-4-yl)- α -D-glucopyranoside

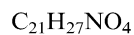
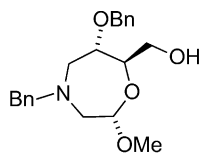
Ee = 100%

$[\alpha]_{\text{D}}^{20} = +53.5$ (c 0.2, CHCl_3)

Source of chirality: methyl α -D-glucopyranoside

Stuart M. Clark and Helen M. I. Osborn*

Tetrahedron: Asymmetry 15 (2004) 3643



((2*S*,6*S*,7*R*)-4-Benzyl-6-benzyloxy-2-methoxy-[1,4]-oxazepan-7-yl)-methanol

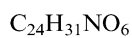
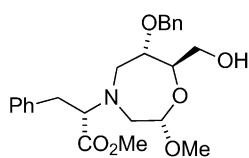
Ee = 100%

$[\alpha]_D^{20} = +91.5$ (*c* 1.0, $CHCl_3$)

Source of chirality: methyl α -D-glucopyranoside

Stuart M. Clark and Helen M. I. Osborn*

Tetrahedron: Asymmetry 15 (2004) 3643



(2*R*)-((2*S*,6*S*,7*R*)-6-Benzoyloxy-7-hydroxymethyl-2-methoxy-[1,4]-oxazepan-4-yl)-3-phenyl-propionic acid methyl ester

Ee = 100%

$[\alpha]_D^{20} = +64.3$ (*c* 1.0, $CHCl_3$)

Source of chirality: methyl α -D-glucopyranoside