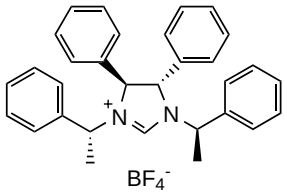
Frédéric Guillen, Caroline L. Winn and Alexandre Alexakis*

Tetrahedron: Asymmetry *12 (2001) 2083*



E.e. >99%

$[\alpha]^{20} = -174$ (*c* 0.54, $CHCl_3$)

Source of chirality: (*S*,*S*)-1,2-diphenylethane-1,2-diamine and 1(*R*)-phenylethyl amine

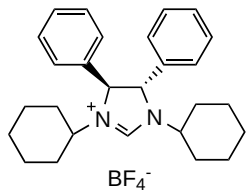
Absolute configuration: (*R*,*S*,*S*,*R*)

$C_{31}H_{31}N_2 \cdot BF_4$

(4*S*,5*S*)-Diphenyl-1,3-bis-(1(*R*)-phenyl-ethyl)-4,5-dihydro-3*H*-imidazol-1-ium tetrafluoro borate

Frédéric Guillen, Caroline L. Winn and Alexandre Alexakis*

Tetrahedron: Asymmetry *12 (2001) 2083*



E.e. >99%

$[\alpha]^{20} = +319$ (*c* 0.50, $CHCl_3$)

Source of chirality: (*R*,*R*)-1,2-diphenylethane-1,2-diamine

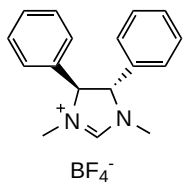
Absolute configuration: *R*,*R*

$C_{27}H_{35}N_2 \cdot BF_4$

1,3-Dicyclohexyl-(4*R*,5*R*)-diphenyl-4,5-dihydro-3*H*-imidazol-1-ium tetrafluoro borate

Frédéric Guillen, Caroline L. Winn and Alexandre Alexakis*

Tetrahedron: Asymmetry *12 (2001) 2083*



E.e. >99%

$[\alpha]^{20} = +253$ (*c* 0.59, $CHCl_3$)

Source of chirality: (*S*,*S*)-1,2-diphenylethane-1,2-diamine

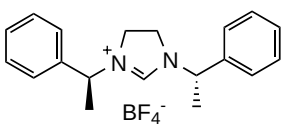
Absolute configuration: *S*,*S*

$C_{17}H_{19}N_2 \cdot BF_4$

1,3-Dimethyl-(4*S*,5*S*)-diphenyl-4,5-dihydro-3*H*-imidazol-1-ium tetrafluoro borate

Frédéric Guillen, Caroline L. Winn and Alexandre Alexakis*

Tetrahedron: Asymmetry *12 (2001) 2083*



E.e. >99%

$[\alpha]^{20} = +23$ (*c* 0.51, $CHCl_3$)

Source of chirality: 1(*S*)-phenylethylamine

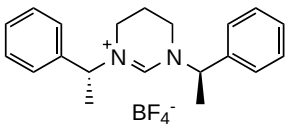
Absolute configuration: *S*,*S*

$C_{19}H_{23}N_2 \cdot BF_4$

1,3-Bis-(1(*S*)-phenyl-ethyl)-4,5-dihydro-3*H*-imidazol-1-ium tetrafluoro borate

Frédéric Guillen, Caroline L. Winn and Alexandre Alexakis*

Tetrahedron: Asymmetry *12 (2001) 2083*



$C_{20}H_{25}N_2 \cdot BF_4$

1,3-Bis-(1(*R*)-phenyl-ethyl)-3,4,5,6-tetrahydro-pyrimidin-1-ium tetrafluoro borate

E.e. >99%
$[\alpha]^{20} = +40$ (*c* 0.48, $CHCl_3$)
Source of chirality: 1(*R*)-phenylethylamine
Absolute configuration: *R*,*R*

Pascal Gosselin,* Martine Lelièvre and Bénédicte Poissonnier

Tetrahedron: Asymmetry *12 (2001) 2091*

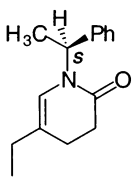
$C_{11}H_{18}O$

(−)-(1*R*,4*R*)-(7,7-Dimethyl-2-methylene-bicyclo[2.2.1]hept-1-yl)-methanol

E.e. = 97.8% by GC using chiral column
$[\alpha]_D = -41.4$ (*c* 0.9, EtOH)
Source of chirality: (+)-(1*S*)-fenchone
Absolute configuration: (1*R*,4*R*)

E. Vázquez, A. Galindo,* D. Gnecco* and S. Bernès

Tetrahedron: Asymmetry *12 (2001) 2099*



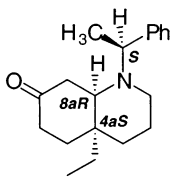
$C_{15}H_{19}NO$

(−)-(1′*S*)-5-Ethyl-1-(1′-phenylethyl)-3,4-dihydro-1*H*-pyridin-2-one

$[\alpha]_D = -75$ ($c = 1.0$, CH_2Cl_2)
Source of chirality: (*S*)-(−)-1-phenylethylamine

E. Vázquez, A. Galindo,* D. Gnecco* and S. Bernès

Tetrahedron: Asymmetry *12 (2001) 2099*



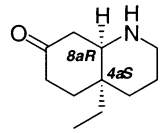
$C_{19}H_{27}NO$

(−)-(1′*S*,4a*S*,8a*R*)-4a-Ethyl-1-(1′-phenylethyl)-octahydroquinolin-7-ones

$[\alpha]_D = -98$ ($c = 1.0$, CH_2Cl_2)
Source of chirality: (*S*)-(−)-1-phenylethylamine
Absolute configuration: (1′*S*,4a*S*,8a*R*)

E. Vázquez, A. Galindo,* D. Gnecco* and S. Bernès

Tetrahedron: Asymmetry *12 (2001) 2099*



$C_{11}H_{19}NO$

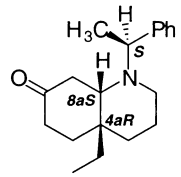
(+)-(4a*S*,8a*R*)-4a-Ethyloctahydroquinolin-7-one

$[\alpha]_D = +27.6$ ($c = 1.0$, EtOH)

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

E. Vázquez, A. Galindo,* D. Gnecco* and S. Bernès

Tetrahedron: Asymmetry *12 (2001) 2099*



$C_{19}H_{27}NO$

(+)-(1′*S*,4a*R*,8a*S*)-4a-Ethyl-1-(1′-phenylethyl)-octahydroquinolin-7-ones

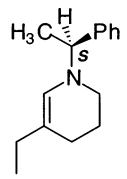
$[\alpha]_D = +5.0$ ($c = 1.0$, CH_2Cl_2)

Source of chirality: (*S*)-(−)-1-phenylethylamine

Absolute configuration: (1′*S*,4a*R*,8a*S*)

E. Vázquez, A. Galindo,* D. Gnecco* and S. Bernès

Tetrahedron: Asymmetry *12 (2001) 2099*



$C_{15}H_{21}N$

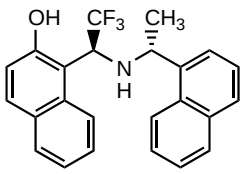
(−)-(1′*S*)-5-Ethyl-1-(1′-phenylethyl)-1,2,3,4-tetrahydropyridine

$[\alpha]_D = -23$ ($c = 1.0$, CH_2Cl_2)

Source of chirality: (*S*)-(−)-1-phenylethylamine

Yuefa Gong* and Katsuya Kato

Tetrahedron: Asymmetry *12 (2001) 2121*



$C_{24}H_{20}F_3NO$

(1*S*,1′*R*)-1-[2,2,2-Trifluoro-1-(1-naphthalen-1-yl-ethylamino)ethyl]naphthalen-2-ol

E.e. >99%

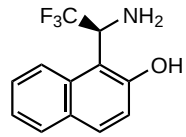
$[\alpha]_D^{20} = -18.9$ (c 0.6, $CHCl_3$)

Source of chirality: Friedel–Crafts reaction of chiral imine

Absolute configuration: (1*S*,1′*R*)

Yuefa Gong* and Katsuya Kato

Tetrahedron: Asymmetry *12 (2001) 2121*



$C_{12}H_{10}F_3NO$

(*S*)-1-(1-Amino-2,2,2-trifluoroethyl)naphthalen-2-ol

E.e. >99%

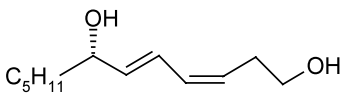
$[\alpha]_D^{20} = +3.3$ (*c* 1.1, $CHCl_3$)

Source of chirality: hydrogenation of chiral amine

Absolute configuration: (*S*)

J. S. Yadav,* S. Nanda and A. Bhaskar Rao

Tetrahedron: Asymmetry *12 (2001) 2129*



$C_{12}H_{22}O_2$

(3*Z*,5*E*,7*S*)-3,5-Dodecadiene-1,7-diol

E.e. = 98%

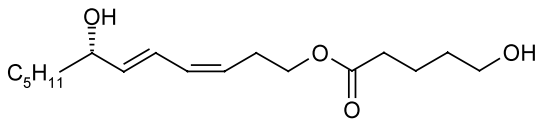
$[\alpha]_D^{25} = +52.0$ (*c* = 1.0, $CHCl_3$)

Source of chirality: lipoxygenase-catalyzed asymmetric hydroxylation

Absolute configuration: *S*

J. S. Yadav,* S. Nanda and A. Bhaskar Rao

Tetrahedron: Asymmetry *12 (2001) 2129*



$C_{18}H_{30}O_4$

7-Hydroxy-(3*Z*,5*E*,7*S*)-3,5-dodecadienyl-5-hydroxypentanoate

E.e. = 98%

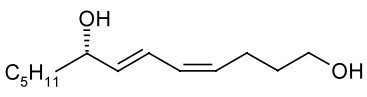
$[\alpha]_D^{25} = +11.0$ (*c* = 0.5, $CHCl_3$)

Source of chirality: lipoxygenase-catalyzed asymmetric hydroxylation

Absolute configuration: *S*

J. S. Yadav,* S. Nanda and A. Bhaskar Rao

Tetrahedron: Asymmetry *12 (2001) 2129*



$C_{13}H_{24}O_2$

(4*Z*,6*E*,8*S*)-4,6-Tridecadiene-1,8-diol

E.e. = 97%

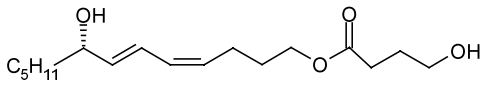
$[\alpha]_D^{25} = +28.0$ (*c* = 1.0, $CHCl_3$)

Source of chirality: lipoxygenase-catalyzed asymmetric hydroxylation

Absolute configuration: *S*

J. S. Yadav,* S. Nanda and A. Bhaskar Rao

Tetrahedron: Asymmetry *12 (2001) 2129*



$C_{18}H_{30}O_{34}$

8-Hydroxy-(4*Z*,6*E*,8*S*)-4,6-tridecadienyl-4-hydroxybutanoate

E.e. = 97%

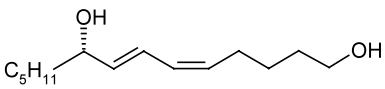
$[\alpha]_D^{25} = +6.2$ ($c = 1.1$, $CHCl_3$)

Source of chirality: lipoxygenase-catalyzed asymmetric hydroxylation

Absolute configuration: *S*

J. S. Yadav,* S. Nanda and A. Bhaskar Rao

Tetrahedron: Asymmetry *12 (2001) 2129*



$C_{14}H_{26}O_2$

(5*Z*,7*E*,9*S*)-5,7-Tetradecadiene-1,9-diol

E.e. = 98%

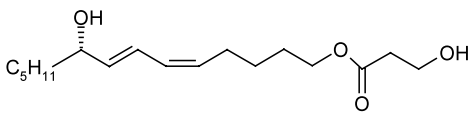
$[\alpha]_D^{25} = +39.0$ ($c = 0.96$, $CHCl_3$)

Source of chirality: lipoxygenase-catalyzed asymmetric hydroxylation

Absolute configuration: *S*

J. S. Yadav,* S. Nanda and A. Bhaskar Rao

Tetrahedron: Asymmetry *12 (2001) 2129*



$C_{18}H_{30}O_{34}$

9-Hydroxy-(5*Z*,7*E*,9*S*)-5,7-tetradecadienyl-3-hydroxypropanoate

E.e. = 98%

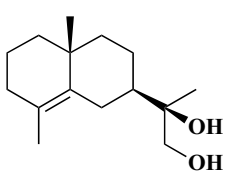
$[\alpha]_D^{25} = +9.4$ ($c = 0.8$, $CHCl_3$)

Source of chirality: lipoxygenase-catalyzed asymmetric hydroxylation

Absolute configuration: *S*

Zhe Zhang, Zhaoming Xiong, Guojun Zheng and Yulin Li*

Tetrahedron: Asymmetry *12 (2001) 2137*



$C_{15}H_{26}O_2$

(7*R*,10*R*,11*R*)-Eudesm-4-en-11,12-diol

D.e. = 45%

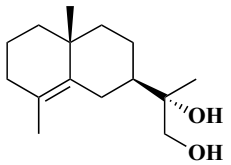
$[\alpha]_D^{16} = +79.4$ (c 1.22, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (7*R*,10*R*,11*R*)

Zhe Zhang, Zhaoming Xiong, Guojun Zheng and Yulin Li*

Tetrahedron: Asymmetry *12 (2001) 2137*



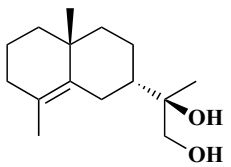
$C_{15}H_{26}O_2$

(7*R*,10*R*,11*S*)-Eudesm-4-en-11,12-diol

D.e. = 52%
$[\alpha]_D^{16} = +76.1$ (*c* 0.92, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (7*R*,10*R*,11*S*)

Zhe Zhang, Zhaoming Xiong, Guojun Zheng and Yulin Li*

Tetrahedron: Asymmetry *12 (2001) 2137*



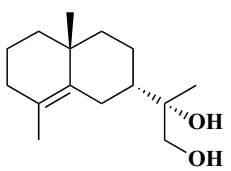
$C_{15}H_{26}O_2$

(7*S*,10*R*,11*R*)-Eudesm-4-en-11,12-diol

D.e. = 85%
$[\alpha]_D^{26} = +14.2$ (*c* 0.45, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (7*S*,10*R*,11*R*)

Zhe Zhang, Zhaoming Xiong, Guojun Zheng and Yulin Li*

Tetrahedron: Asymmetry *12 (2001) 2137*



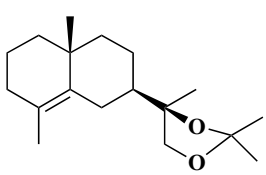
$C_{15}H_{26}O_2$

(7*S*,10*R*,11*S*)-Eudesm-4-en-11,12-diol

D.e. = 85%
$[\alpha]_D^{26} = +25.0$ (*c* 1.70, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (7*S*,10*R*,11*S*)

Zhe Zhang, Zhaoming Xiong, Guojun Zheng and Yulin Li*

Tetrahedron: Asymmetry *12 (2001) 2137*



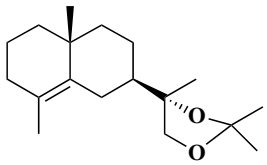
$C_{18}H_{30}O_2$

(7*R*,10*R*,11*R*)-Eudesm-4-en-11,12-isopropylidene ketal

D.e. = 45%
$[\alpha]_D^{16} = +44.5$ (*c* 1.15, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (7*R*,10*R*,11*R*)

Zhe Zhang, Zhaoming Xiong, Guojun Zheng and Yulin Li*

Tetrahedron: Asymmetry *12 (2001) 2137*

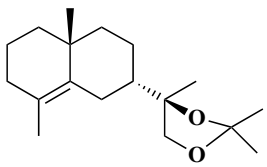


D.e. = 52%
$[\alpha]_D^{16} = +51.2$ (*c* 0.84, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (7*R*,10*R*,11*S*)

$C_{18}H_{30}O_2$
(7*R*,10*R*,11*S*)-Eudesm-4-en-11,12-isopropylidene ketal

Zhe Zhang, Zhaoming Xiong, Guojun Zheng and Yulin Li*

Tetrahedron: Asymmetry *12 (2001) 2137*

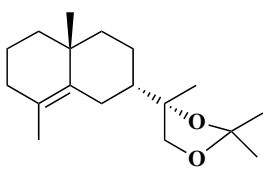


D.e. = 85%
$[\alpha]_D^{26} = +3.6$ (*c* 0.91, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (7*S*,10*R*,11*R*)

$C_{18}H_{30}O_2$
(7*S*,10*R*,11*R*)-Eudesm-4-en-11,12-isopropylidene ketal

Zhe Zhang, Zhaoming Xiong, Guojun Zheng and Yulin Li*

Tetrahedron: Asymmetry *12 (2001) 2137*

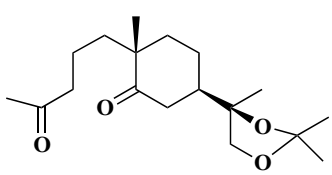


D.e. = 85%
$[\alpha]_D^{26} = +8.5$ (*c* 0.45, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (7*S*,10*R*,11*S*)

$C_{18}H_{30}O_2$
(7*S*,10*R*,11*S*)-Eudesm-4-en-11,12-isopropylidene ketal

Zhe Zhang, Zhaoming Xiong, Guojun Zheng and Yulin Li*

Tetrahedron: Asymmetry *12 (2001) 2137*

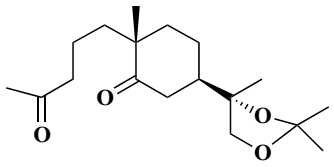


D.e. = 75%
$[\alpha]_D^{26} = +36.5$ (*c* 0.98, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (7*R*,10*R*,11*R*)

$C_{18}H_{30}O_4$
(7*R*,10*R*,11*R*)-4,5-Dioxo-4,5-*seco*-eudesman-11,13-isopropylidene ketal

Zhe Zhang, Zhaoming Xiong, Guojun Zheng and Yulin Li*

Tetrahedron: Asymmetry *12 (2001) 2137*

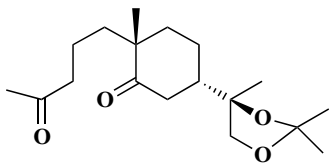


D.e. = 80%
$[\alpha]_D^{16} = +38.5$ (*c* 0.85, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (7*R*,10*R*,11*S*)

$C_{18}H_{30}O_4$
(7*R*,10*R*,11*S*)-4,5-Dioxo-4,5-*seco*-eudesman-11,13-isopropylidene ketal

Zhe Zhang, Zhaoming Xiong, Guojun Zheng and Yulin Li*

Tetrahedron: Asymmetry *12 (2001) 2137*

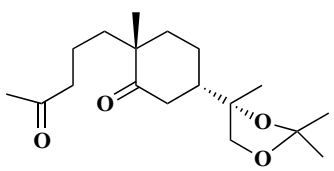


D.e. = 90%
$[\alpha]_D^{26} = -62.9$ (*c* 0.46, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (7*S*,10*R*,11*R*)

$C_{18}H_{30}O_4$
(7*R*,10*R*,11*S*)-4,5-Dioxo-4,5-*seco*-eudesman-11,13-isopropylidene ketal

Zhe Zhang, Zhaoming Xiong, Guojun Zheng and Yulin Li*

Tetrahedron: Asymmetry *12 (2001) 2137*

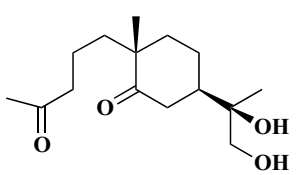


D.e. = 90%
$[\alpha]_D^{26} = -67.6$ (*c* 1.27, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (7*S*,10*R*,11*S*)

$C_{18}H_{30}O_4$
(7*S*,10*R*,11*S*)-4,5-Dioxo-4,5-*seco*-eudesman-11,13-isopropylidene ketal

Zhe Zhang, Zhaoming Xiong, Guojun Zheng and Yulin Li*

Tetrahedron: Asymmetry *12 (2001) 2137*

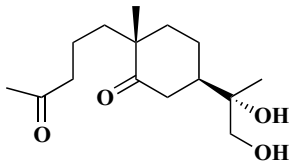


D.e. = 75%
$[\alpha]_D^{16} = +64.3$ (*c* 0.70, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (7*R*,10*R*,11*R*)

$C_{15}H_{26}O_4$
(7*R*,10*R*,11*R*)-4,5-Dioxo-4,5-*seco*-eudesman-11,13-diol

Zhe Zhang, Zhaoming Xiong, Guojun Zheng and Yulin Li*

Tetrahedron: Asymmetry *12 (2001) 2137*

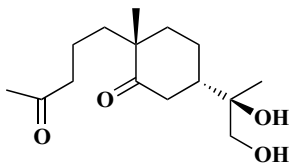


D.e. = 80%
$[\alpha]_D^{16} = +22.1$ (*c* 0.58, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (7*R*,10*R*,11*S*)

$C_{15}H_{26}O_4$
(7*R*,10*R*,11*S*)-4,5-Dioxo-4,5-*seco*-eudesman-11,13-diol

Zhe Zhang, Zhaoming Xiong, Guojun Zheng and Yulin Li*

Tetrahedron: Asymmetry *12 (2001) 2137*

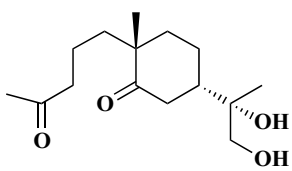


D.e. = 90%
$[\alpha]_D^{16} = -49.1$ (*c* 0.88, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (7*S*,10*R*,11*R*)

$C_{15}H_{26}O_4$
(7*S*,10*R*,11*R*)-4,5-Dioxo-4,5-*seco*-eudesman-11,13-diol

Zhe Zhang, Zhaoming Xiong, Guojun Zheng and Yulin Li*

Tetrahedron: Asymmetry *12 (2001) 2137*

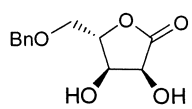


D.e. = 90%
$[\alpha]_D^{16} = -53.7$ (*c* 0.85, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (7*S*,10*R*,11*S*)

$C_{15}H_{26}O_4$
(7*S*,10*R*,11*S*)-4,5-Dioxo-4,5-*seco*-eudesman-11,13-diol

Fabio Fazio and Manfred P. Schneider*

Tetrahedron: Asymmetry *12 (2001) 2143*

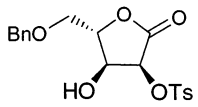


$[\alpha]_D^{20} = -23$ (*c* 0.9, acetone)
Source of chirality: chiral pool

$C_{12}H_{14}O_5$
(3*S*,4*S*,5*S*)-(−)-5-Benzyloxymethyl-3,4-dihydroxy-dihydro-furan-2-one

Fabio Fazio and Manfred P. Schneider*

Tetrahedron: Asymmetry *12 (2001) 2143*

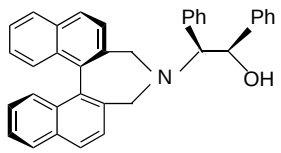


$[\alpha]_D^{20} = +37$ (c 1.0, $CHCl_3$)
Source of chirality: chiral pool

$C_{19}H_{20}O_7S$
(3*S*,4*S*,5*S*)-(+)-5-Benzyloxymethyl-4-hydroxy-3-(4-methylbenzenesulfonate)-dihydro-furan-2-one

Gui Lu, Xingshu Li, Zhongyuan Zhou, Wing Lai Chan* and Albert S. C. Chan*

Tetrahedron: Asymmetry *12 (2001) 2147*

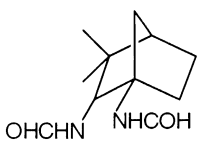


E.e. >97%
$[\alpha]_D^{20} = -0.84$ (c 1.00, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*R*,2*S*,3*R*)

$C_{36}H_{29}NO$
(*R*)-*N*-[(1*S*,2*R*)-1,2-Diphenyl-2-hydroxyethyl]-3,5-dihydro-4*H*-dinaphtho[2,1-*c*:1′,2′-*e*]-azepine

Antonio García Martínez,* Enrique Teso Vilar,* Amelia García Fraile and Paloma Martínez-Ruiz

Tetrahedron: Asymmetry *12 (2001) 2153*

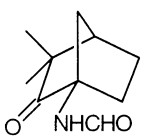


$[\alpha]_D^{20} = -58.8$ ($c = 0.50$, MeOH)
Source of chirality: natural [(1*R*)-Camphor]
Absolute configuration: 1*R*,2*R*

$C_{11}H_{18}N_2O_2$
(1*R*,2*R*)-*N*-(3,3-Dimethyl-2-formylamino-1-norbornyl)formamide

Antonio García Martínez,* Enrique Teso Vilar,* Amelia García Fraile and Paloma Martínez-Ruiz

Tetrahedron: Asymmetry *12 (2001) 2153*

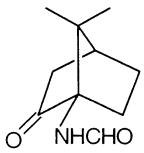


$[\alpha]_D^{20} = -8.6$ ($c = 0.97$, MeOH)
Source of chirality: natural [(1*R*)-Camphor]
Absolute configuration: 1*R*

$C_{10}H_{15}NO_2$
(1*R*)-*N*-(3,3-Dimethyl-2-oxo-1-norbornyl)formamide

Antonio García Martínez,* Enrique Teso Vilar,* Amelia García Fraile and Paloma Martínez-Ruiz

Tetrahedron: Asymmetry *12 (2001) 2153*



$C_{10}H_{15}NO_2$

(1*R*)-*N*-(7,7-Dimethyl-2-oxo-1-norbornyl)formamide

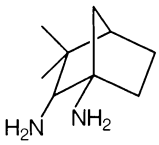
$[\alpha]_D^{20} = -40.2$ ($c = 0.49$, MeOH)

Source of chirality: natural [(1*R*)-Fenchone]

Absolute configuration: 1*R*

Antonio García Martínez,* Enrique Teso Vilar,* Amelia García Fraile and Paloma Martínez-Ruiz

Tetrahedron: Asymmetry *12 (2001) 2153*



$C_9H_{18}N_2$

(1*R*,2*R*)-3,3-Dimethyl-1,2-norbornanediamine

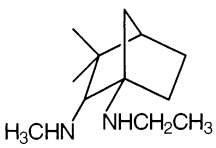
$[\alpha]_D^{20\ \text{Hydrochloride}} = +1.5$ ($c = 0.67$, MeOH)

Source of chirality: natural [(1*R*)-Camphor]

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

Antonio García Martínez,* Enrique Teso Vilar,* Amelia García Fraile and Paloma Martínez-Ruiz

Tetrahedron: Asymmetry *12 (2001) 2153*



$C_{12}H_{24}N_2$

(1*R*,2*R*)-3,3-Dimethyl-1-ethylamino-2-methylaminonorbornane

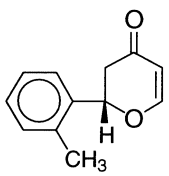
$[\alpha]_D^{20} = -1.6$ ($c = 1.47$, MeOH)

Source of chirality: natural [(1*R*)-Camphor]

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

Clara Baldoli,* Stefano Maiorana, Emanuela Licandro, Giovanna Zinzalla, Maurizio Lanfranchi and Antonio Tiripicchio

Tetrahedron: Asymmetry *12 (2001) 2159*



$C_{12}H_{12}O_2$

(+)-(*S*)-2,3-Dihydro-2-(2-methylphenyl)-4*H*-pyran-4-one

E.e. = 98%

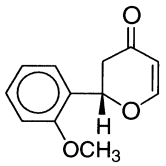
$[\alpha]_D^{25} = +46.3$ (c 0.38, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Clara Baldoli,* Stefano Maiorana, Emanuela Licandro, Giovanna Zinzalla, Maurizio Lanfranchi and Antonio Tiripicchio

Tetrahedron: Asymmetry *12 (2001) 2159*



$C_{12}H_{12}O_3$

(−)-(*S*)-2,3-Dihydro-2-(2-methoxylphenyl)-4*H*-pyran-4-one

E.e. = 98%

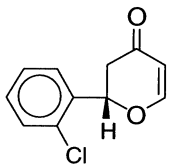
$[\alpha]_D^{24} = -63.5$ (*c* 0.37, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Clara Baldoli,* Stefano Maiorana, Emanuela Licandro, Giovanna Zinzalla, Maurizio Lanfranchi and Antonio Tiripicchio

Tetrahedron: Asymmetry *12 (2001) 2159*



$C_{11}H_9ClO_2$

(−)-(*S*)-2,3-Dihydro-2-(2-chlorophenyl)-4*H*-pyran-4-one

E.e. = 98%

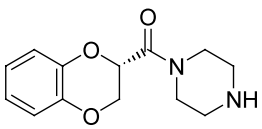
$[\alpha]_D^{24} = -127$ (*c* 0.24, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Q. Kevin Fang,* Paul Grover, Zhengxu Han, Fran X. McConville, Richard F. Rossi, Damase J. Olsson, Donald W. Kessler, Stephen A. Wald and Chris H. Senanayake

Tetrahedron: Asymmetry *12 (2001) 2169*



$C_{13}H_{16}N_2O_3$

(*S*)-*N*-(1,4-Benzodioxan-2-carbonyl)piperazine

E.e. = 99.90%

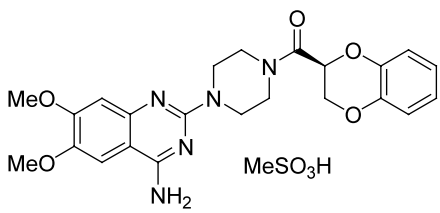
$[\alpha]_D^{22} = +85.4$ (*c* 1, MeOH)

Source of chirality: enzymatic resolution

Absolute configuration: *S*

Q. Kevin Fang,* Paul Grover, Zhengxu Han, Fran X. McConville, Richard F. Rossi, Damase J. Olsson, Donald W. Kessler, Stephen A. Wald and Chris H. Senanayake

Tetrahedron: Asymmetry *12 (2001) 2169*



$C_{25}H_{33}N_5O_8S$

(*S*)-Doxazosin mesylate

E.e. = 99.90%

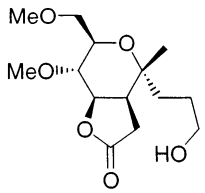
$[\alpha]_D^{22} = +69.6$ (*c* 1, DMSO)

Source of chirality: enzymatic resolution

Absolute configuration: *S*

Ana M. Gómez,* Marta Casillas, Serafín Valverde and J. Cristóbal López*

Tetrahedron: Asymmetry *12 (2001) 2175*

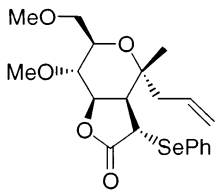


E.e. = 100%
$[\alpha]_D^{25} = -47.0$ ($c = 0.61$, $CHCl_3$)
Source of chirality: starting material
Absolute configuration: D

$C_{14}H_{24}O_6$
(3a*S*,4*R*,6*R*,7*S*,7a*R*)-4-(3-Hydroxypropyl)-7-methoxy-6-(methoxymethyl)-4-methylhexahydro-4*H*-furo[3,2-*c*]pyran-2(3*H*)-one

Ana M. Gómez,* Marta Casillas, Serafín Valverde and J. Cristóbal López*

Tetrahedron: Asymmetry *12 (2001) 2175*

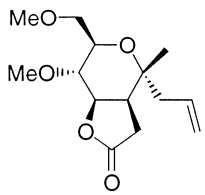


E.e. = 100%
$[\alpha]_D^{25} = -16.1$ ($c = 0.46$, $CHCl_3$)
Source of chirality: starting material
Absolute configuration: D

$C_{20}H_{26}O_5Se$
(3*R*,3a*S*,4*R*,6*R*,7*S*,7a*R*)-4-Allyl-7-methoxy-6-(methoxymethyl)-4-methyl-3-(phenylselanyl)tetrahydro-4*H*-furo[3,2-*c*]pyran-2(3*H*)-one

Ana M. Gómez,* Marta Casillas, Serafín Valverde and J. Cristóbal López*

Tetrahedron: Asymmetry *12 (2001) 2175*

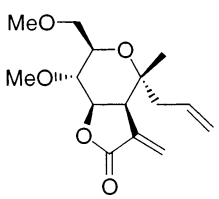


E.e. = 100%
$[\alpha]_D^{25} = -29.5$ ($c = 0.74$, $CHCl_3$)
Source of chirality: starting material
Absolute configuration: D

$C_{14}H_{22}O_5$
(3a*S*,4*R*,6*R*,7*S*,7a*R*)-4-Allyl-7-methoxy-6-(methoxymethyl)-4-methyltetrahydro-4*H*-furo[3,2-*c*]pyran-2(3*H*)-one

Ana M. Gómez,* Marta Casillas, Serafín Valverde and J. Cristóbal López*

Tetrahedron: Asymmetry *12 (2001) 2175*

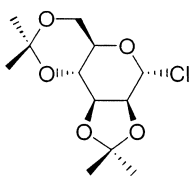


E.e. = 100%
$[\alpha]_D^{25} = -67.4$ ($c = 0.69$, $CHCl_3$)
Source of chirality: starting material
Absolute configuration: D

$C_{15}H_{22}O_5$
(3a*S*,4*R*,6*R*,7*S*,7a*R*)-4-Allyl-7-methoxy-6-(methoxymethyl)-4-methyl-3-methylentetrahydro-4*H*-furo[3,2-*c*]pyran-2(3*H*)-one

Ana M. Gómez,* Marta Casillas, Serafín Valverde and J. Cristóbal López*

Tetrahedron: Asymmetry *12 (2001) 2175*



$C_{12}H_{19}O_5Cl$

2,3:4,6-Di-*O*-isopropyliden-α-D-mannopyranoside chloride

E.e. = 100%

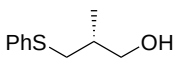
$[\alpha]_D^{25} = +52.9$ ($c = 1.35$, $CHCl_3$)

Source of chirality: starting material

Absolute configuration: D

Stefano Serra* and Claudio Fuganti

Tetrahedron: Asymmetry *12 (2001) 2191*



$C_{10}H_{14}OS$

(2*R*)-(−)-2-Methyl-3-(phenylthio)propan-1-ol

E.e. = 90% (by NMR analysis of its (*S*)-(−)-MTPA ester)

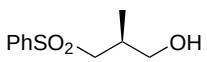
$[\alpha]_D^{20} = -18.5$ (c 1, CH_2Cl_2)

Source of chirality: baker's yeast reduction of (*E*)-3-thiophenyl-2-methylpropen-1-al

Absolute configuration: 2*R*

Stefano Serra* and Claudio Fuganti

Tetrahedron: Asymmetry *12 (2001) 2191*



$C_{10}H_{14}O_3S$

(2*S*)-(+)-2-Methyl-3-(phenylsulfonyl)propan-1-ol

E.e. = 98% (by NMR analysis of its (*S*)-(−)-MTPA ester)

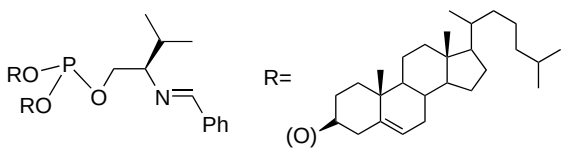
$[\alpha]_D^{20} = +9.3$ (c 1, $CHCl_3$)

Source of chirality: baker's yeast reduction of 3-(phenylsulfonyl)-2-methylenepropan-1-al

Absolute configuration: 2*S*

Alexei I. Polosukhin,* Oleg G. Bondarev, Sergey E. Lyubimov, Andrei V. Korostylev, Konstantin A. Lyssenko, Vadim A. Davankov and Konstantin N. Gavrilov

Tetrahedron: Asymmetry *12 (2001) 2197*



$C_{66}H_{106}NO_3P$

(2′*R*)-2-(*N*′-Benzylideneamino)-3′-methylbutyldicholesterylphosphite

E.e. = 100%

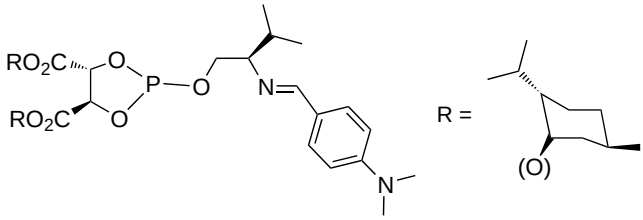
$[\alpha]_D^{20} = -25.0$ (c 1.00, CH_2Cl_2)

Source of chirality: (*R*)-valinol, 5-cholesten-3β-ol

Absolute configuration: (2′*R*)

Alexei I. Polosukhin,* Oleg G. Bondarev, Sergey E. Lyubimov, Andrei V. Korostylev, Konstantin A. Lyssenko, Vadim A. Davankov and Konstantin N. Gavrilov

Tetrahedron: Asymmetry *12 (2001) 2197*



E.e. = 100%

$[\alpha]_D^{24} = +120.65$ (*c* 10, $CHCl_3$)

Source of chirality: (−)-menthol, (+)-tartaric acid, (*R*)-valinol

Absolute configuration: (2′*R*,4*R*,5*R*)

$C_{38}H_{61}N_2O_7P$

(2′*R*,4*R*,5*R*)-2-{2′[*N*-(*p*-Dimethylaminobenzylideneamino)]-3′-methylbutoxy}-4,5-dicarmentoxy-1,3,2-dioxaphospholane

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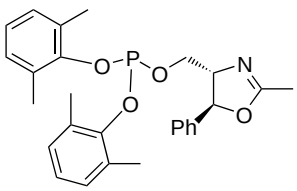
Alexei I. Polosukhin,* Oleg G. Bondarev, Sergey E. Lyubimov, Andrei V. Korostylev, Konstantin A. Lyssenko, Vadim A. Davankov and Konstantin N. Gavrilov

Tetrahedron: Asymmetry *12 (2001) 2197*



E.e. = 100%

$[\alpha]_D^{27} = -78.6$ (*c* 1.24, $CHCl_3$)

Source of chirality: (4*S*,5*S*)-(−)-2-methyl-5-phenyl-2-oxazoline-4-methanol

Absolute configuration: (4′*S*,5′*S*)

$C_{27}H_{30}NO_4P$

(4′*S*,5′*S*)-(2′-Methyl-5′-phenyl-2′-oxazolino-4′)methyldi(*o*,*o*′-dimethyl)phenylphosphite

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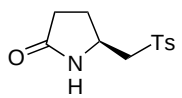
Ana Costa, Carmen Nájera* and José M. Sansano

Tetrahedron: Asymmetry *12 (2001) 2205*



E.e. = 100%

$[\alpha]_D^{25} = +58.6$ (*c* 1, CH_2Cl_2)

Source of chirality: (*S*)-5-hydroxymethyl-2-pyrrolidinone

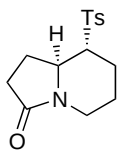
Absolute configuration: (5*S*)

$C_{12}H_{15}NO_3S$

(*S*)-5-(*p*-Toluenesulfonylmethyl)-2-pyrrolidinone

Ana Costa, Carmen Nájera* and José M. Sansano

Tetrahedron: Asymmetry *12 (2001) 2205*



D.e. >98%

$[\alpha]_D^{26} = -58.1$ (*c* 1, CH_2Cl_2)

Source of chirality: (*S*)-5-hydroxymethyl-2-pyrrolidinone

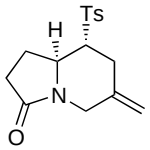
Absolute configuration: (8*R*,8a*S*)

$C_{15}H_{19}NO_3S$

(8*R*,8a*S*)-6-Methylene-8-(*p*-toluenesulfonyl)perhydro-3-indolizidinone

Ana Costa, Carmen Nájera* and José M. Sansano

Tetrahedron: Asymmetry *12 (2001) 2205*



$C_{16}H_{19}NO_3S$

(8*R*,8a*S*)-6-Methylene-8-(*p*-toluenesulfonyl)perhydro-3-indolizidinone

D.e. >98%

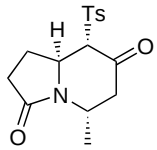
$[\alpha]_D^{26} = +6.1$ (*c* 1, CH_2Cl_2)

Source of chirality: (*S*)-5-hydroxymethyl-2-pyrrolidinone

Absolute configuration: (8*R*,8a*S*)

Ana Costa, Carmen Nájera* and José M. Sansano

Tetrahedron: Asymmetry *12 (2001) 2205*



$C_{16}H_{19}NO_4S$

(5*S*,8*R*,8a*S*)-5-Methyl-8-(*p*-toluenesulfonyl)perhydro-3,7-indolizidinedione

D.e. >98%

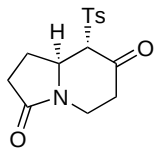
$[\alpha]_D^{26} = +2.2$ (*c* 0.7, CH_2Cl_2)

Source of chirality: (*S*)-5-hydroxymethyl-2-pyrrolidinone

Absolute configuration: (5*S*,8*R*,8a*S*)

Ana Costa, Carmen Nájera* and José M. Sansano

Tetrahedron: Asymmetry *12 (2001) 2205*



$C_{16}H_{19}NO_3S$

(8*S*,8a*S*)-8-(*p*-Toluenesulfonyl)perhydro-3,7-indolizidinedione

D.e. >98%

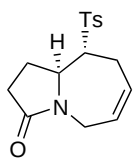
$[\alpha]_D^{26} = +10.3$ (*c* 1, CH_2Cl_2)

Source of chirality: (*S*)-5-hydroxymethyl-2-pyrrolidinone

Absolute configuration: (8*S*,8a*S*)

Ana Costa, Carmen Nájera* and José M. Sansano

Tetrahedron: Asymmetry *12 (2001) 2205*



$C_{16}H_{19}NO_3S$

(9*R*,9a*S*)-9-(*p*-Toluenesulfonyl)-2,3,5,8,9,9a-hexahydro-1*H*-pyrrolo[1,2-*a*]azepin-3-one

D.e. >98%

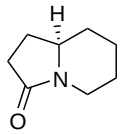
$[\alpha]_D^{26} = -13.5$ (*c* 0.9, CH_2Cl_2)

Source of chirality: (*S*)-5-hydroxymethyl-2-pyrrolidinone

Absolute configuration: (9*R*,9a*S*)

Ana Costa, Carmen Nájera* and José M. Sansano

Tetrahedron: Asymmetry *12 (2001) 2205*



$C_{16}H_{19}NO_3S$

(8a*R*)-Perhydro-3-indolizidinone

E.e. >98%

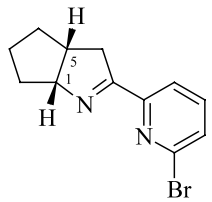
$[\alpha]_D^{26} = -33.5$ (c 0.2, $CHCl_3$)

Source of chirality: (*S*)-5-hydroxymethyl-2-pyrrolidinone

Absolute configuration: (8a*R*)

Nikolai Graf v. Keyserlingk and Jürgen Martens*

Tetrahedron: Asymmetry *12 (2001) 2213*



$C_{12}H_{13}BrN_2$

(1*R*,5*R*)-3-(6-Bromopyridin-2-yl)-azabicyclo[3.3.0]oct-2-en

E.e. = 100%

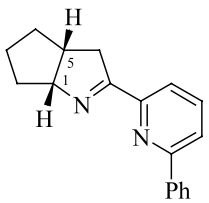
$[\alpha]_D^{20} = +38.3$ ($c = 1.00$, CH_2Cl_2)

Source of chirality: (all-*R*)-2-azabicyclo[3.3.0]octane

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

Nikolai Graf v. Keyserlingk and Jürgen Martens*

Tetrahedron: Asymmetry *12 (2001) 2213*



$C_{18}H_{18}N_2$

(1*R*,5*R*)-3-(6-Phenylpyridin-2-yl)-azabicyclo[3.3.0]oct-2-en

E.e. = 100%

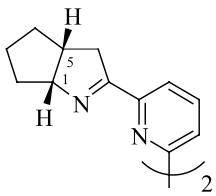
$[\alpha]_D^{20} = +160.2$ ($c = 1.00$, CH_2Cl_2)

Source of chirality: (all-*R*)-2-azabicyclo[3.3.0]octane

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

Nikolai Graf v. Keyserlingk and Jürgen Martens*

Tetrahedron: Asymmetry *12 (2001) 2213*



$C_{24}H_{26}N_4$

(all-*R*)-6,6′-Azabicyclo[3.3.0]oct-2-en-3-yl-2,2′-bipyridine

E.e. = 100%

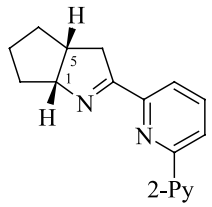
$[\alpha]_D^{20} = +169.6$ ($c = 1.00$, CH_2Cl_2)

Source of chirality: (all-*R*)-2-azabicyclo[3.3.0]octane

Absolute configuration: (1*R*,5*R*,1′*R*,5′*R*)

Nikolai Graf v. Keyserlingk and Jürgen Martens*

Tetrahedron: Asymmetry *12 (2001) 2213*



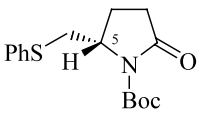
$C_{17}H_{17}N_3$

(1*R*,5R)-(Azabicyclo[3.3.0]oct-2-en-3-yl-2,2-bipyridine

E.e. = 100%
$[\alpha]_D^{20} = +127.4$ ($c = 1.34$, CH_2Cl_2)
Source of chirality: (all-*R*)-2-azabicyclo[3.3.0]octane
Absolute configuration: (1*R*,5*R*)

Nikolai Graf v. Keyserlingk and Jürgen Martens*

Tetrahedron: Asymmetry *12 (2001) 2213*



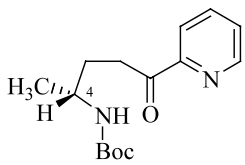
$C_{16}H_{21}NO_3S$

(*S*)-(*N*-*tert*-Butyloxycarbonyl)-5-phenylsulfanylmethyl-pyrrolidin-2-one

E.e. = 100%
$[\alpha]_D^{20} = -38.4$ ($c = 1.56$, CH_2Cl_2)
Source of chirality: (*S*)-pyroglutamic acid
Absolute configuration: (*S*)

Nikolai Graf v. Keyserlingk and Jürgen Martens*

Tetrahedron: Asymmetry *12 (2001) 2213*



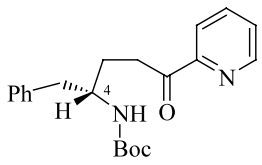
$C_{15}H_{22}N_2O_3$

(*R*)-(*N*-*tert*-Butyloxycarbonyl)-4-amino-1-pyridin-2-yl-pentan-1-one

E.e. = 100%
$[\alpha]_D^{20} = +0.9$ ($c = 1.10$, CH_2Cl_2)
Source of chirality: (*S*)-pyroglutamic acid
Absolute configuration: (*R*)

Nikolai Graf v. Keyserlingk and Jürgen Martens*

Tetrahedron: Asymmetry *12 (2001) 2213*



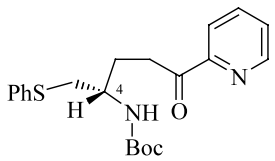
$C_{21}H_{26}N_2O_3$

(*S*)-(*N*-*tert*-Butyloxycarbonyl)-4-amino-5-phenyl-1-pyridin-2-yl-pentan-1-one

E.e. = 100%
$[\alpha]_D^{20} = -0.9$ ($c = 0.68$, CH_2Cl_2)
Source of chirality: (*S*)-pyroglutamic acid
Absolute configuration: (*S*)

Nikolai Graf v. Keyserlingk and Jürgen Martens*

Tetrahedron: Asymmetry *12 (2001) 2213*



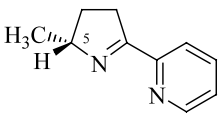
$C_{21}H_{26}N_2O_3S$

(*S*)-(*N*-*tert*-Butyloxycarbonyl)-4-amino-5-sulfanylphenyl-1-pyridin-2-yl-pentan-1-one

E.e. = 100%
$[\alpha]_D^{20} = +9.5$ ($c = 1.13$, CH_2Cl_2)
Source of chirality: (*S*)-pyroglutamic acid
Absolute configuration: (*S*)

Nikolai Graf v. Keyserlingk and Jürgen Martens*

Tetrahedron: Asymmetry *12 (2001) 2213*



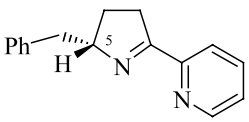
$C_{10}H_{12}N_2$

(*R*)-2-(5-Methyl-4,5-dihydro-3*H*-pyrrol-2-yl-pyridine

E.e. = 100%
$[\alpha]_D^{20} = +96.8$ ($c = 1.00$, CH_2Cl_2)
Source of chirality: (*S*)-pyroglutamic acid
Absolute configuration: (*R*)

Nikolai Graf v. Keyserlingk and Jürgen Martens*

Tetrahedron: Asymmetry *12 (2001) 2213*



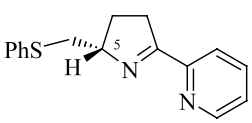
$C_{16}H_{16}N_2$

(*S*)-2-(5-Benzyl-4,5-dihydro-3*H*-pyrrol-2-yl-pyridine

E.e. = 100%
$[\alpha]_D^{20} = +31.7$ ($c = 1.00$, CH_2Cl_2)
Source of chirality: (*S*)-pyroglutamic acid
Absolute configuration: (*S*)

Nikolai Graf v. Keyserlingk and Jürgen Martens*

Tetrahedron: Asymmetry *12 (2001) 2213*



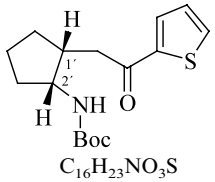
$C_{16}H_{16}N_2S$

(*S*)-2-(5-Phenylsulfanylmethyl-4,5-dihydro-3*H*-pyrrol-2-yl)-pyridine

E.e. = 100%
$[\alpha]_D^{20} = +44.1$ ($c = 1.89$, CH_2Cl_2)
Source of chirality: (*S*)-pyroglutamic acid
Absolute configuration: (*S*)

Nikolai Graf v. Keyserlingk and Jürgen Martens*

Tetrahedron: Asymmetry *12 (2001) 2213*



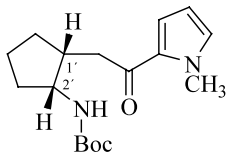
$C_{16}H_{23}NO_3S$

(1′*R*,2′*R*)-(*N*-*tert*-Butyloxycarbonyl)-2′-aminocyclopent-1′-yl-(2-thienyl)-ethanone

E.e. = 100%
$[\alpha]_D^{20} = +24.0$ ($c = 1.06$, CH_2Cl_2)
Source of chirality: (all-*R*)-2-azabicyclo[3.3.0]octane
Absolute configuration: (1′*R*,2′*R*)

Nikolai Graf v. Keyserlingk and Jürgen Martens*

Tetrahedron: Asymmetry *12 (2001) 2213*



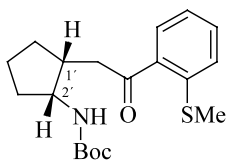
$C_{17}H_{26}N_2O_3$

(1′*R*,2′*R*)-(*N*-*tert*-Butyloxycarbonyl)-2′-aminocyclopent-1′yl-(2-*N*-methylpyrrolyl)-ethanone

E.e. = 100%
$[\alpha]_D^{20} = +33.3$ ($c = 1.10$, CH_2Cl_2)
Source of chirality: (all-*R*)-2-azabicyclo[3.3.0]octane
Absolute configuration: (1′*R*,2′*R*)

Nikolai Graf v. Keyserlingk and Jürgen Martens*

Tetrahedron: Asymmetry *12 (2001) 2213*



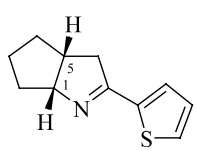
$C_{19}H_{27}NO_3S$

(1,*R*,2′*R*)-(*N*-*tert*-Butyloxycarbonyl)-2′-aminocyclopent-1′yl-(2-methylsulfanylphenyl)-ethanone

E.e. = 100%
$[\alpha]_D^{20} = +4.2$ ($c = 1.15$, CH_2Cl_2)
Source of chirality: (all-*R*)-2-azabicyclo[3.3.0]octane
Absolute configuration: (1′*R*,2′*R*)

Nikolai Graf v. Keyserlingk and Jürgen Martens*

Tetrahedron: Asymmetry *12 (2001) 2213*



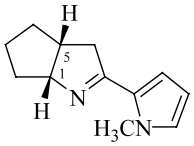
$C_{11}H_{13}NS$

(1*R*,5*R*)-3-(Thiophen-2-yl)-azabicyclo[3.3.0]oct-2-en

E.e. = 100%
$[\alpha]_D^{20} = +9.8$ ($c = 1.00$, CH_2Cl_2)
Source of chirality: (all-*R*)-2-azabicyclo[3.3.0]octane
Absolute configuration: (1*R*,5*R*)

Nikolai Graf v. Keyserlingk and Jürgen Martens*

Tetrahedron: Asymmetry *12 (2001) 2213*



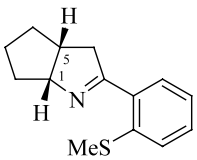
$C_{12}H_{16}N_2$

(1*R*,5*R*)-3-(*N*-Methylpyrrol-2-yl)-azabicyclo[3.3.0]oct-2-en

E.e. = 100%
$[\alpha]_D^{20} = +3.0$ ($c = 0.50$, CH_2Cl_2)
Source of chirality: (all-*R*)-2-azabicyclo[3.3.0]octane
Absolute configuration: (1*R*,5*R*)

Nikolai Graf v. Keyserlingk and Jürgen Martens*

Tetrahedron: Asymmetry *12 (2001) 2213*



$C_{14}H_{17}NS$

(1*R*,5*R*)-3-(2-Methylsulfanylphenyl)-azabicyclo[3.3.0]oct-2-en

E.e. = 100%
$[\alpha]_D^{20} = -14.4$ ($c = 1.19$, CH_2Cl_2)
Source of chirality: (all-*R*)-2-azabicyclo[3.3.0]octane
Absolute configuration: (1*R*,5*R*)