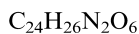
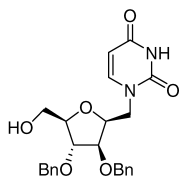


Stereochemistry abstracts

Anthony Clouet, Christine Gravier-Pelletier,* Bayan Al-Dabbag, Ahmed Bouhss and Yves Le Merrer*

Tetrahedron: Asymmetry 19 (2008) 397



2,5-Anhydro-3,4-di-*O*-benzyl-1-deoxy-1-(uracil-1'-yl)-*D*-glucitol

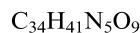
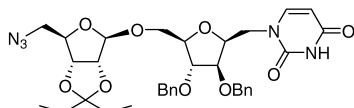
De > 95% (by ^1H NMR)

$[\alpha]_{\text{D}}^{20} = -8$ (*c* 1.0, CH_3OH)

Source of chirality: 1,2:5,6-dianhydro-3,4-di-*O*-benzyl-L-iditol

Anthony Clouet, Christine Gravier-Pelletier,* Bayan Al-Dabbag, Ahmed Bouhss and Yves Le Merrer*

Tetrahedron: Asymmetry 19 (2008) 397



2,5-Anhydro-1-deoxy-6-*O*-(5''-azido-5''-deoxy-2'',3''-*O*-isopentylidene- β -*D*-ribofuranosyl)-1-(uracil-1'-yl)-3,4-di-*O*-benzyl-*D*-glucitol

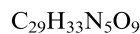
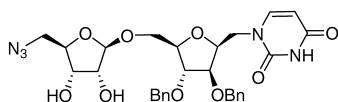
De > 95% (by ^1H NMR)

$[\alpha]_{\text{D}}^{20} = -28$ (*c* 1.0, CH_3OH)

Source of chirality: 1,2:5,6-dianhydro-3,4-di-*O*-benzyl-L-iditol and *D*-ribose

Anthony Clouet, Christine Gravier-Pelletier,* Bayan Al-Dabbag, Ahmed Bouhss and Yves Le Merrer*

Tetrahedron: Asymmetry 19 (2008) 397



2,5-Anhydro-1-deoxy-6-*O*-(5''-azido-5''-deoxy- β -*D*-ribofuranosyl)-1-(uracil-1'-yl)-3,4-di-*O*-benzyl-*D*-glucitol

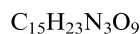
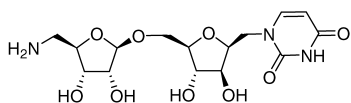
De > 95% (by ^1H NMR)

$[\alpha]_{\text{D}}^{20} = -6$ (*c* 1.0, CH_3OH)

Source of chirality: 1,2:5,6-dianhydro-3,4-di-*O*-benzyl-L-iditol and *D*-ribose

Anthony Clouet, Christine Gravier-Pelletier,* Bayan Al-Dabbag, Ahmed Bouhss and Yves Le Merrer*

Tetrahedron: Asymmetry 19 (2008) 397



2,5-Anhydro-1-deoxy-6-*O*-(5''-amino-5''-deoxy- β -*D*-ribofuranosyl)-1-(uracil-1'-yl)-*D*-glucitol

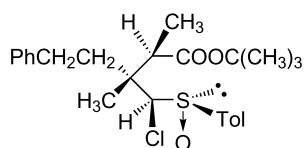
De > 95% (by ^1H NMR)

$[\alpha]_{\text{D}}^{20} = -33$ (*c* 1.0, H_2O)

Source of chirality: 1,2:5,6-dianhydro-3,4-di-*O*-benzyl-L-iditol and *D*-ribose

Shimpei Sugiyama, Nobuhito Nakaya and Tsuyoshi Satoh*

Tetrahedron: Asymmetry 19 (2008) 401



$C_{25}H_{33}O_3ClS$

(2*S*,3*R*,4*S*,*S_R*)-*tert*-Butyl 3-[chloro(*p*-tolylsulfinyl)methyl]-2,3-dimethyl-5-phenylpentanoate

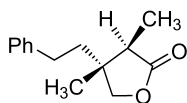
$[\alpha]_D^{27} = -50.9$ (*c* 1.77, EtOH)

Source of chirality: (*R*)-(-)-chloromethyl *p*-tolyl sulf-oxide

Absolute configuration: (2*S*,3*R*,4*S*,*S_R*)

Shimpei Sugiyama, Nobuhito Nakaya and Tsuyoshi Satoh*

Tetrahedron: Asymmetry 19 (2008) 401



$C_{14}H_{18}O_2$

(3*R*,4*R*)-3,4-Dimethyl-4-(2-phenylethyl)tetrahydrofuran-2-one

De = 98%, ee = 98%

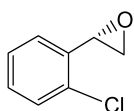
$[\alpha]_D^{26} = -11.0$ (*c* 0.93, EtOH)

Source of chirality: (*R*)-(-)-chloromethyl *p*-tolyl sulf-oxide

Absolute configuration: (3*R*,4*R*)

Xin Jia, Zunsheng Wang and Zhi Li*

Tetrahedron: Asymmetry 19 (2008) 407



C_8H_7ClO

(*S*)-(2-Chlorophenyl)-oxirane

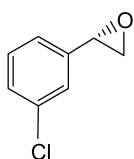
Ee = 98.5% (HPLC)

$[\alpha]_D^{20} = +58.2$ (*c* 0.20, $CHCl_3$)

Configuration: (*S*)

Xin Jia, Zunsheng Wang and Zhi Li*

Tetrahedron: Asymmetry 19 (2008) 407



C_8H_7ClO

(*S*)-(3-Chlorophenyl)-oxirane

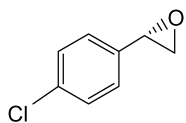
Ee = 99.1% (HPLC)

$[\alpha]_D^{20} = +11.5$ (*c* 1.61, $CHCl_3$)

Configuration: (*S*)

Xin Jia, Zunsheng Wang and Zhi Li*

Tetrahedron: Asymmetry 19 (2008) 407



C_8H_7ClO

(*S*)-(4-Chlorophenyl)-oxirane

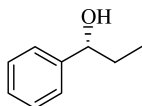
Ee = 99.1% (HPLC)

$[\alpha]_D^{20} = +24.5$ (*c* 1.37, $CHCl_3$)

Configuration: (*S*)

Ashraf A. El-Shehawy,* Kenji Sugiyama and Akira Hirao

Tetrahedron: Asymmetry 19 (2008) 425



$C_9H_{12}O$

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

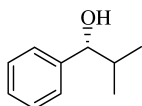
$[\alpha]_D^{25} = +43.7$ (*c* 5.5, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Ashraf A. El-Shehawy,* Kenji Sugiyama and Akira Hirao

Tetrahedron: Asymmetry 19 (2008) 425



$C_{10}H_{14}O$

(*R*)-2-Methyl-1-phenylpropanol

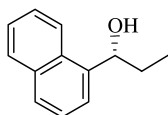
$[\alpha]_D^{25} = +47.9$ (*c* 1.1, Et_2O)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Ashraf A. El-Shehawy,* Kenji Sugiyama and Akira Hirao

Tetrahedron: Asymmetry 19 (2008) 425



$C_{13}H_{14}O$

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

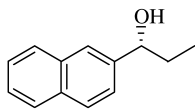
$[\alpha]_D^{25} = +54.7$ (*c* 0.9, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Ashraf A. El-Shehawy,* Kenji Sugiyama and Akira Hirao

Tetrahedron: Asymmetry 19 (2008) 425



C₁₃H₁₄O

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

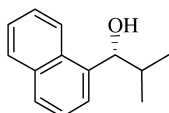
$$[\alpha]_{\text{D}}^{25} = +24.9 \text{ (} c \text{ 3.5, C}_6\text{H}_6\text{)}$$

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Ashraf A. El-Shehawy,* Kenji Sugiyama and Akira Hirao

Tetrahedron: Asymmetry 19 (2008) 425



C₁₄H₁₆O

(*R*)-2-Methyl-1-(1'-naphthyl)propanol

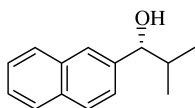
$$[\alpha]_{\text{D}}^{25} = +21.9 \text{ (} c \text{ 1.1, CHCl}_3\text{)}$$

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Ashraf A. El-Shehawy,* Kenji Sugiyama and Akira Hirao

Tetrahedron: Asymmetry 19 (2008) 425



C₁₄H₁₆O

(*R*)-2-Methyl-1-(2'-naphthyl)propanol

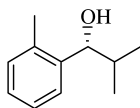
$$[\alpha]_{\text{D}}^{25} = +29.8 \text{ (} c \text{ 2.1, CHCl}_3\text{)}$$

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Ashraf A. El-Shehawy,* Kenji Sugiyama and Akira Hirao

Tetrahedron: Asymmetry 19 (2008) 425



C₁₁H₁₆O

(*R*)-2-Methyl-1-(*o*-tolyl)propanol

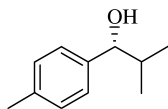
$$[\alpha]_{\text{D}}^{25} = +35.9 \text{ (} c \text{ 1.3, CHCl}_3\text{)}$$

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Ashraf A. El-Shehawey,* Kenji Sugiyama and Akira Hirao

Tetrahedron: Asymmetry 19 (2008) 425



$C_{11}H_{16}O$

(*R*)-2-Methyl-1-(*p*-tolyl)propanol

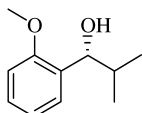
$[\alpha]_D^{25} = +43.4$ (*c* 1.2, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Ashraf A. El-Shehawey,* Kenji Sugiyama and Akira Hirao

Tetrahedron: Asymmetry 19 (2008) 425



$C_{11}H_{16}O_2$

(*R*)-2-Methyl-1-(*o*-methoxyphenyl)propanol

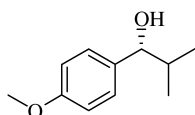
$[\alpha]_D^{25} = +31.4$ (*c* 2.2, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Ashraf A. El-Shehawey,* Kenji Sugiyama and Akira Hirao

Tetrahedron: Asymmetry 19 (2008) 425



$C_{11}H_{16}O_2$

(*R*)-2-Methyl-1-(*p*-methoxyphenyl)propanol

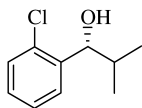
$[\alpha]_D^{25} = +37.6$ (*c* 1.8, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Ashraf A. El-Shehawey,* Kenji Sugiyama and Akira Hirao

Tetrahedron: Asymmetry 19 (2008) 425



$C_{10}H_{13}ClO$

(*R*)-2-Methyl-1-(*o*-chlorophenyl)propanol

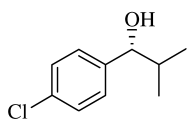
$[\alpha]_D^{25} = +26.1$ (*c* 1.4, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Ashraf A. El-Shehawy,* Kenji Sugiyama and Akira Hirao

Tetrahedron: Asymmetry 19 (2008) 425



$C_{10}H_{13}ClO$

(*R*)-2-Methyl-1-(*p*-chlorophenyl)propanol

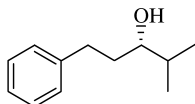
$[\alpha]_D^{25} = +38.5$ (*c* 1.3, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Ashraf A. El-Shehawy,* Kenji Sugiyama and Akira Hirao

Tetrahedron: Asymmetry 19 (2008) 425



$C_{12}H_{18}O$

(*S*)-2-Methyl-5-phenyl-3-pentanol

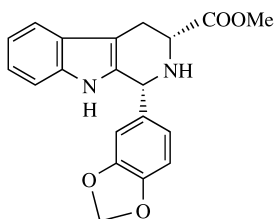
$[\alpha]_D^{25} = -38.6$ (*c* 3.1, EtOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)

Xiao-Xin Shi,* Shi-Ling Liu, Wei Xu and Yu-Lan Xu

Tetrahedron: Asymmetry 19 (2008) 435



$C_{20}H_{18}N_2O_4$

(1*R*,3*R*)-1-(3,4-Methylenedioxyphenyl)-2,3,4,9-tetrahydro-9*H*-pyrido[3,4-*b*]indole-3-carboxylic methyl ester

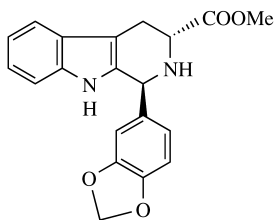
$[\alpha]_D^{20} = +25.2$ (*c* 1.0, $CHCl_3$)

Source of chirality: D-tryptophan

Absolute configuration: (1*R*,3*R*)

Xiao-Xin Shi,* Shi-Ling Liu, Wei Xu and Yu-Lan Xu

Tetrahedron: Asymmetry 19 (2008) 435



$C_{20}H_{18}N_2O_4$

(1*S*,3*R*)-1-(3,4-Methylenedioxyphenyl)-2,3,4,9-tetrahydro-9*H*-pyrido[3,4-*b*]indole-3-carboxylic methyl ester

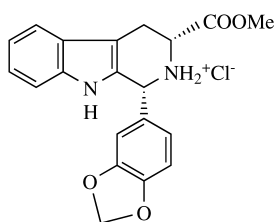
$[\alpha]_D^{20} = +33.1$ (*c* 1.0, $CHCl_3$)

Source of chirality: D-tryptophan

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

Xiao-Xin Shi,* Shi-Ling Liu, Wei Xu and Yu-Lan Xu

Tetrahedron: Asymmetry 19 (2008) 435



$C_{20}H_{19}N_2O_4Cl$

(1*R*,3*R*)-1-(3,4-Methylenedioxyphenyl)-2,3,4,9-tetrahydro-9*H*-pyrido[3,4-*b*]indole-3-carboxylic methyl ester hydrochloride

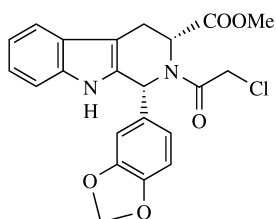
$[\alpha]_D^{20} = +92.9$ (*c* 1.1, MeOH)

Source of chirality: D-tryptophan

Absolute configuration: (1*R*,3*R*)

Xiao-Xin Shi,* Shi-Ling Liu, Wei Xu and Yu-Lan Xu

Tetrahedron: Asymmetry 19 (2008) 435



$C_{22}H_{19}N_2O_5Cl$

(1*R*,3*R*)-1-(3,4-Methylenedioxyphenyl)-2-chloroacetyl-2,3,4,9-tetrahydro-9*H*-pyrido[3,4-*b*]indole-3-carboxylic methyl ester

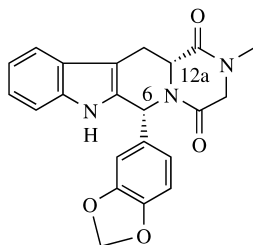
$[\alpha]_D^{20} = -126.0$ (*c* 1.1, $CHCl_3$)

Source of chirality: D-tryptophan

Absolute configuration: (1*R*,3*R*)

Xiao-Xin Shi,* Shi-Ling Liu, Wei Xu and Yu-Lan Xu

Tetrahedron: Asymmetry 19 (2008) 435



$C_{22}H_{19}N_3O_4$

(6*R*,12*aR*)-2,3,6,7,12,12*a*-Hexahydro-2-methyl-6-(3,4-methylenedioxyphenyl)-pyrazino-[2',1':6,1]pyrido[3,4-*b*]indole-1,4-dione

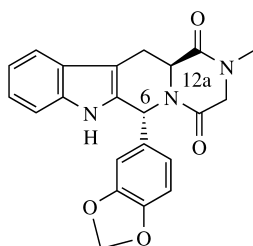
$[\alpha]_D^{20} = +71.5$ (*c* 1.0, $CHCl_3$)

Source of chirality: D-tryptophan

Absolute configuration: (6*R*,12*aR*)

Xiao-Xin Shi,* Shi-Ling Liu, Wei Xu and Yu-Lan Xu

Tetrahedron: Asymmetry 19 (2008) 435



$C_{22}H_{19}N_3O_4$

(6*R*,12*aS*)-2,3,6,7,12,12*a*-Hexahydro-2-methyl-6-(3,4-methylenedioxyphenyl)-pyrazino-[2',1':6,1]pyrido[3,4-*b*]indole-1,4-dione

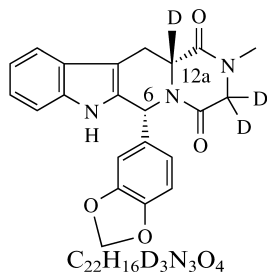
$[\alpha]_D^{20} = -303.1$ (*c* 1.2, $CHCl_3$)

Source of chirality: D-tryptophan

Absolute configuration: (6*R*,12*aS*)

Xiao-Xin Shi,* Shi-Ling Liu, Wei Xu and Yu-Lan Xu

Tetrahedron: Asymmetry 19 (2008) 435



(6*R*,12*aR*)-2,3,6,7,12,12*a*-Hexahydro-2-methyl-6-(3,4-methylenedioxyphenyl)-3,3,12*a*-trideutero-pyrazino-[2',1':6,1]pyrido[3,4-*b*]-indole-1,4-dione

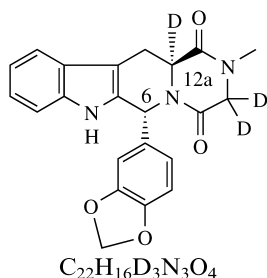
$[\alpha]_D^{20} = +87.1$ (*c* 1.0, $CHCl_3$)

Source of chirality: D-tryptophan

Absolute configuration: (6*R*,12*aR*)

Xiao-Xin Shi,* Shi-Ling Liu, Wei Xu and Yu-Lan Xu

Tetrahedron: Asymmetry 19 (2008) 435



(6*R*,12*aS*)-2,3,6,7,12,12*a*-Hexahydro-2-methyl-6-(3,4-methylenedioxyphenyl)-3,3,12*a*-trideutero-pyrazino-[2',1':6,1]pyrido[3,4-*b*]-indole-1,4-dione

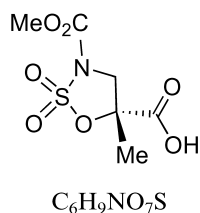
$[\alpha]_D^{20} = -268.0$ (*c* 1.2, $CHCl_3$)

Source of chirality: D-tryptophan

Absolute configuration: (6*R*,12*aS*)

Gonzalo Jiménez-Osés, Alberto Avenoza, Jesús H. Busto* and Jesús M. Peregrina*

Tetrahedron: Asymmetry 19 (2008) 443



Methyl 5-hydroxycarbonyl-5-methyl-2,2-dioxo-2λ⁶-[1,2,3]oxathiazolidine-3-carboxylate

Ee > 93%

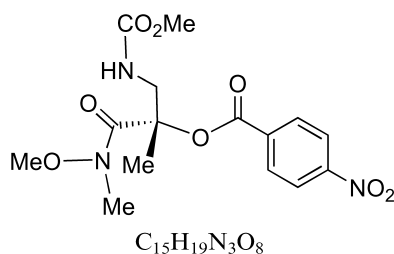
$[\alpha]_D^{25} = -4.3$ (*c* 1.30, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Gonzalo Jiménez-Osés, Alberto Avenoza, Jesús H. Busto* and Jesús M. Peregrina*

Tetrahedron: Asymmetry 19 (2008) 443



2-Methoxycarbonylaminoethyl-2-(*p*-nitrobenzoyloxy)-*N*-methoxy-*N*-methylpropanamide

Ee > 93%

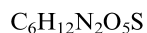
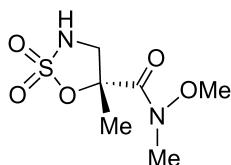
$[\alpha]_D^{25} = -11.8$ (*c* 0.94, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)

Gonzalo Jiménez-Osés, Alberto Avenoza, Jesús H. Busto* and
Jesús M. Peregrina*

Tetrahedron: Asymmetry 19 (2008) 443



5-Methyl-5-(*N*-methoxy-*N*-methylcarbamoyl)-2,2-dioxo-2λ⁶-[1,2,3]oxathiazolidine

Ee > 93%

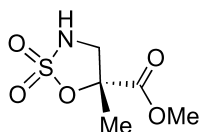
$[\alpha]_D^{25} = -46.3$ (c 1.04, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Gonzalo Jiménez-Osés, Alberto Avenoza, Jesús H. Busto* and
Jesús M. Peregrina*

Tetrahedron: Asymmetry 19 (2008) 443



Methyl 5-methyl-2,2-dioxo-2λ⁶-[1,2,3]oxathiazolidine-5-carboxylate

Ee > 93%

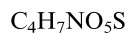
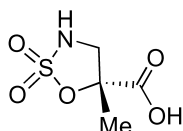
$[\alpha]_D^{25} = -24.4$ (c 1.30, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Gonzalo Jiménez-Osés, Alberto Avenoza, Jesús H. Busto* and
Jesús M. Peregrina*

Tetrahedron: Asymmetry 19 (2008) 443



5-Methyl-2,2-dioxo-2λ⁶-[1,2,3]oxathiazolidine-5-carboxylic acid

Ee > 93%

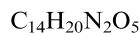
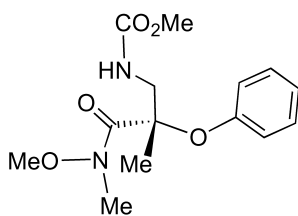
$[\alpha]_D^{25} = -8.0$ (c 0.99, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Gonzalo Jiménez-Osés, Alberto Avenoza, Jesús H. Busto* and
Jesús M. Peregrina*

Tetrahedron: Asymmetry 19 (2008) 443



2-Methoxycarbonylaminoethyl-2-phenyloxy-*N*-methoxy-*N*-methylpropanamide

Ee > 93%

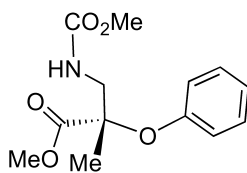
$[\alpha]_D^{25} = -42.8$ (c 1.03, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)

Gonzalo Jiménez-Osés, Alberto Avenoza, Jesús H. Busto* and
Jesús M. Peregrina*

Tetrahedron: Asymmetry 19 (2008) 443



$C_{13}H_{17}NO_5$

Methyl 2-methoxycarbonylamino-2-phenyloxypropanoate

Ee > 93%

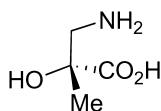
$[\alpha]_D^{25} = -6.9$ (c 1.88, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (S)

Gonzalo Jiménez-Osés, Alberto Avenoza, Jesús H. Busto* and
Jesús M. Peregrina*

Tetrahedron: Asymmetry 19 (2008) 443



$C_4H_9NO_3$

2-Aminomethyl-2-hydroxypropanoic acid or α -Methylisoserine

Ee > 93%

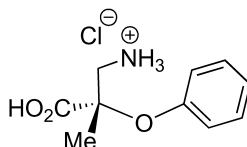
$[\alpha]_D^{25} = -2.6$ (c 1.01, H_2O)

Source of chirality: asymmetric synthesis

Absolute configuration: (R)

Gonzalo Jiménez-Osés, Alberto Avenoza, Jesús H. Busto* and
Jesús M. Peregrina*

Tetrahedron: Asymmetry 19 (2008) 443



$C_{10}H_{14}ClNO_3$

2-Aminomethyl-2-phenyloxypropanoic acid hydrochloride or *O*-Phenyl- α -methylisoserine

Ee > 93%

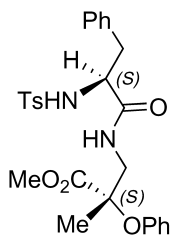
$[\alpha]_D^{25} = -16.8$ (c 1.38, H_2O)

Source of chirality: asymmetric synthesis

Absolute configuration: (S)

Gonzalo Jiménez-Osés, Alberto Avenoza, Jesús H. Busto* and
Jesús M. Peregrina*

Tetrahedron: Asymmetry 19 (2008) 443



$C_{27}H_{30}N_2O_6S$

N-(Tosyl)phenylalaninyl-*O*-phenyl- α -methylisoserine methyl ester

Ee > 93%

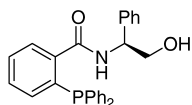
$[\alpha]_D^{25} = -35.8$ (c 1.38, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (S,S)

Vanda Raquel Marinho, Ana Isabel Rodrigues and Anthony J. Burke*

Tetrahedron: Asymmetry 19 (2008) 454



$C_{27}H_{24}NO_2P$

(*S*)-*N*-(2-Hydroxy-1-phenylethyl)-2-(diphenylphosphino)benzamide **5a**

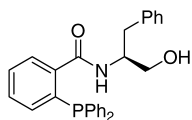
$[\alpha]_D^{21} = +22.4$ (*c* 0.41, $CHCl_3$)

Source of chirality: (*S*)-phenylglycine

Absolute configuration: (*S*)

Vanda Raquel Marinho, Ana Isabel Rodrigues and Anthony J. Burke*

Tetrahedron: Asymmetry 19 (2008) 454



$C_{28}H_{26}NO_2P$

(*S*)-*N*-(1-Benzyl-2-hydroxyethyl)-2-(diphenylphosphino)benzamide **5b**

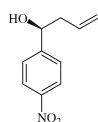
$[\alpha]_D^{23} = -39$ (*c* 0.55, $CHCl_3$)

Source of chirality: (*S*)-phenylalanine

Absolute configuration: (*S*)

Yuri N. Belokon,* Denis Chusov, Dmitry A. Borkin, Lidia V. Yashkina, Pavel Bolotov, Tatiana Skrupskaya and Michael North

Tetrahedron: Asymmetry 19 (2008) 459



$C_{10}H_{11}NO_3$

(*S*)-1-(4-Nitrophenyl)but-3-en-1-ol

Ee = 74.0%

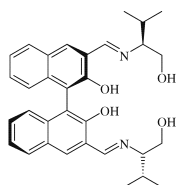
$[\alpha]_D^{25} = -35.7$ (*c* 0.5, $CHCl_3$)

Source of chirality: 3,3'-[[(*S*)-1-hydroxymethyl-2-methylpropyl]imino]methyl-2,2'-dihydroxy-(*S*)-1,1'-binaphthalene

Absolute configuration: (*S*)

Yuri N. Belokon,* Denis Chusov, Dmitry A. Borkin, Lidia V. Yashkina, Pavel Bolotov, Tatiana Skrupskaya and Michael North

Tetrahedron: Asymmetry 19 (2008) 459



$C_{32}H_{36}N_2O_4$

3,3'-[[(*S*)-1-Hydroxymethyl-2-methylpropyl]imino]methyl-2,2'-dihydroxy-(*R*)-1,1'-binaphthalene

Ee > 99.9%

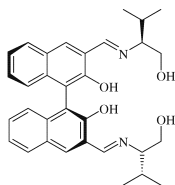
$[\alpha]_D^{25} = -139.8$ (*c* 1, $CHCl_3$)

Source of chirality: synthesis from (*S*)-valine and (*R*)-binol

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

Yuri N. Belokon,* Denis Chusov, Dmitry A. Borkin, Lidia V. Yashkina,
Pavel Bolotov, Tatiana Skrupskaya and Michael North

Tetrahedron: Asymmetry 19 (2008) 459



$C_{32}H_{36}N_2O_4$

3,3'-[((S)-1-Hydroxymethyl-2-methylpropyl)imino]methyl-2,2'-dihydroxy-(S)-1,1'-binaphthalene

Ee > 99.9%

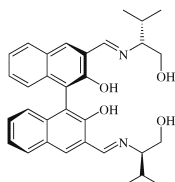
$[\alpha]_D^{25} = -163$ (c 1, $CHCl_3$)

Source of chirality: synthesis from (S)-valine and (S)-binol

Absolute configuration: (S,S,^aS)

Yuri N. Belokon,* Denis Chusov, Dmitry A. Borkin, Lidia V. Yashkina,
Pavel Bolotov, Tatiana Skrupskaya and Michael North

Tetrahedron: Asymmetry 19 (2008) 459



$C_{32}H_{36}N_2O_4$

3,3'-[((R)-1-Hydroxymethyl-2-methylpropyl)imino]methyl-2,2'-dihydroxy-(R)-1,1'-binaphthalene

Ee > 99.9%

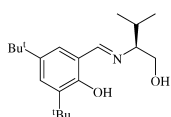
$[\alpha]_D^{25} = +163$ (c 1, $CHCl_3$)

Source of chirality: synthesis from (R)-valine and (R)-binol

Absolute configuration: (R,R,^aR)

Yuri N. Belokon,* Denis Chusov, Dmitry A. Borkin, Lidia V. Yashkina,
Pavel Bolotov, Tatiana Skrupskaya and Michael North

Tetrahedron: Asymmetry 19 (2008) 459



$C_{20}H_{33}NO_2$

N-(2-Hydroxy-3,5-di-*tert*-butyl-benzylidene)-(S)-2-amino-3-methylbutan-1-ol

Ee > 99.9%

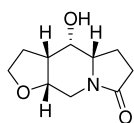
$[\alpha]_D^{25} = -33.3$ (c 0.78, MeOH)

Source of chirality: synthesis from (S)-valine

Absolute configuration: (S)

Peter Šafář, Jozefína Žúžiová, Mária Bobošíková, Štefan Marchalín,
Nadežda Prónayová, Vincent Dalla and Adam Daich*

Tetrahedron: Asymmetry 19 (2008) 467



$C_{10}H_{15}NO_3$

(3aR,4S,4aS,9aR)-4-Hydroxyoctahydrofuro[2,3-f]indolizin-7(2H)-one

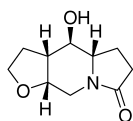
$[\alpha]_D = -0.6$ (c 1.0, EtOH)

Absolute configuration: (3aR,4S,4aS,9aR)

Source of chirality: (S)-glutamic acid

Peter Šafář, Jozefína Žúžiová, Mária Bobošíková, Štefan Marchalín,
Nadežda Prónayová, Vincent Dalla and Adam Daich*

Tetrahedron: Asymmetry 19 (2008) 467



$C_{10}H_{15}NO_3$

(3aR,4R,4aS,9aR)-4-Hydroxyoctahydrofuro[2,3-f]indolizin-7(2H)-one

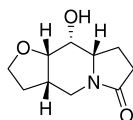
$[\alpha]_D = -44.8$ (*c* 1.0, EtOH)

Absolute configuration: (3aR,4R,4aS,9aR)

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

Peter Šafář, Jozefína Žúžiová, Mária Bobošíková, Štefan Marchalín,
Nadežda Prónayová, Vincent Dalla and Adam Daich*

Tetrahedron: Asymmetry 19 (2008) 467



$C_{10}H_{15}NO_3$

(3aS,8aS,9R,9aS)-9-Hydroxyoctahydrofuro[3,2-f]indolizin-6(2H)-one

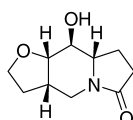
$[\alpha]_D = -31.8$ (*c* 1.0, EtOH)

Absolute configuration: (3aS,8aS,9R,9aS)

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

Peter Šafář, Jozefína Žúžiová, Mária Bobošíková, Štefan Marchalín,
Nadežda Prónayová, Vincent Dalla and Adam Daich*

Tetrahedron: Asymmetry 19 (2008) 467



$C_{10}H_{15}NO_3$

(3aS,8aS,9S,9aS)-9-Hydroxyoctahydro[3,2-f]-indolizin-6(2H)-one

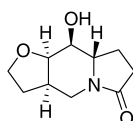
$[\alpha]_D = -35.6$ (*c* 1.0, EtOH)

Absolute configuration: (3aS,8aS,9S,9aS)

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

Peter Šafář, Jozefína Žúžiová, Mária Bobošíková, Štefan Marchalín,
Nadežda Prónayová, Vincent Dalla and Adam Daich*

Tetrahedron: Asymmetry 19 (2008) 467



$C_{10}H_{15}NO_3$

(3aR,8aS,9S,9aR)-9-Hydroxyoctahydro[3,2-f]-indolizin-6(2H)-one

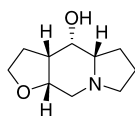
$[\alpha]_D = -17.8$ (*c* 1.0, EtOH)

Absolute configuration: (3aR,8aS,9S,9aR)

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

Peter Šafář, Jozefína Žúžiová, Mária Bobošíková, Štefan Marchalín,
Nadežda Prónayová, Vincent Dalla and Adam Daich*

Tetrahedron: Asymmetry 19 (2008) 467



$C_{10}H_{17}NO_2$

(3aR,4S,4aS,9aR)-4-Hydroxyoctahydrofuro[2,3-f]-indolizine

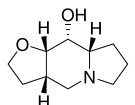
$[\alpha]_D = +181$ (*c* 1.0, MeOH)

Absolute configuration: (3aR,4S,4aS,9aR)

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

Peter Šafář, Jozefína Žúžiová, Mária Bobošíková, Štefan Marchalín,
Nadežda Prónayová, Vincent Dalla and Adam Daich*

Tetrahedron: Asymmetry 19 (2008) 467



$C_{10}H_{17}NO_2$

(3aS,8aS,9R,9aS)-9-Hydroxyoctahydrofuro[2,3-f]-indolizine

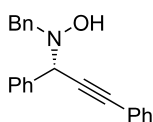
$[\alpha]_D = +34.0$ (*c* 1.0, EtOH)

Absolute configuration: (3aS,8aS,9R,9aS)

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

Weilin Wei, Yoshihira Hamamoto, Yutaka Ukaji* and
Katsuhiko Inomata*

Tetrahedron: Asymmetry 19 (2008) 476



$C_{22}H_{19}NO$

(*S*)-*N*-Benzyl-*N*-(1,3-diphenylprop-2-ynyl)hydroxylamine

Ee = 92%

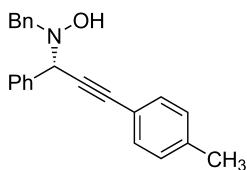
$[\alpha]_D^{25} = -42$ (*c* 1.23, EtOH)

Source of chirality: (*R,R*)-DTBT

Absolute configuration: (*S*)

Weilin Wei, Yoshihira Hamamoto, Yutaka Ukaji* and
Katsuhiko Inomata*

Tetrahedron: Asymmetry 19 (2008) 476



$C_{23}H_{21}NO$

(*S*)-*N*-Benzyl-*N*-(1-phenyl-3-*p*-tolylprop-2-ynyl)hydroxylamine

Ee = 87%

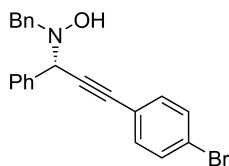
$[\alpha]_D^{25} = -45$ (*c* 1.23, EtOH)

Source of chirality: (*R,R*)-DTBT

Absolute configuration: (*S*)

Weilin Wei, Yoshihira Hamamoto, Yutaka Ukaji* and Katsuhiko Inomata*

Tetrahedron: Asymmetry 19 (2008) 476



$C_{22}H_{18}NOBr$

(*S*)-*N*-Benzyl-*N*-[3-(4-bromophenyl)-1-phenylprop-2-ynyl]hydroxylamine

Ee = 90%

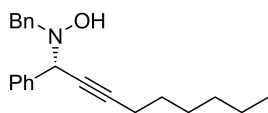
$[\alpha]_D^{25} = -69$ (*c* 0.50, EtOH)

Source of chirality: (*R,R*)-DTBT

Absolute configuration: (*S*)

Weilin Wei, Yoshihira Hamamoto, Yutaka Ukaji* and Katsuhiko Inomata*

Tetrahedron: Asymmetry 19 (2008) 476



$C_{22}H_{27}NO$

(*S*)-*N*-Benzyl-*N*-(1-phenylnon-2-ynyl)hydroxylamine

Ee = 87%

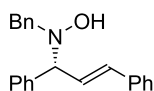
$[\alpha]_D^{25} = -43$ (*c* 1.14, EtOH)

Source of chirality: (*R,R*)-DTBT

Absolute configuration: (*S*)

Weilin Wei, Yoshihira Hamamoto, Yutaka Ukaji* and Katsuhiko Inomata*

Tetrahedron: Asymmetry 19 (2008) 476



$C_{22}H_{21}NO$

(*R,E*)-*N*-Benzyl-*N*-(1,3-diphenylallyl)hydroxylamine

Ee = 49%

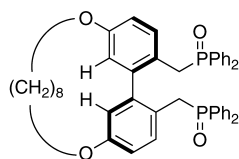
$[\alpha]_D^{25} = +7$ (*c* 0.73, EtOH)

Source of chirality: (*R,R*)-DTBT

Absolute configuration: (*R*)

Hao Wei, Yong Jian Zhang, Feijun Wang and Wanbin Zhang*

Tetrahedron: Asymmetry 19 (2008) 482



$C_{46}H_{46}O_4P_2$

(*R*)-(-)-2,2'-Bis(diphenylphosphinomethyl)-5,5'-(octamethylenedioxy)-1,1'-biphenyl dioxide

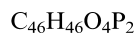
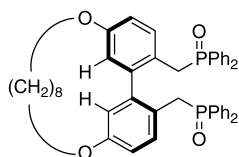
$[\alpha]_D^{25} = -34.1$ (*c* 1, $CHCl_3$)

Source of chirality: resolution by chiral preparative HPLC

Absolute configuration: (*R*)

Hao Wei, Yong Jian Zhang, Feijun Wang and Wanbin Zhang*

Tetrahedron: Asymmetry 19 (2008) 482



(*S*)-(+)-2,2'-Bis(diphenylphosphinomethyl)-5,5'-(octamethylenedioxy)-1,1'-biphenyl dioxide

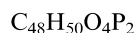
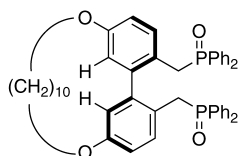
$[\alpha]_D^{25} = +33.8$ (*c* 1, $CHCl_3$)

Source of chirality: resolution by chiral preparative HPLC

Absolute configuration: (*S*)

Hao Wei, Yong Jian Zhang, Feijun Wang and Wanbin Zhang*

Tetrahedron: Asymmetry 19 (2008) 482



(*R*)-(-)-2,2'-Bis(diphenylphosphinomethyl)-5,5'-(decamethylenedioxy)-1,1'-biphenyl dioxide

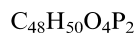
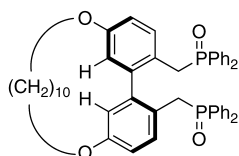
$[\alpha]_D^{25} = -37.5$ (*c* 1.1, $CHCl_3$)

Source of chirality: resolution by chiral preparative HPLC

Absolute configuration: (*R*)

Hao Wei, Yong Jian Zhang, Feijun Wang and Wanbin Zhang*

Tetrahedron: Asymmetry 19 (2008) 482



(*S*)-(+)-2,2'-Bis(diphenylphosphinomethyl)-5,5'-(decamethylenedioxy)-1,1'-biphenyl dioxide

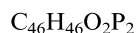
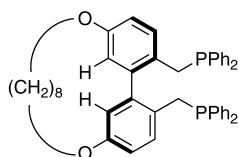
$[\alpha]_D^{25} = +36.8$ (*c* 1.1, $CHCl_3$)

Source of chirality: optical resolution by chiral preparative HPLC

Absolute configuration: (*S*)

Hao Wei, Yong Jian Zhang, Feijun Wang and Wanbin Zhang*

Tetrahedron: Asymmetry 19 (2008) 482



(*R*)-(-)-2,2'-Bis(diphenylphosphinomethyl)-5,5'-(octamethylenedioxy)-1,1'-biphenyl

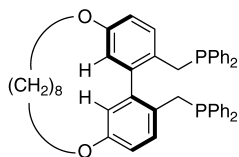
$[\alpha]_D^{25} = -28.6$ (*c* 1, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Hao Wei, Yong Jian Zhang, Feijun Wang and Wanbin Zhang*

Tetrahedron: Asymmetry 19 (2008) 482



$C_{46}H_{46}O_2P_2$

(S)-(+)-2,2'-Bis(diphenylphosphinomethyl)-5,5'-(octamethylenedioxy)-1,1'-biphenyl

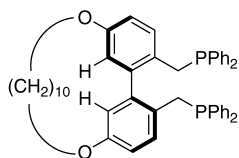
$[\alpha]_D^{25} = +29.8$ (*c* 1, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (S)

Hao Wei, Yong Jian Zhang, Feijun Wang and Wanbin Zhang*

Tetrahedron: Asymmetry 19 (2008) 482



$C_{48}H_{50}O_2P_2$

(S)-(+)-2,2'-Bis(diphenylphosphinomethyl)-5,5'-(decamethylenedioxy)-1,1'-biphenyl

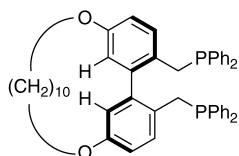
$[\alpha]_D^{25} = +32.8$ (*c* 1, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (S)

Hao Wei, Yong Jian Zhang, Feijun Wang and Wanbin Zhang*

Tetrahedron: Asymmetry 19 (2008) 482



$C_{48}H_{50}O_2P_2$

(R)-(-)-2,2'-Bis(diphenylphosphinomethyl)-5,5'-(decamethylenedioxy)-1,1'-biphenyl

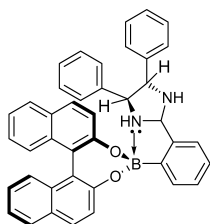
$[\alpha]_D^{25} = -31.5$ (*c* 1.1, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (R)

Andrew M. Kelly, Steven D. Bull* and Tony D. James*

Tetrahedron: Asymmetry 19 (2008) 489



$C_{41}H_{31}BN_2O_2$

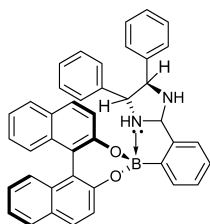
(4S,5S)-2-(2-((R)-Naphtho[2,1,9,14-*def*][1,3,2]dioxaborepin-4-yl)phenyl)-4,5-diphenylimidazolidine

$[\alpha]_D^{20} = -302$ (*c* 1.2, CH_2Cl_2)

Absolute configuration: (4S,5S,R)

Andrew M. Kelly, Steven D. Bull* and Tony D. James*

Tetrahedron: Asymmetry 19 (2008) 489



$C_{41}H_{31}BN_2O_2$

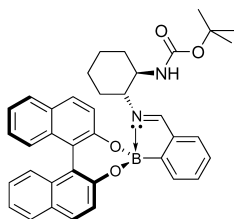
(4*R*,5*R*)-2-(2-((*R*)-Naphtho[2,1,9,14-*def*][1,3,2]dioxaborepin-4-yl)phenyl)-4,5-diphenylimidazolidine

$[\alpha]_D^{20} = +314$ (*c* 1.7, CH₂Cl₂)

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

Andrew M. Kelly, Steven D. Bull* and Tony D. James*

Tetrahedron: Asymmetry 19 (2008) 489



$C_{38}H_{37}BN_2O_4$

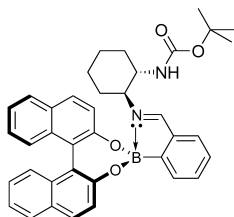
tert-Butyl (*E*,1*R*,2*R*)-2-((2-((*S*)-naphtho[15,10,1,2-*def*][1,3,2]dioxaborepin-4-yl)phenyl)methyleneamino)cyclohexylcarbamate

$[\alpha]_D^{20} = -429$ (*c* 1.1, CH₂Cl₂)

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

Andrew M. Kelly, Steven D. Bull* and Tony D. James*

Tetrahedron: Asymmetry 19 (2008) 489



$C_{38}H_{37}BN_2O_4$

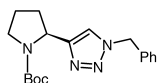
tert-Butyl (*E*,1*S*,2*S*)-2-((2-((*S*)-naphtho[15,10,1,2-*def*][1,3,2]dioxaborepin-4-yl)phenyl)methyleneamino)cyclohexylcarbamate

$[\alpha]_D^{20} = +414$ (*c* 2.0, CH₂Cl₂)

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

S. Chandrasekhar,* Bhoopendra Tiwari, Bibhuti B. Parida and Ch. Raji Reddy

Tetrahedron: Asymmetry 19 (2008) 495



$C_{18}H_{24}N_4O_2$

(*S*)-*tert*-Butyl 2-(1-benzyl-1*H*-1,2,3-triazol-4-yl)pyrrolidine-1-carboxylate

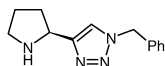
$[\alpha]_D^{25} = -42.7$ (*c* 0.8, CHCl₃)

Source of chirality: L-proline

Absolute configuration: (2*S*)

S. Chandrasekhar,* Bhoopendra Tiwari, Bibhuti B. Parida and Ch. Raji Reddy

Tetrahedron: Asymmetry 19 (2008) 495



(S)-1-Benzyl-4-(pyrrolidin-2-yl)-1H-1,2,3-triazole

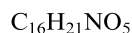
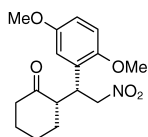
$$[\alpha]_D^{25} = -15.0 \text{ (c 1.0, CHCl}_3\text{)}$$

Source of chirality: L-proline

Absolute configuration: (2S)

S. Chandrasekhar,* Bhoopendra Tiwari, Bibhuti B. Parida and Ch. Raji Reddy

Tetrahedron: Asymmetry 19 (2008) 495



(S)-2-((R)-1-(2,5-Dimethoxyphenyl)-2-nitroethyl) cyclohexanone

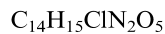
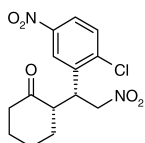
$$[\alpha]_D^{25} = -25.1 \text{ (c 0.6, CHCl}_3\text{)}$$

Source of chirality: Michael reaction

Absolute configuration: (2S,3R)

S. Chandrasekhar,* Bhoopendra Tiwari, Bibhuti B. Parida and Ch. Raji Reddy

Tetrahedron: Asymmetry 19 (2008) 495



(S)-2-((R)-1-(2-Chloro-5-nitrophenyl)-2-nitroethyl) cyclohexanone

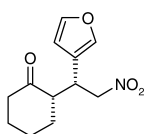
$$[\alpha]_D^{25} = -8.0 \text{ (c 0.45, CHCl}_3\text{)}$$

Source of chirality: Michael reaction

Absolute configuration: (2S,3R)

S. Chandrasekhar,* Bhoopendra Tiwari, Bibhuti B. Parida and Ch. Raji Reddy

Tetrahedron: Asymmetry 19 (2008) 495



(S)-2-((R)-1-(Furan-3-yl)-2-nitroethyl) cyclohexanone

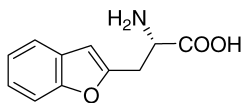
$$[\alpha]_D^{25} = -12.5 \text{ (c 0.75, CHCl}_3\text{)}$$

Source of chirality: Michael reaction

Absolute configuration: (2S,3R)

Paula Veronica Podea, Monica Ioana Toşa,
Csaba Paizs and Florin Dan Irimie*

Tetrahedron: Asymmetry 19 (2008) 500



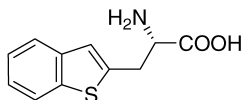
$C_{11}H_{11}NO_3$

L-2-Amino-3-(benzofuran-2-yl)propanoic acid

Ee >99% on Chirobiotic-Tag HPLC column
 $[\alpha]_D^{20} = -14.5$ (c 1, CH₃COOH)

Paula Veronica Podea, Monica Ioana Toşa,
Csaba Paizs and Florin Dan Irimie*

Tetrahedron: Asymmetry 19 (2008) 500



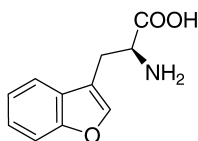
$C_{11}H_{11}NO_2S$

L-2-Amino-3-(benzo[b]thiophen-2-yl)propanoic acid

Ee >99% on Chirobiotic-Tag HPLC column
 $[\alpha]_D^{20} = -23.8$ (c 1, CH₃COOH)

Paula Veronica Podea, Monica Ioana Toşa,
Csaba Paizs and Florin Dan Irimie*

Tetrahedron: Asymmetry 19 (2008) 500



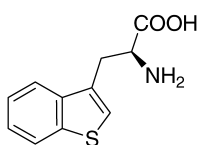
$C_{11}H_{11}NO_3$

L-2-Amino-3-(benzofuran-3-yl)propanoic acid

Ee >99% on Chirobiotic-Tag HPLC column
 $[\alpha]_D^{20} = -8.0$ (c 1, CH₃COOH)

Paula Veronica Podea, Monica Ioana Toşa,
Csaba Paizs and Florin Dan Irimie*

Tetrahedron: Asymmetry 19 (2008) 500



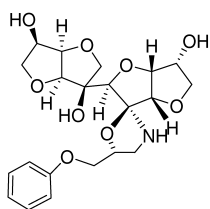
$C_{11}H_{11}NO_2S$

L-2-Amino-3-(benzo[b]thiophene-3-yl)propanoic acid

Ee >99% on Chirobiotic-Tag HPLC column
 $[\alpha]_D^{20} = -26.0$ (c 1, CH₃COOH)

Jing-Yu Zhang, Hong-Min Liu,* Hai-Wei Xu and Li-Hong Shan

Tetrahedron: Asymmetry 19 (2008) 512



$C_{21}H_{27}NO_9$

(2*R*,3*R*,3*aS*,6*R*,6*aR*,3'*R*,3'*aS*,6'*R*,6'*aR*,5''*R*)-Spiro-[6,3',6'-trihydroxy-octahydro[2,3']bi[furo[3,2-*b*]furan]-3,2''-[5''-phenoxymethyl-1'',3''-oxazolidine]

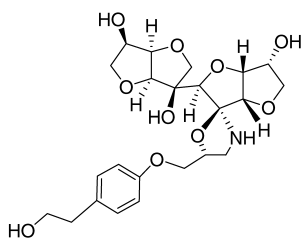
$[\alpha]_D^{20} = +58.0$ (*c* 1.00, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (5''*R*)

Jing-Yu Zhang, Hong-Min Liu,* Hai-Wei Xu and Li-Hong Shan

Tetrahedron: Asymmetry 19 (2008) 512



$C_{23}H_{31}NO_{10}$

(2*R*,3*R*,3*aS*,6*R*,6*aR*,3'*R*,3'*aS*,6'*R*,6'*aR*,5''*R*)-Spiro-[6,3',6'-trihydroxy-octahydro[2,3']bi[furo[3,2-*b*]furan]-3,2''-[5''-[4'''-[2'''-hydroxyethyl]]phenoxymethyl-1'',3''-oxazolidine]

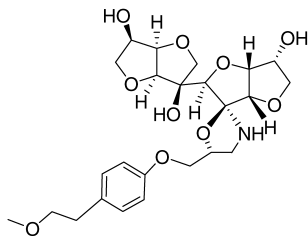
$[\alpha]_D^{20} = +67.3$ (*c* 1.00, CH_3OH)

Source of chirality: asymmetric synthesis

Absolute configuration: (5''*R*)

Jing-Yu Zhang, Hong-Min Liu,* Hai-Wei Xu and Li-Hong Shan

Tetrahedron: Asymmetry 19 (2008) 512



$C_{24}H_{33}NO_{10}$

(2*R*,3*R*,3*aS*,6*R*,6*aR*,3'*R*,3'*aS*,6'*R*,6'*aR*,5''*R*)-Spiro-[6,3',6'-trihydroxy-octahydro[2,3']bi[furo[3,2-*b*]furan]-3,2''-[5''-[4'''-[2'''-methoxyethyl]]phenoxymethyl-1'',3''-oxazolidine]

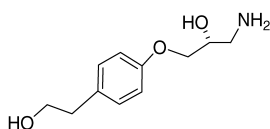
$[\alpha]_D^{20} = +25.6$ (*c* 1.00, CH_3OH)

Source of chirality: asymmetric synthesis

Absolute configuration: (5''*R*)

Jing-Yu Zhang, Hong-Min Liu,* Hai-Wei Xu and Li-Hong Shan

Tetrahedron: Asymmetry 19 (2008) 512



$C_{11}H_{17}NO_3$

(*R*)-1-Amino-3-[4-[2-hydroxyethyl]phenoxy]propan-2-ol

$[\alpha]_D^{20} = +4.0$ (*c* 1.00, CH_3OH)

Source of chirality: kinetic resolution

Absolute configuration: (2*R*)