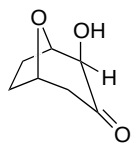


Alan Armstrong,* William O. Moss and Jonathan R. Reeves

Tetrahedron: Asymmetry 12 (2001) 2779(1*R*,2*R*,5*S*)-2-Hydroxy-8-oxabicyclo[3.2.1]octan-3-one

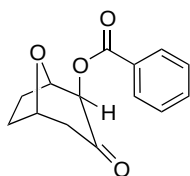
E.e. = 72% (GC, Chiraldex GTA)

 $[\alpha]_D^{19} = -5.9$ (*c* 0.22, CHCl_3)

Source of chirality: asymmetric synthesis

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

Alan Armstrong,* William O. Moss and Jonathan R. Reeves

Tetrahedron: Asymmetry 12 (2001) 2779(1*R*,2*R*,5*S*)-2-Benzyloxy-8-oxabicyclo[3.2.1]octan-3-one

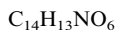
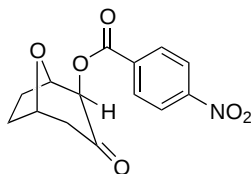
E.e. = 72% (based on parent alcohol)

 $[\alpha]_D^{19} = -0.9$ (*c* 0.01, CHCl_3)

Source of chirality: asymmetric synthesis

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

Alan Armstrong,* William O. Moss and Jonathan R. Reeves

Tetrahedron: Asymmetry 12 (2001) 2779(1*R*,2*R*,5*S*)-2-*p*-Nitrobenzyloxy-8-oxabicyclo[3.2.1]octan-3-one

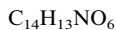
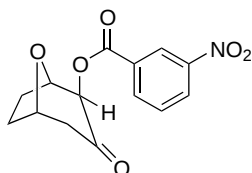
E.e. = 72% (based on parent alcohol)

 $[\alpha]_D^{19} = -4.8$ (*c* 0.03, CHCl_3)

Source of chirality: asymmetric synthesis

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

Alan Armstrong,* William O. Moss and Jonathan R. Reeves

Tetrahedron: Asymmetry 12 (2001) 2779(1*R*,2*R*,5*S*)-2-*m*-Nitrobenzyloxy-8-oxabicyclo[3.2.1]octan-3-one

E.e. = 72% (based on parent alcohol)

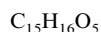
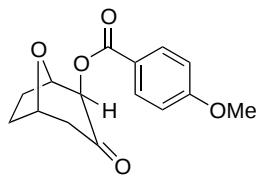
 $[\alpha]_D^{19} = -4.5$ (*c* 0.06, CHCl_3)

Source of chirality: asymmetric synthesis

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

Alan Armstrong,* William O. Moss and Jonathan R. Reeves

Tetrahedron: Asymmetry 12 (2001) 2779

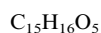
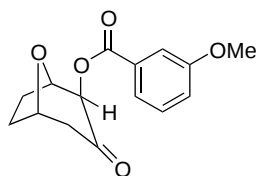


(1*R*,2*R*,5*S*)-2-*p*-Methoxybenzyloxy-8-oxabicyclo[3.2.1]octan-3-one

E.e. = 72% (based on parent alcohol)
 $[\alpha]_D^{19} = -6.7$ (*c* 0.12, $CHCl_3$)
 Source of chirality: asymmetric synthesis
 Absolute configuration: 1*R*,2*R*,5*S*

Alan Armstrong,* William O. Moss and Jonathan R. Reeves

Tetrahedron: Asymmetry 12 (2001) 2779

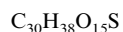
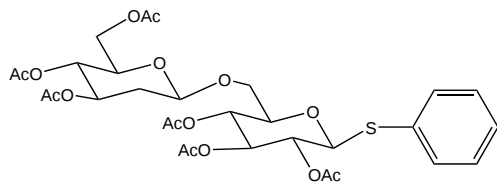


(1*R*,2*R*,5*S*)-2-*m*-Methoxybenzyloxy-8-oxabicyclo[3.2.1]octan-3-one

E.e. = 72% (based on parent alcohol)
 $[\alpha]_D^{19} = -2.7$ (*c* 0.06, $CHCl_3$)
 Source of chirality: asymmetric synthesis
 Absolute configuration: 1*R*,2*R*,5*S*

Antonio Trincone,* Edoardo Pagnotta, Mosè Rossi,
 Marialuisa Mazzone and Marco Moracci

Tetrahedron: Asymmetry 12 (2001) 2783

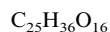
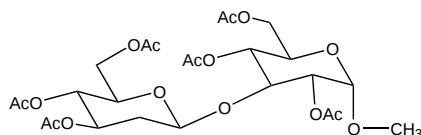


6-*O*-(β-*D*-2-Deoxyglucopyranosyloxy)phenyl thioglucopyranoside hexaacetate

$[\alpha]_D^{20} = -24.0$ (*c* 15, CH_2Cl_2)
 Source of chirality: chiral pool, enzymatic synthesis for
 glycosidic *O*-β-bond

Antonio Trincone,* Edoardo Pagnotta, Mosè Rossi,
 Marialuisa Mazzone and Marco Moracci

Tetrahedron: Asymmetry 12 (2001) 2783

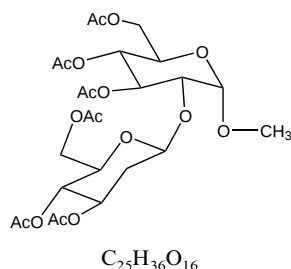


3-*O*-(β-*D*-2-Deoxyglucopyranosyloxy)methyl α-*D*-glucopyranoside hexaacetate

$[\alpha]_D^{20} = 37.8$ (*c* 2.6, CH_2Cl_2)
 Source of chirality: chiral pool, enzymatic synthesis for
 glycosidic *O*-β-bond

Antonio Trincone,* Edoardo Pagnotta, Mosè Rossi,
Marialuisa Mazzone and Marco Moracci

Tetrahedron: Asymmetry 12 (2001) 2783



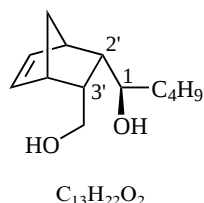
2-*O*-(β-*D*-2-Deoxyglucopyranosyloxy)methyl α-*D*-glucopyranoside hexaacetate

$[\alpha]_D^{20} = 36.7$ (*c* 3.4, CH_2Cl_2)

Source of chirality: chiral pool, enzymatic synthesis for glycosidic *O*-β-bond

Katsufumi Suzuki, Muneo Shoji, Eriko Kobayashi and
Kohei Inomata*

Tetrahedron: Asymmetry 12 (2001) 2789



(1*R*)-1-[(2'*S*,3'*R*)-3-Hydroxymethylbicyclo[2.2.1]hept-5-en-2-yl]pentan-1-ol

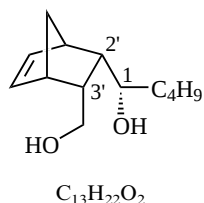
$[\alpha]_D = +76.2$ (*c* 1.0, $CHCl_3$)

Source of chirality: diastereoselective synthesis

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

Katsufumi Suzuki, Muneo Shoji, Eriko Kobayashi and
Kohei Inomata*

Tetrahedron: Asymmetry 12 (2001) 2789



(1*S*)-1-[(2'*S*,3'*R*)-3-Hydroxymethylbicyclo[2.2.1]hept-5-en-2-yl]pentan-1-ol

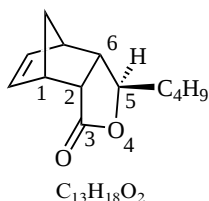
$[\alpha]_D = -8.2$ (*c* 1.0, $CHCl_3$)

Source of chirality: diastereoselective synthesis

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

Katsufumi Suzuki, Muneo Shoji, Eriko Kobayashi and
Kohei Inomata*

Tetrahedron: Asymmetry 12 (2001) 2789



(2*R*,5*R*,6*S*)-5-Butyl-4-oxatricyclo[5.2.1.0^{2,6}]dec-8-en-3-one

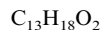
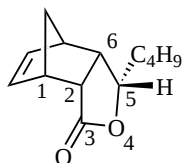
$[\alpha]_D = -30.7$ (*c* 1.0, $CHCl_3$)

Source of chirality: diastereoselective synthesis

Absolute configuration: 2*R*,5*R*,6*S*

Katsufumi Suzuki, Muneo Shoji, Eriko Kobayashi and Kohei Inomata*

Tetrahedron: Asymmetry 12 (2001) 2789



(2*R*,5*S*,6*S*)-5-Butyl-4-oxatricyclo[5.2.1.0^{2,6}]dec-8-en-3-one

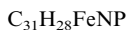
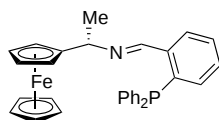
$[\alpha]_D = -104.3$ (*c* 1.0, $CHCl_3$)

Source of chirality: diastereoselective synthesis

Absolute configuration: 2*R*,5*S*,6*S*

Tsutomu Fukuda, Akihiro Takehara and Masatomo Iwao*

Tetrahedron: Asymmetry 12 (2001) 2793



(*S*)-*N*-[2-(Diphenylphosphino)benzylidene]-1-ferrocenylethylamine

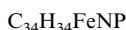
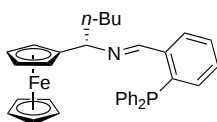
$[\alpha]_D^{26} = +106$ (*c* 1.01, $CHCl_3$)

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

Absolute configuration: *S*

Tsutomu Fukuda, Akihiro Takehara and Masatomo Iwao*

Tetrahedron: Asymmetry 12 (2001) 2793



(*S*)-*N*-[2-(Diphenylphosphino)benzylidene]-1-ferrocenylpentylamine

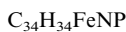
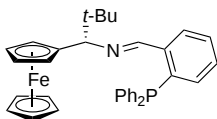
$[\alpha]_D^{26} = +92.6$ (*c* 1.04, $CHCl_3$)

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

Absolute configuration: *S*

Tsutomu Fukuda, Akihiro Takehara and Masatomo Iwao*

Tetrahedron: Asymmetry 12 (2001) 2793



(*S*)-*N*-[2-(Diphenylphosphino)benzylidene]-1-ferrocenyl-2,2-dimethylpropylamine

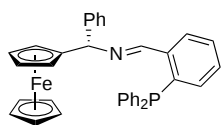
$[\alpha]_D^{26} = +72.2$ (*c* 1.03, $CHCl_3$)

Source of chirality: (*S*)-1-ferrocenyl-2,2-dimethylpropylamine

Absolute configuration: *S*

Tsutomu Fukuda, Akihiro Takehara and Masatomo Iwao*

Tetrahedron: Asymmetry 12 (2001) 2793



$C_{36}H_{30}FeNP$

(*S*)-*N*-[2-(Diphenylphosphino)benzylidene]- α -ferrocenylbenzylamine

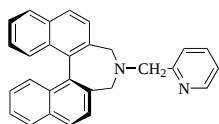
$[\alpha]_D^{27} = +107$ (*c* 1.04, $CHCl_3$)

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

Absolute configuration: *S*

Jun-An Ma, Li-Xin Wang, Wei Zhang and Qi-Lin Zhou*

Tetrahedron: Asymmetry 12 (2001) 2801



$C_{28}H_{22}N_2$

(*S*)-3,5-Dihydro-4-(2-pyridinylmethyl)dinaphth[2,1-c:1',2'-e]azepine

E.e. = 100%

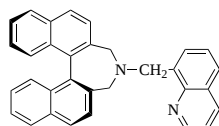
$[\alpha]_D^{20} = +235.4$ (*c* 1.0, CH_2Cl_2)

Source of chirality: chiral resolution

Absolute configuration: *S*

Jun-An Ma, Li-Xin Wang, Wei Zhang and Qi-Lin Zhou*

Tetrahedron: Asymmetry 12 (2001) 2801



$C_{32}H_{24}N_2$

(*S*)-3,5-Dihydro-4-(8-quinolinylmethyl)dinaphth[2,1-c:1',2'-e]azepine

E.e. = 100%

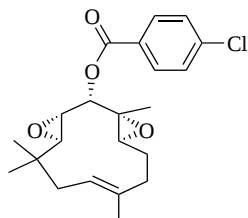
$[\alpha]_D^{20} = +215.2$ (*c* 1.0, CH_2Cl_2)

Source of chirality: chiral resolution

Absolute configuration: *S*

Takashi Kitayama,* Tomomi Masuda, Yasushi Kawai,
Richard K. Hill, Masahiro Takatani, Seiji Sawada and
Tadashi Okamoto

Tetrahedron: Asymmetry 12 (2001) 2805



$C_{22}H_{27}ClO_4$

E.e. >99%

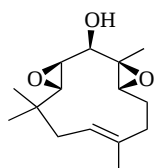
$[\alpha]_D^{23.5} = +22.0$ (*c* 0.087, EtOH)

Source of chirality: asymmetric epoxidation of allylic alcohol

Absolute configuration: 1*S*,2*R*,3*S*,10*R*,11*S*

Takashi Kitayama,* Tomomi Masuda, Yasushi Kawai,
Richard K. Hill, Masahiro Takatani, Seiji Sawada and
Tadashi Okamoto

Tetrahedron: Asymmetry 12 (2001) 2805



(1*R*,2*S*,3*R*,10*S*,11*R*)-2,3-10,11-Diepoxy-2,6,9,9-tetramethyl-6-cycloundecen-1-ol

E.e. >99% [1H NMR with $Eu(hfc)_3$]

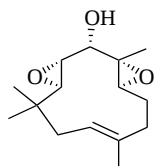
$[\alpha]_D^{23.5} = -6.5$ (c 1.005, EtOH)

Source of chirality: asymmetric epoxidation of allylic alcohol

Absolute configuration: 1*R*,2*S*,3*R*,10*S*,11*R*

Takashi Kitayama,* Tomomi Masuda, Yasushi Kawai,
Richard K. Hill, Masahiro Takatani, Seiji Sawada and
Tadashi Okamoto

Tetrahedron: Asymmetry 12 (2001) 2805



(1*S*,2*R*,3*S*,10*R*,11*S*)-2,3-10,11-Diepoxy-2,6,9,9-tetramethyl-6-cycloundecen-1-ol

E.e. >99% [1H NMR with $Eu(hfc)_3$]

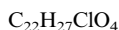
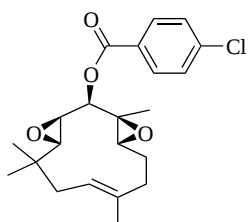
$[\alpha]_D^{23.5} = +8.2$ (c 0.815, EtOH)

Source of chirality: asymmetric epoxidation of allylic alcohol

Absolute configuration: 1*S*,2*R*,3*S*,10*R*,11*S*

Takashi Kitayama,* Tomomi Masuda, Yasushi Kawai,
Richard K. Hill, Masahiro Takatani, Seiji Sawada and
Tadashi Okamoto

Tetrahedron: Asymmetry 12 (2001) 2805



E.e. >99%

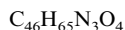
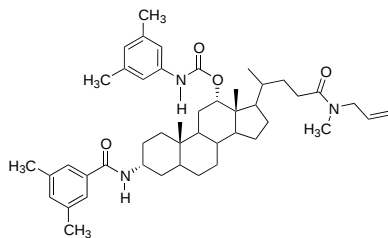
$[\alpha]_D^{23.5} = -18.3$ (c 1.010, EtOH)

Source of chirality: asymmetric epoxidation of allylic alcohol

Absolute configuration: 1*R*,2*S*,3*R*,10*S*,11*R*

A. Iuliano, G. Masini, G. Félix and P. Salvadori*

Tetrahedron: Asymmetry 12 (2001) 2811



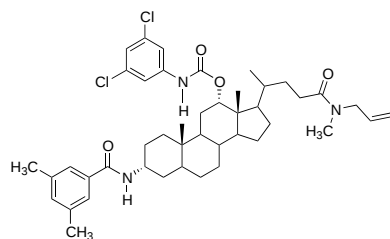
N-Allyl-*N'*-methyl-3α-*N*-(3,5-dimethylbenzoyl)amino-12α-(3,5-dimethylphenyl)carbamoyloxy-5β-cholan-24-amide

$[\alpha]_D^{29} = +113.8$ (c = 0.84, CH_2Cl_2)

Source of chirality: natural source

A. Iuliano, G. Masini, G. Félix and P. Salvadori*

Tetrahedron: Asymmetry 12 (2001) 2811



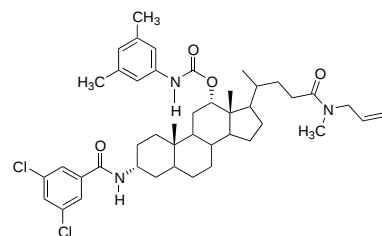
N-Allyl-*N*'-methyl-3α-*N*-(3,5-dimethylbenzoyl)amino-12α-(3,5-dichlorophenyl)carbamoyloxy-5β-cholan-24-amide

$[\alpha]_{\text{D}}^{28} +124.0$ ($c=0.89$, CH_2Cl_2)

Source of chirality: natural source

A. Iuliano, G. Masini, G. Félix and P. Salvadori*

Tetrahedron: Asymmetry 12 (2001) 2811



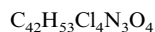
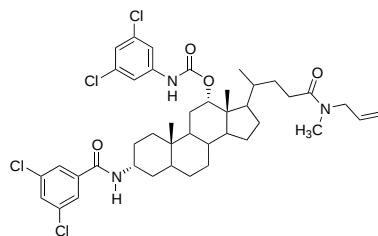
N-Allyl-*N*'-methyl-3α-*N*-(3,5-dichlorobenzoyl)amino-12α-(3,5-dimethylphenyl)carbamoyloxy-5β-cholan-24-amide

$[\alpha]_{\text{D}}^{24} +115.1$ ($c=0.98$, CH_2Cl_2)

Source of chirality: natural source

A. Iuliano, G. Masini, G. Félix and P. Salvadori*

Tetrahedron: Asymmetry 12 (2001) 2811



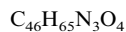
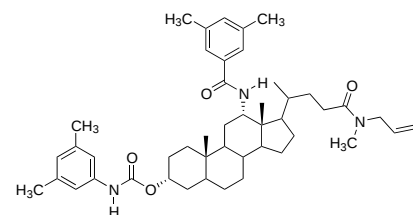
N-Allyl-*N*'-methyl-3α-*N*-(3,5-dichlorobenzoyl)amino-12α-(3,5-dichlorophenyl)carbamoyloxy-5β-cholan-24-amide

$[\alpha]_{\text{D}}^{27} +119.2$ ($c=1.00$, CH_2Cl_2)

Source of chirality: natural source

A. Iuliano, G. Masini, G. Félix and P. Salvadori*

Tetrahedron: Asymmetry 12 (2001) 2811



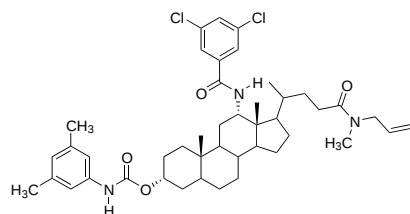
N-Allyl-*N*'-methyl-3α-(3,5-dimethylphenyl)carbamoyloxy-12α-*N*-(3,5-dimethylbenzoyl)amino-5β-cholan-24-amide

$[\alpha]_{\text{D}}^{26} +98.7$ ($c=1.01$, CH_2Cl_2)

Source of chirality: natural source

A. Iuliano, G. Masini, G. Félix and P. Salvadori*

Tetrahedron: Asymmetry 12 (2001) 2811



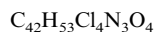
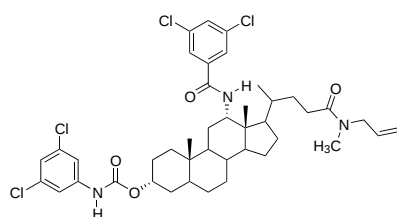
N-Allyl-*N*'-methyl-3α-(3,5-dimethylphenyl)carbamoyloxy-12α-*N*-(3,5-dichlorobenzoyl)amino-5β-cholan-24-amide

$[\alpha]_D^{25} +90.4$ ($c=1.00$, CH_2Cl_2)

Source of chirality: natural source

A. Iuliano, G. Masini, G. Félix and P. Salvadori*

Tetrahedron: Asymmetry 12 (2001) 2811



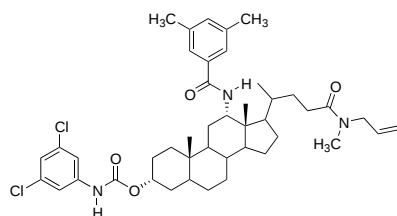
N-Allyl-*N*'-methyl-3α-(3,5-dichlorophenyl)carbamoyloxy-12α-*N*-(3,5-dichlorobenzoyl)amino-5β-cholan-24-amide

$[\alpha]_D^{23} +123.5$ ($c=1.01$, CH_2Cl_2)

Source of chirality: natural source

A. Iuliano, G. Masini, G. Félix and P. Salvadori*

Tetrahedron: Asymmetry 12 (2001) 2811



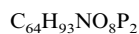
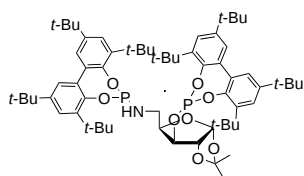
N-Allyl-*N*'-methyl-3α-(3,5-dichlorophenyl)carbamoyloxy-12α-*N*-(3,5-dimethylbenzoyl)amino-5β-cholan-24-amide

$[\alpha]_D^{25} +99.0$ ($c=1.00$, CH_2Cl_2)

Source of chirality: natural source

Montserrat Diéguez,* Aurora Ruiz and Carmen Claver

Tetrahedron: Asymmetry 12 (2001) 2827



3,5-Bis[(3,3',5,5'-tetra-*t*-butyl-1,1'-biphenyl-2,2'-diyl)phosphite]-5-amine-5-deoxy-1,2-*O*-isopropylidene-α-*D*-xylofuranose

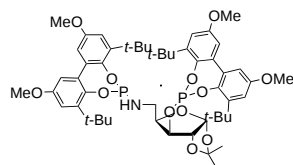
$[\alpha]_D^{20} = -11.2$ (c 1.0, CH_2Cl_2)

Source of chirality: chiral pool

Absolute configuration: 1*R*,2*R*,3*S*,4*R*

Montserrat Diéguez,* Aurora Ruiz and Carmen Claver

Tetrahedron: Asymmetry 12 (2001) 2827



3,5-Bis[(3,3'-bis-*t*-butyl-5,5'-bis-methoxy-1,1'-biphenyl-2,2'-diyl)phosphite]-5-amine-5-deoxy-1,2-*O*-isopropylidene- α -D-xylofuranose

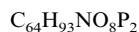
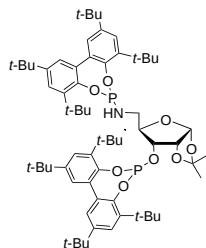
$[\alpha]_D^{20} = -91.1$ (*c* 1.0, CH_2Cl_2)

Source of chirality: chiral pool

Absolute configuration: 1*R*,2*R*,3*S*,4*R*

Montserrat Diéguez,* Aurora Ruiz and Carmen Claver

Tetrahedron: Asymmetry 12 (2001) 2827



3,5-Bis[(3,3',5,5'-tetra-*t*-butyl-1,1'-biphenyl-2,2'-diyl)phosphite]-5-amine-5-deoxy-1,2-*O*-isopropylidene- α -D-ribofuranose

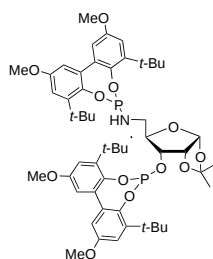
$[\alpha]_D^{20} = -26.7$ (*c* 0.3, CH_2Cl_2)

Source of chirality: chiral pool

Absolute configuration: 1*R*,2*R*,3*R*,4*R*

Montserrat Diéguez,* Aurora Ruiz and Carmen Claver

Tetrahedron: Asymmetry 12 (2001) 2827



3,5-Bis[(3,3'-bis-*t*-butyl-5,5'-bis-methoxy-1,1'-biphenyl-2,2'-diyl)phosphite]-5-amine-5-deoxy-1,2-*O*-isopropylidene- α -D-ribofuranose

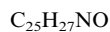
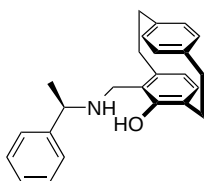
$[\alpha]_D^{20} = -40.2$ (*c* 0.3, CH_2Cl_2)

Source of chirality: chiral pool

Absolute configuration: 1*R*,2*R*,3*R*,4*R*

Stefan Dahmen and Stefan Bräse*

Tetrahedron: Asymmetry 12 (2001) 2845



(*S_p*,*R*)-5-[(1'-Phenylethylamino)methyl]-4-hydroxy[2.2]paracyclophane

E.e. = 100%

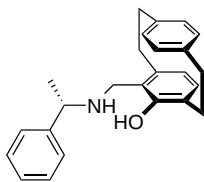
$[\alpha]_D^{20} = -146$ (*c* 1.2, $CHCl_3$)

Source of chirality: resolution

Absolute configuration: *S_p*,*R*

Stefan Dahmen and Stefan Bräse*

Tetrahedron: Asymmetry 12 (2001) 2845



$C_{25}H_{27}NO$

(S_p,S)-5-[(1'-Phenylethylamino)methyl]-4-hydroxy[2.2]paracyclophane

E.e. = 100%

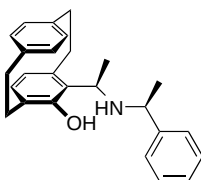
$[\alpha]_D^{20} = -131$ (c 0.5, $CHCl_3$)

Source of chirality: resolution

Absolute configuration: S_p,S

Stefan Dahmen and Stefan Bräse*

Tetrahedron: Asymmetry 12 (2001) 2845



$C_{26}H_{29}NO$

(R_p,R,S)-5-[1'-(1''-Phenylethylamino)ethyl]-4-hydroxy[2.2]paracyclophane

E.e. = 100%, d.e. >98%

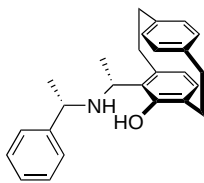
$[\alpha]_D^{20} = +86$ (c 1.0, $CHCl_3$)

Source of chirality: resolution, asymmetric synthesis

Absolute configuration: R_p,R,S

Stefan Dahmen and Stefan Bräse*

Tetrahedron: Asymmetry 12 (2001) 2845



$C_{26}H_{29}NO$

(S_p,R,S)-5-[1'-(1''-Phenylethylamino)ethyl]-4-hydroxy[2.2]paracyclophane

E.e. = 100%, d.e. >98%

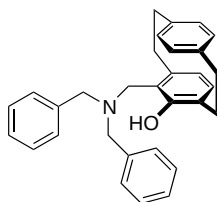
$[\alpha]_D^{20} = -140$ (c 1.0, $CHCl_3$)

Source of chirality: resolution, asymmetric synthesis

Absolute configuration: S_p,S,R

Stefan Dahmen and Stefan Bräse*

Tetrahedron: Asymmetry 12 (2001) 2845



$C_{31}H_{31}NO$

(S_p)-5-[(Dibenzylamino)methyl]-4-hydroxy[2.2]paracyclophane

E.e. = 100%

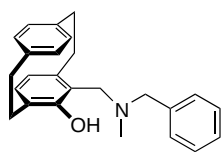
$[\alpha]_D^{20} = -93$ (c 1.0, $CHCl_3$)

Source of chirality: resolution

Absolute configuration: S_p

Stefan Dahmen and Stefan Bräse*

Tetrahedron: Asymmetry 12 (2001) 2845



$C_{25}H_{27}NO$

(R_p)-5-[(Benzylmethylamino)methyl]-4-hydroxy[2.2]paracyclophane

E.e. = 100%

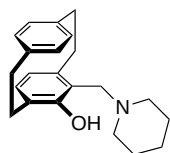
$[\alpha]_D^{20} = +132$ (c 1.6, $CHCl_3$)

Source of chirality: resolution

Absolute configuration: R_p

Stefan Dahmen and Stefan Bräse*

Tetrahedron: Asymmetry 12 (2001) 2845



$C_{22}H_{27}NO$

(R_p)-5-[(Piperidinyl)methyl]-4-hydroxy[2.2]paracyclophane

E.e. = 100%

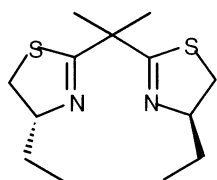
$[\alpha]_D^{20} = +207$ (c 1.0, $CHCl_3$)

Source of chirality: resolution

Absolute configuration: R_p

Isabelle Abrunhosa, Mihaela Gulea, Jocelyne Levillain and Serge Masson*

Tetrahedron: Asymmetry 12 (2001) 2851



$C_{13}H_{22}N_2S_2$

(R,R)-2,2'-(1-Methylethylidene)bis[4,5-dihydro-4-ethylthiazoline]

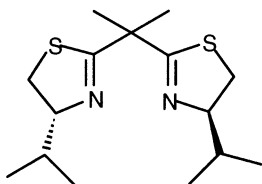
$[\alpha]_D^{20} +161$ (c 1.3, acetone)

Source of chirality: commercial R -(-)-aminobutanol

Absolute configuration: (R,R)

Isabelle Abrunhosa, Mihaela Gulea, Jocelyne Levillain and Serge Masson*

Tetrahedron: Asymmetry 12 (2001) 2851



$C_{15}H_{26}N_2S_2$

(R,R)-2,2'-(1-Methylethylidene)bis[4,5-dihydro-4-isopropylthiazoline]

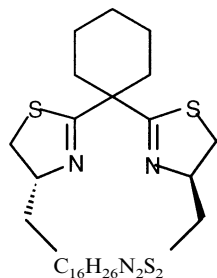
$[\alpha]_D^{20} +130$ (c 1, acetone)

Source of chirality: commercial R -(-)-valinol

Absolute configuration: (R,R)

Isabelle Abrunhosa, Mihaela Gulea, Jocelyne Levillain
and Serge Masson*

Tetrahedron: Asymmetry 12 (2001) 2851



(*R,R*)-2,2'-Cyclohexylidenebis[4-ethyl-4,5-dihydrothiazoline]

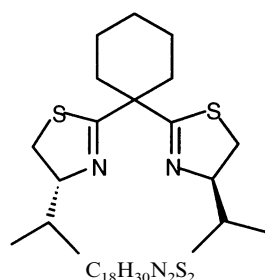
$[\alpha]_D^{20} +90$ (*c* 1, acetone)

Source of chirality: commercial *R*-(-)-2-aminobutanol

Absolute configuration: (*R,R*)

Isabelle Abrunhosa, Mihaela Gulea, Jocelyne Levillain
and Serge Masson*

Tetrahedron: Asymmetry 12 (2001) 2851



(*R,R*)-2,2'-Cyclohexylidenebis[2-(4,5-dihydro-4-isopropylthiazoline)]

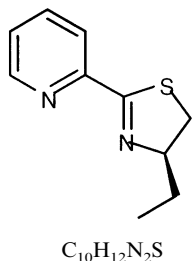
$[\alpha]_D^{20} +31$ (*c* 1, acetone)

Source of chirality: commercial *R*-(-)-valinol

Absolute configuration: (*R,R*)

Isabelle Abrunhosa, Mihaela Gulea, Jocelyne Levillain
and Serge Masson*

Tetrahedron: Asymmetry 12 (2001) 2851



2-[(*R*)-4,5-Dihydro-4-ethyl-2-thiazolyl]pyridine

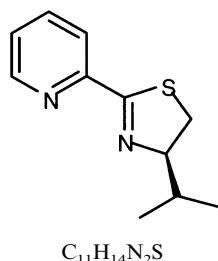
$[\alpha]_D^{20} +84$ (*c* 1, acetone)

Source of chirality: commercial *R*-(-)-2-aminobutanol

Absolute configuration: (*R*)

Isabelle Abrunhosa, Mihaela Gulea, Jocelyne Levillain
and Serge Masson*

Tetrahedron: Asymmetry 12 (2001) 2851



2-[(*R*)-4,5-Dihydro-4-isopropyl-2-thiazolyl]pyridine

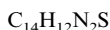
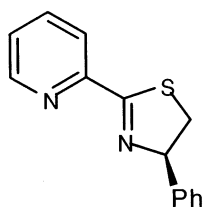
$[\alpha]_D^{20} -54$ (*c* 1, acetone)

Source of chirality: commercial *R*-(-)-valinol

Absolute configuration: (*R*)

Isabelle Abrunhosa, Mihaela Gulea, Jocelyne Levillain
and Serge Masson*

Tetrahedron: Asymmetry 12 (2001) 2851



2-[(*R*)-4,5-Dihydro-4-phenyl-2-thiazolyl]pyridine

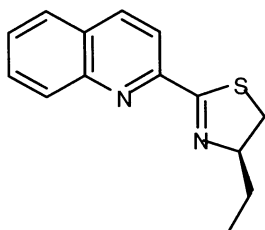
$[\alpha]_D^{20} -89$ (*c* 1, acetone)

Source of chirality: commercial *R*-(-)-phenylglycinol

Absolute configuration: (*R*)

Isabelle Abrunhosa, Mihaela Gulea, Jocelyne Levillain
and Serge Masson*

Tetrahedron: Asymmetry 12 (2001) 2851



2-[(*R*)-4,5-Dihydro-4-ethyl-2-thiazolyl]quinoline

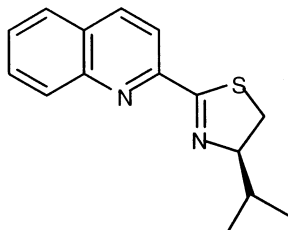
$[\alpha]_D^{20} +113$ (*c* 1, acetone)

Source of chirality: commercial *R*-(-)-2-aminobutanol

Absolute configuration: (*R*)

Isabelle Abrunhosa, Mihaela Gulea, Jocelyne Levillain
and Serge Masson*

Tetrahedron: Asymmetry 12 (2001) 2851



2-[(*R*)-4,5-Dihydro-4-isopropyl-2-thiazolyl]quinoline

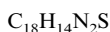
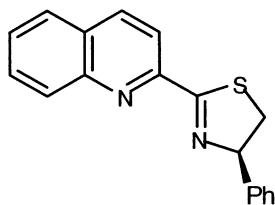
$[\alpha]_D^{20} +115$ (*c* 1, acetone)

Source of chirality: commercial *R*-(-)-valinol

Absolute configuration: (*R*)

Isabelle Abrunhosa, Mihaela Gulea, Jocelyne Levillain
and Serge Masson*

Tetrahedron: Asymmetry 12 (2001) 2851



2-[(*R*)-4,5-Dihydro-4-phenyl-2-thiazolyl]quinoline

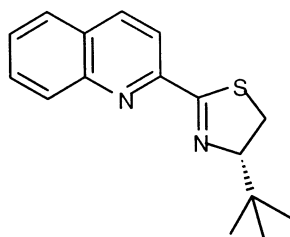
$[\alpha]_D^{20} +30$ (*c* 1, acetone)

Source of chirality: commercial *R*-(-)-phenylglycinol

Absolute configuration: (*R*)

Isabelle Abrunhosa, Mihaela Gulea, Jocelyne Levillain
and Serge Masson*

Tetrahedron: Asymmetry 12 (2001) 2851



2-[(*S*)-4,5-Dihydro-4-*tert*-butyl-2-thiazolyl]quinoline

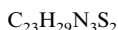
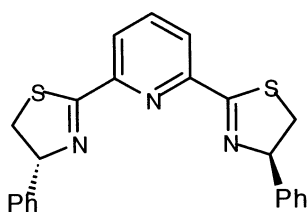
$[\alpha]_D^{20} -90$ (*c* 1, acetone)

Source of chirality: commercial *S*-(+)-*tert*-leucinol

Absolute configuration: (*S*)

Isabelle Abrunhosa, Mihaela Gulea, Jocelyne Levillain
and Serge Masson*

Tetrahedron: Asymmetry 12 (2001) 2851



(*R,R*)-2,6-Bis[4-diphenyl-4,5-dihydro-2-thiazoline]pyridine

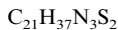
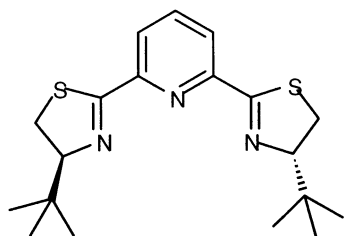
$[\alpha]_D^{20} +49$ (*c* 1, acetone)

Source of chirality: commercial *R*-(-)-phenylglycinol

Absolute configuration: (*R,R*)

Isabelle Abrunhosa, Mihaela Gulea, Jocelyne Levillain
and Serge Masson*

Tetrahedron: Asymmetry 12 (2001) 2851



(*S,S*)-2,6-Bis[4-(1,1-dimethylethyl)-4,5-dihydro-2-thiazoline]pyridine

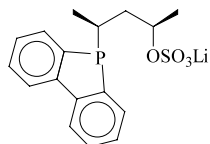
$[\alpha]_D^{20} -123$ (*c* 1, acetone)

Source of chirality: commercial *S*-(+)-*tert*-leucinol

Absolute configuration: (*S,S*)

Csaba Hegedüs, József Madarász, Henrik Gulyás, Áron Szöllősy
and József Bakos*

Tetrahedron: Asymmetry 12 (2001) 2867



(*2R,4S*)-4-(Dibenzophospholyl)-pent-2-yl-sulfate lithium salt

E.e. = 100%

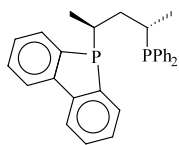
$[\alpha]_D = +39.5$ (*c* = 4.1, H_2O)

Source of chirality: (*2R,4R*)-2,4-pentanediol

Absolute configuration: *2R,4S*

Csaba Hegedüs, József Madarász, Henrik Gulyás, Áron Szöllősy and József Bakos*

Tetrahedron: Asymmetry 12 (2001) 2867



$C_{29}H_{28}P_2$

(2*S*,4*S*)-2-(Dibenzophospholyl)-4-(diphenylphosphino)pentane

E.e. = 100%

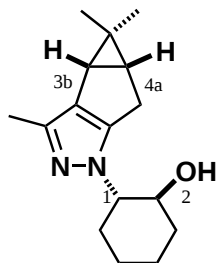
$[\alpha]_D = -67.3$ ($c = 4.1$, $CHCl_3$)

Source of chirality: (2*R*,4*R*)-2,4-pentanediol

Absolute configuration: 2*S*,4*S*

Sergey A. Popov, Yuri V. Gatilov, Tatjana V. Rybalova, Oxana A. Kholdeeva and Alexey V. Tkachev*

Tetrahedron: Asymmetry 12 (2001) 2875



$C_{16}H_{24}N_2O$

(1*S*,2*S*)-2-((3*bS*,4*aR*)-3,4,4-Trimethyl-3*b*,4,4*a*,5-tetrahydrocyclopropa[3,4]cyclopenta[1,2-*c*]pyrazol-1-yl)-cyclohexanol

D.e. $\geq 98\%$

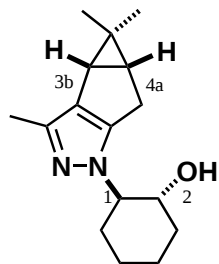
$[\alpha]^{25} = +102$ (c 1.0, $CHCl_3$)

Source of chirality: (+)-3-carene

Absolute configuration: (1*S*,2*S*,3*bS*,4*aR*)

Sergey A. Popov, Yuri V. Gatilov, Tatjana V. Rybalova, Oxana A. Kholdeeva and Alexey V. Tkachev*

Tetrahedron: Asymmetry 12 (2001) 2875



$C_{16}H_{24}N_2O$

(1*R*,2*R*)-2-((3*bS*,4*aR*)-3,4,4-Trimethyl-3*b*,4,4*a*,5-tetrahydrocyclopropa[3,4]cyclopenta[1,2-*c*]pyrazol-1-yl)-cyclohexanol

D.e. $\geq 98\%$

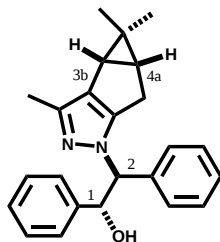
$[\alpha]^{25} = +66$ (c 1.3, $CHCl_3$)

Source of chirality: (+)-3-carene

Absolute configuration: (1*R*,2*R*,3*bS*,4*aR*)

Sergey A. Popov, Yuri V. Gatilov, Tatjana V. Rybalova, Oxana A. Kholdeeva and Alexey V. Tkachev*

Tetrahedron: Asymmetry 12 (2001) 2875



$C_{24}H_{26}N_2O$

(1*S*,2*R*)-1,2-Diphenyl-2-((3*bS*,4*aR*)-3,4,4-trimethyl-3*b*,4,4*a*,5-tetrahydrocyclopropa[3,4]cyclopenta[1,2-*c*]pyrazol-1-yl)-ethanol

D.e. $\geq 98\%$

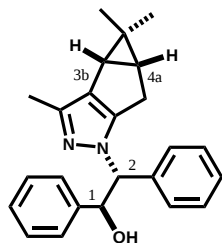
$[\alpha]^{21} = +298$ (c 1.3, $CHCl_3$)

Source of chirality: (+)-3-carene

Absolute configuration: (1*R*,2*S*,3*bS*,4*aR*)

Sergey A. Popov, Yuri V. Gatilov, Tatjana V. Rybalova,
Oxana A. Kholdeeva and Alexey V. Tkachev*

Tetrahedron: Asymmetry 12 (2001) 2875



$C_{24}H_{26}N_2O$

(1*R*,2*S*)-1,2-Diphenyl-2-((3*bS*,4*aR*)-3,4,4-trimethyl-3*b*,4,4*a*,5-tetrahydrocyclopropa[3,4]cyclopenta[1,2-*c*]pyrazol-1-yl)-ethanol

D.e. $\geq 98\%$

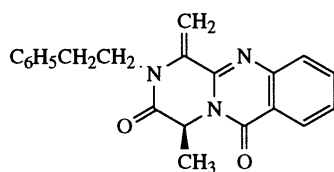
$[\alpha]_D^{21} = -39$ (*c* 1.6, $CHCl_3$)

Source of chirality: (+)-3-carene

Absolute configuration: (1*S*,2*R*,3*bS*,4*aR*)

María Luisa Heredia, Elena de la Cuesta and Carmen Avendaño*

Tetrahedron: Asymmetry 12 (2001) 2883



$C_{21}H_{19}N_3O_2$

(-)-(4*S*)-4-Methyl-1-methylene-2-phenethyl-2,4-dihydro-(1*H*)-pyrazino[2,1-*b*]quinazoline-3,6-dione

E.e. $>98\%$ [by chiral HPLC]

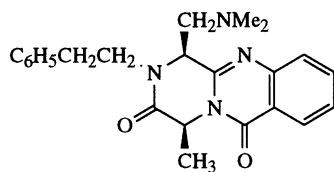
$[\alpha]_D^{25} = -79$ (*c* 0.12, $CHCl_3$)

Source of chirality: natural

Absolute configuration: 4*S*

María Luisa Heredia, Elena de la Cuesta and Carmen Avendaño*

Tetrahedron: Asymmetry 12 (2001) 2883



$C_{23}H_{26}N_4O_2$

(-)-(1*S*,4*S*)-4-Methyl-1-dimethylaminomethyl-2-phenethyl-2,4-dihydro-(1*H*)-pyrazino[2,1-*b*]quinazoline-3,6-dione

E.e. $>98\%$ [by NMR]

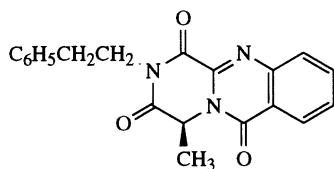
$[\alpha]_D^{25} = -130$ (*c* 0.12, $CHCl_3$)

Source of chirality: natural and synthesis

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

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Tetrahedron: Asymmetry 12 (2001) 2883



$C_{20}H_{17}N_3O_3$

(-)-(4*S*)-4-Methyl-2-phenethyl-2,4-dihydro-(1*H*)-pyrazino[2,1-*b*]quinazoline-1,3,6-trione

E.e. $>98\%$ [by NMR]

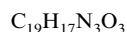
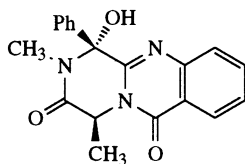
$[\alpha]_D^{25} = -0.5$ (*c* 0.25, $CHCl_3$)

Source of chirality: natural

Absolute configuration: 4*S*

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Tetrahedron: Asymmetry 12 (2001) 2883



(-)-(1*R*,4*S*)-1-Hydroxy-2,4-dimethyl-1-phenyl-2,4-dihydro-(1*H*)-pyrazino[2,1-*b*]quinazoline-3,6-dione

E.e. >98% [by NMR]

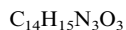
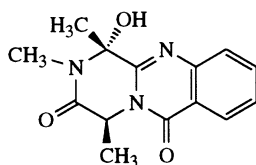
$[\alpha]_D^{25} = -0.18$ (*c* 0.19, $CHCl_3$)

Source of chirality: natural and synthesis

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

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Tetrahedron: Asymmetry 12 (2001) 2883



(-)-(1*R*,4*S*)-1-Hydroxy-1,2,4-trimethyl-2,4-dihydro-(1*H*)-pyrazino[2,1-*b*]quinazoline-3,6-dione

E.e. >98% [by NMR]

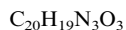
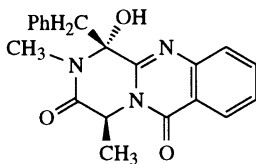
$[\alpha]_D^{25} = -46$ (*c* 0.12, $CHCl_3$)

Source of chirality: natural and synthesis

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

María Luisa Heredia, Elena de la Cuesta and Carmen Avendaño*

Tetrahedron: Asymmetry 12 (2001) 2883



(+)-(1*R*,4*S*)-1-Benzyl-1-hydroxy-2,4-dimethyl-2,4-dihydro-(1*H*)-pyrazino[2,1-*b*]quinazoline-3,6-dione

E.e. >98% [by NMR]

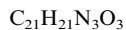
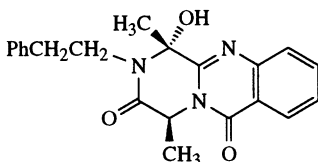
$[\alpha]_D^{25} = +90$ (*c* 0.2, $CHCl_3$)

Source of chirality: natural and synthesis

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

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Tetrahedron: Asymmetry 12 (2001) 2883



(+)-(1*R*,4*S*)-1-Hydroxy-1,4-dimethyl-2-phenethyl-2,4-dihydro-(1*H*)-pyrazino[2,1-*b*]quinazoline-3,6-dione

E.e. >98% [by NMR]

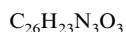
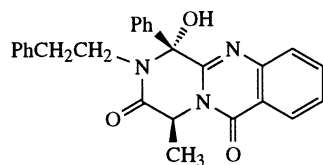
$[\alpha]_D^{25} = +43$ (*c* 0.13, $CHCl_3$)

Source of chirality: natural and synthesis

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

María Luisa Heredia, Elena de la Cuesta and Carmen Avendaño*

Tetrahedron: Asymmetry 12 (2001) 2883



(-)-(1*R*,4*S*)-1-Hydroxy-4-methyl-2-phenethyl-1-phenyl-2,4-dihydro-(1*H*)-pyrazino[2,1-*b*]quinazoline-3,6-dione

E.e. >98% [by NMR]

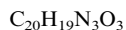
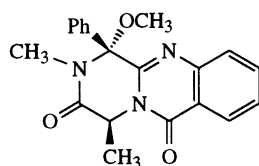
$[\alpha]_D^{25} = -64$ (*c* 0.13, $CHCl_3$)

Source of chirality: natural and synthesis

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

María Luisa Heredia, Elena de la Cuesta and Carmen Avendaño*

Tetrahedron: Asymmetry 12 (2001) 2883



(+)-(1*R*,4*S*)-1-Methoxy-2,4-dimethyl-1-phenyl-2,4-dihydro-(1*H*)-pyrazino[2,1-*b*]quinazoline-3,6-dione

E.e. >98% [by NMR]

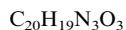
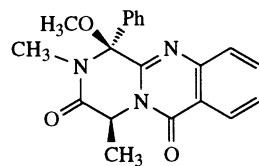
$[\alpha]_D^{25} = +112$ (*c* 0.14, $CHCl_3$)

Source of chirality: natural and synthesis

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

María Luisa Heredia, Elena de la Cuesta and Carmen Avendaño*

Tetrahedron: Asymmetry 12 (2001) 2883



(-)-(1*S*,4*S*)-1-Methoxy-2,4-dimethyl-1-phenyl-2,4-dihydro-(1*H*)-pyrazino[2,1-*b*]quinazoline-3,6-dione

E.e. >98% [by NMR]

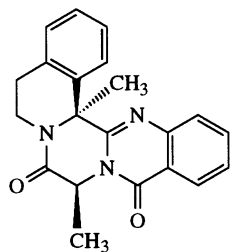
$[\alpha]_D^{25} = -59$ (*c* 0.09, $CHCl_3$)

Source of chirality: natural and synthesis

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

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Tetrahedron: Asymmetry 12 (2001) 2883



(-)-(9*S*,16*bS*)-9,16b-Dimethyl-5,6,9,16b-tetrahydroisoquino[1',2':3,4]pyrazino[2,1-*b*]quinazoline-8-11-dione

E.e. >98% [by chiral HPLC]

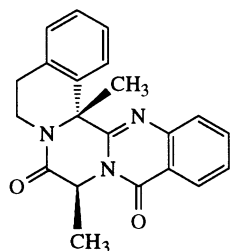
$[\alpha]_D^{25} = -30$ (*c* 0.11, $CHCl_3$)

Source of chirality: natural and synthesis

Absolute configuration: 9*S*,16*bS*

María Luisa Heredia, Elena de la Cuesta and Carmen Avendaño*

Tetrahedron: Asymmetry 12 (2001) 2883



$C_{21}H_{19}N_3O_2$

(-)-(9*S*,16*bR*)-9,16*b*-Dimethyl-5,6,9,16*b*-tetrahydroisoquino[1',2':3,4]pyrazino[2,1-*b*]quinazoline-8-11-dione

E.e. >98% [by chiral HPLC]

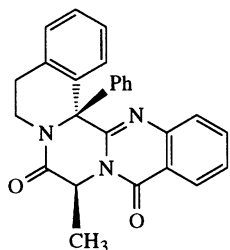
$[\alpha]_D^{25} = -42$ (*c* 0.33, $CHCl_3$)

Source of chirality: natural and synthesis

Absolute configuration: 9*S*,16*bR*

María Luisa Heredia, Elena de la Cuesta and Carmen Avendaño*

Tetrahedron: Asymmetry 12 (2001) 2883



$C_{26}H_{21}N_3O_2$

(-)-(9*S*,16*bR*)-9-Methyl-16*b*-phenyl-5,6,9,16*b*-tetrahydroisoquino[1',2':3,4]pyrazino[2,1-*b*]quinazoline-8,11-dione

E.e. >98% [by chiral HPLC]

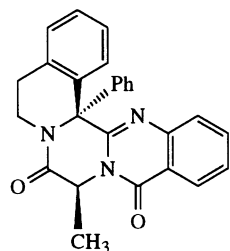
$[\alpha]_D^{25} = -236$ (*c* 0.33, $CHCl_3$)

Source of chirality: natural and synthesis

Absolute configuration: 9*S*,16*bR*

María Luisa Heredia, Elena de la Cuesta and Carmen Avendaño*

Tetrahedron: Asymmetry 12 (2001) 2883



$C_{26}H_{21}N_3O_2$

(-)-(9*S*,16*bS*)-9-Methyl-16*b*-phenyl-5,6,9,16*b*-tetrahydroisoquino[1',2':3,4]pyrazino[2,1-*b*]quinazoline-8,11-dione

E.e. >98% [by chiral HPLC]

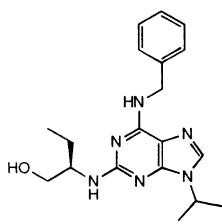
$[\alpha]_D^{25} = -166$ (*c* 0.27, $CHCl_3$)

Source of chirality: natural and synthesis

Absolute configuration: 9*S*,16*bS*

Shudong Wang, Steven J. McClue, John R. Ferguson,
Jonathan D. Hull, Steven Stokes, Simon Parsons, Robert Westwood
and Peter M. Fischer*

Tetrahedron: Asymmetry 12 (2001) 2891



$C_{19}H_{26}N_6O$

(*R*)-2-(6-Benzylamino-9-isopropyl-9*H*-purin-2-ylamino)butan-1-ol

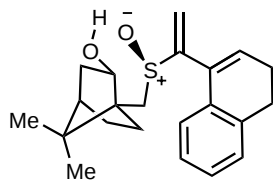
$[\alpha]_D^{20} = +56.3$ (*c* 0.56, $CHCl_3$)

Source of chirality: resolution

Absolute configuration: *R* (by X-ray)

M. C. Aversa,* A. Barattucci,* P. Bonaccorsi, G. Bruno,
F. Caruso and P. Giannetto

Tetrahedron: Asymmetry 12 (2001) 2901



(*R_S*)-1,2-Dihydro-4-{1-[(1*S*)-isoborneol-10-sulfinyl]vinyl}naphthalene

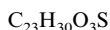
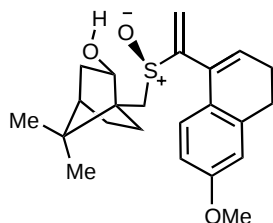
$[\alpha]_D^{23} = +19.4$ (*c* 0.0083, $CHCl_3$)

Source of chirality: stereoselective synthesis

Absolute configuration: (*R_S*,1'*S*,2'*R*,4'*R*)

M. C. Aversa,* A. Barattucci,* P. Bonaccorsi, G. Bruno,
F. Caruso and P. Giannetto

Tetrahedron: Asymmetry 12 (2001) 2901



(*R_S*)-1,2-Dihydro-4-{1-[(1*S*)-isoborneol-10-sulfinyl]vinyl}-7-methoxynaphthalene

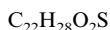
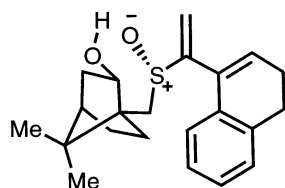
$[\alpha]_D^{20} = +2.8$ (*c* 0.0066, $CHCl_3$)

Source of chirality: stereoselective synthesis

Absolute configuration: (*R_S*,1'*S*,2'*R*,4'*R*)

M. C. Aversa,* A. Barattucci,* P. Bonaccorsi, G. Bruno,
F. Caruso and P. Giannetto

Tetrahedron: Asymmetry 12 (2001) 2901



(*S_S*)-1,2-Dihydro-4-{1-[(1*S*)-isoborneol-10-sulfinyl]vinyl}naphthalene

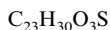
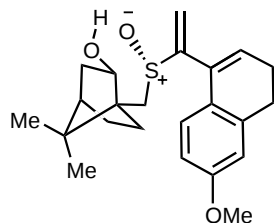
$[\alpha]_D^{25} = -53.0$ (*c* 0.0101, $CHCl_3$)

Source of chirality: stereoselective synthesis

Absolute configuration: (*S_S*,1'*S*,2'*R*,4'*R*)

M. C. Aversa,* A. Barattucci,* P. Bonaccorsi, G. Bruno,
F. Caruso and P. Giannetto

Tetrahedron: Asymmetry 12 (2001) 2901



(*S_S*)-1,2-Dihydro-4-{1-[(1*S*)-isoborneol-10-sulfinyl]vinyl}-7-methoxynaphthalene

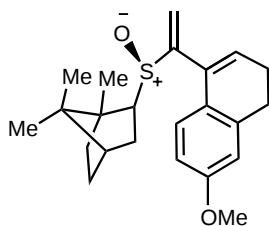
$[\alpha]_D^{20} = -24.8$ (*c* 0.0042, $CHCl_3$)

Source of chirality: stereoselective synthesis

Absolute configuration: (*S_S*,1'*S*,2'*R*,4'*R*)

M. C. Aversa,* A. Barattucci,* P. Bonaccorsi, G. Bruno,
F. Caruso and P. Giannetto

Tetrahedron: Asymmetry 12 (2001) 2901



$C_{23}H_{30}O_2S$

(R_S)-4-{1-[(1*S*-*exo*)-2-Bornylsulfinyl]vinyl}-1,2-Dihydro-7-methoxynaphthalene

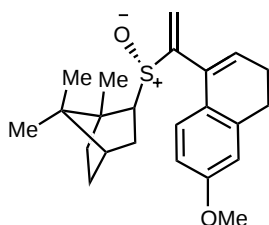
$[\alpha]_D^{20} = +5.9$ (c 0.0122, $CHCl_3$)

Source of chirality: stereoselective synthesis

Absolute configuration: ($R_S, 1'S, 2'S, 4'S$)

M. C. Aversa,* A. Barattucci,* P. Bonaccorsi, G. Bruno,
F. Caruso and P. Giannetto

Tetrahedron: Asymmetry 12 (2001) 2901



$C_{23}H_{30}O_2S$

(S_S)-4-{1-[(1*S*-*exo*)-2-Bornylsulfinyl]vinyl}-1,2-Dihydro-7-methoxynaphthalene

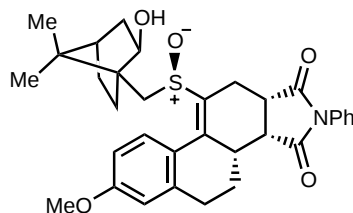
$[\alpha]_D^{20} = +37.7$ (c 0.0116, $CHCl_3$)

Source of chirality: stereoselective synthesis

Absolute configuration: ($S_S, 1'S, 2'S, 4'S$)

M. C. Aversa,* A. Barattucci,* P. Bonaccorsi, G. Bruno,
F. Caruso and P. Giannetto

Tetrahedron: Asymmetry 12 (2001) 2901



$C_{33}H_{37}NO_5S$

($3aR, 3bS, 11aS, R_S$)-10-[(1*S*)-Isoborneol-10-sulfinyl]-7-methoxy-2,3,3a,3b,4,5,11,11a-octahydro-2-phenyl-naphth[2,1-*e*]isoindole-1,3(1*H*)-dione

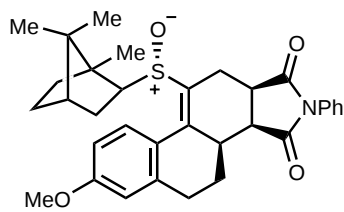
$[\alpha]_D^{20} = +51.4$ (c 0.0079, $CHCl_3$)

Source of chirality: stereoselective synthesis

Absolute configuration: ($3aR, 3bS, 11aS, R_S, 1'S, 2'R, 4'R$)

M. C. Aversa,* A. Barattucci,* P. Bonaccorsi, G. Bruno,
F. Caruso and P. Giannetto

Tetrahedron: Asymmetry 12 (2001) 2901



$C_{33}H_{37}NO_4S$

($3aS, 3bR, 11aR, S_S$)-10-[(1*S*-*exo*)-2-Bornylsulfinyl]-7-methoxy-2,3,3a,3b,4,5,11,11a-octahydro-2-phenyl-naphth[2,1-*e*]isoindole-1,3(1*H*)-dione

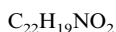
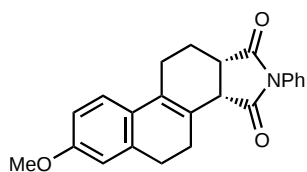
$[\alpha]_D^{24} = +27.1$ (c 0.0373, $CHCl_3$)

Source of chirality: stereoselective synthesis

Absolute configuration: ($3aS, 3bR, 11aR, S_S, 1'S, 2'S, 4'S$)

M. C. Aversa,* A. Barattucci,* P. Bonaccorsi, G. Bruno,
F. Caruso and P. Giannetto

Tetrahedron: Asymmetry 12 (2001) 2901



(3a*S*,11a*S*)-7-Methoxy-2,3,3a,4,5,11,11a-octahydro-2-phenyl-naphth[2,1-*e*]isoindole-1,3(1*H*)-dione

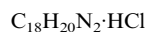
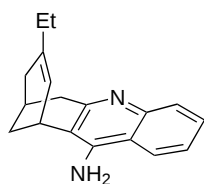
$[\alpha]_D^{24} = +32.4$ (*c* 0.0326, $CHCl_3$)

Source of chirality: enantiopurity of the starting product

Absolute configuration: (3a*S*,11a*S*)

Pelayo Camps,* Elena Gómez, Diego Muñoz-Torrero and
Manuel Arnó

Tetrahedron: Asymmetry 12 (2001) 2909



(7*S*,11*R*)-12-Amino-9-ethyl-6,7,8,11-tetrahydro-7,11-methanocycloocta[*b*]quinoline

E.e. = 77%

$[\alpha]_D^{20} = +302$ (*c* 0.29, methanol)

Source of chirality: chiral MPLC: cellulose triacetate

Absolute configuration: 7*S*,11*R*