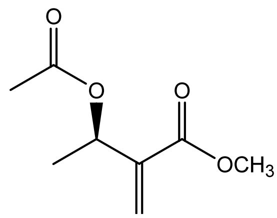
Maria da Graça Nascimento,* Sandra P. Zanotto, Sílvia P. Melegari, Luciano Fernandes and Marcus Mandolesi Sá

Tetrahedron: Asymmetry *14 (2003) 3111*



$C_8H_{12}O_4$

Methyl (*R*)-3-acetoxy-2-methylenebutanoate

E.e. >99%

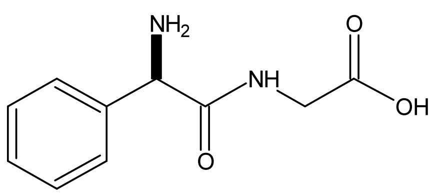
$[\alpha]_D^{25}=+18.0$ (*c* 5.0, $CHCl_3$)

Source of chirality: lipase-catalyzed resolution

Absolute configuration: (*R*)

Andrei Y. Khimiuk, Alexei V. Korennykh, Luuk M. van Langen, Fred van Rantwijk, Roger A. Sheldon and Vytas K. Švedas*

Tetrahedron: Asymmetry *14 (2003) 3123*



$C_{10}H_{12}N_2O_3$

D-Phenylglycyl-glycine

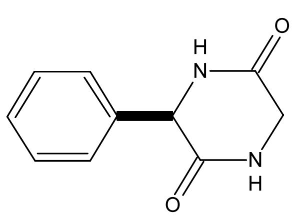
$[\alpha]_D^{20}=-123.2$ (*c* 1, 2.5 M HCl)

Source of chirality: starting materials and enzymatic reaction

Absolute configuration: *R*

Andrei Y. Khimiuk, Alexei V. Korennykh, Luuk M. van Langen, Fred van Rantwijk, Roger A. Sheldon and Vytas K. Švedas*

Tetrahedron: Asymmetry *14 (2003) 3123*



$C_{10}H_{10}N_2O_2$

(*R*)-3-Phenylpiperazine-2,5-dione

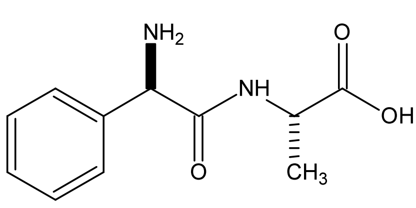
$[\alpha]_D^{20}=-74.2$ (*c* 1, DMSO)

Source of chirality: starting materials and enzymatic reaction

Absolute configuration: *R*

Andrei Y. Khimiuk, Alexei V. Korennykh, Luuk M. van Langen, Fred van Rantwijk, Roger A. Sheldon and Vytas K. Švedas*

Tetrahedron: Asymmetry *14 (2003) 3123*



$C_{11}H_{14}N_2O_3$

D-Phenylglycyl-L-alanine

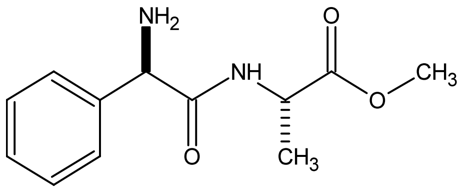
$[\alpha]_D^{20}=-119.8$ (*c* 1, 2.5 M HCl)

Source of chirality: starting materials and enzymatic reaction

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

Andrei Y. Khimiuk, Alexei V. Korennykh, Luuk M. van Langen, Fred van Rantwijk, Roger A. Sheldon and Vytas K. Švedas*

Tetrahedron: Asymmetry *14 (2003) 3123*



$C_{12}H_{16}N_2O_3$

D-Phenylglycyl-L-alanine methyl ester

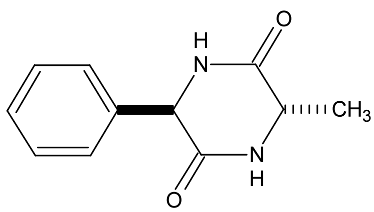
$[\alpha]_D^{20}$ = −118.4 (*c* 1, EtOH)

Source of chirality: starting materials and enzymatic reaction

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

Andrei Y. Khimiuk, Alexei V. Korennykh, Luuk M. van Langen, Fred van Rantwijk, Roger A. Sheldon and Vytas K. Švedas*

Tetrahedron: Asymmetry *14 (2003) 3123*



$C_{11}H_{12}N_2O_2$

(3*S*,6*R*)-3-Methyl-6-phenylpiperazine-2,5-dione

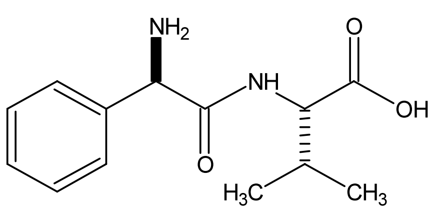
$[\alpha]_D^{20}$ = −57.2 (*c* 1, DMSO)

Source of chirality: starting materials and enzymatic reaction

Absolute configuration: (3*S*,6*R*)

Andrei Y. Khimiuk, Alexei V. Korennykh, Luuk M. van Langen, Fred van Rantwijk, Roger A. Sheldon and Vytas K. Švedas*

Tetrahedron: Asymmetry *14 (2003) 3123*



$C_{13}H_{18}N_2O_3$

D-Phenylglycyl-L-valine

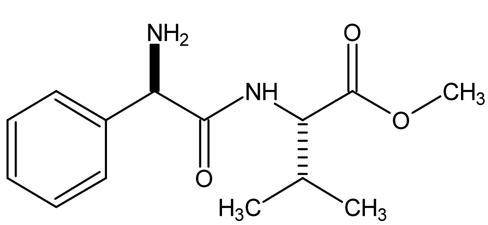
$[\alpha]_D^{20}$ = −75.6 (*c* 1, 2.5 M HCl)

Source of chirality: starting materials and enzymatic reaction

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

Andrei Y. Khimiuk, Alexei V. Korennykh, Luuk M. van Langen, Fred van Rantwijk, Roger A. Sheldon and Vytas K. Švedas*

Tetrahedron: Asymmetry *14 (2003) 3123*



$C_{14}H_{20}N_2O_3$

D-Phenylglycyl-L-valine methyl ester

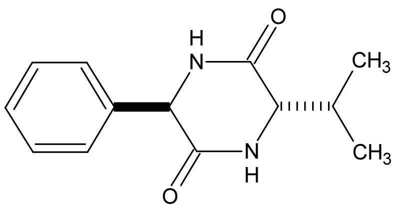
$[\alpha]_D^{20}$ = −77.0 (*c* 1, EtOH)

Source of chirality: starting materials and enzymatic reaction

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

Andrei Y. Khimiuk, Alexei V. Korennykh, Luuk M. van Langen, Fred van Rantwijk, Roger A. Sheldon and Vytas K. Švedas*

Tetrahedron: Asymmetry *14 (2003) 3123*



$C_{13}H_{16}N_2O_2$

(3*S*,6*R*)-3-Isopropyl-6-phenylpiperazine-2,5-dione

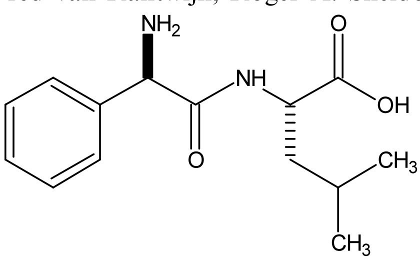
$[\alpha]_D^{20} = -61.4$ (*c* 1, DMSO)

Source of chirality: starting materials and enzymatic reaction

Absolute configuration: (3*S*,6*R*)

Andrei Y. Khimiuk, Alexei V. Korennykh, Luuk M. van Langen, Fred van Rantwijk, Roger A. Sheldon and Vytas K. Švedas*

Tetrahedron: Asymmetry *14 (2003) 3123*



$C_{14}H_{20}N_2O_3$

D-Phenylglycyl-L-leucine

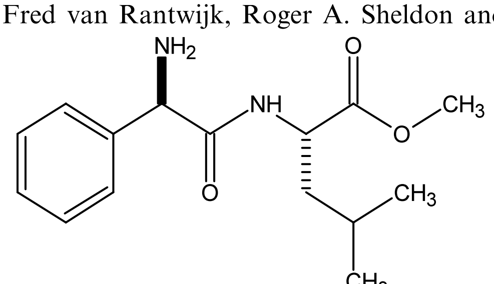
$[\alpha]_D^{20} = -95.2$ (*c* 1, 2.5 M HCl)

Source of chirality: starting materials and enzymatic reaction

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

Andrei Y. Khimiuk, Alexei V. Korennykh, Luuk M. van Langen, Fred van Rantwijk, Roger A. Sheldon and Vytas K. Švedas*

Tetrahedron: Asymmetry *14 (2003) 3123*



$C_{15}H_{22}N_2O_3$

D-Phenylglycyl-L-leucine methyl ester

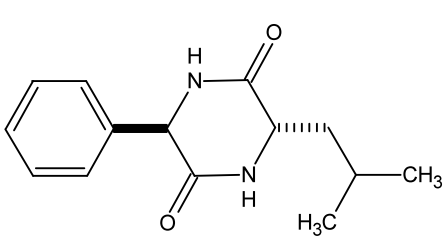
$[\alpha]_D^{20} = -94.0$ (*c* 1, EtOH)

Source of chirality: starting materials and enzymatic reaction

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

Andrei Y. Khimiuk, Alexei V. Korennykh, Luuk M. van Langen, Fred van Rantwijk, Roger A. Sheldon and Vytas K. Švedas*

Tetrahedron: Asymmetry *14 (2003) 3123*



$C_{14}H_{18}N_2O_2$

(3*S*,6*R*)-3-(2-Methylpropyl)-6-phenylpiperazine-2,5-dione

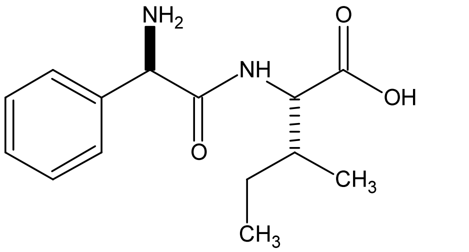
$[\alpha]_D^{20} = -47.0$ (*c* 1, DMSO)

Source of chirality: starting materials and enzymatic reaction

Absolute configuration: (3*S*,6*R*)

Andrei Y. Khimiuk, Alexei V. Korennykh, Luuk M. van Langen, Fred van Rantwijk, Roger A. Sheldon and Vytas K. Švedas*

Tetrahedron: Asymmetry *14 (2003) 3123*



$C_{14}H_{20}N_2O_3$

D-Phenylglycyl-L-isoleucine

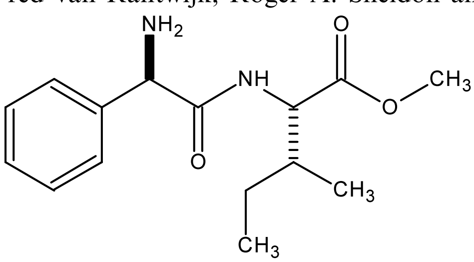
$[\alpha]_D^{20} = -68.8$ (*c* 0.5, 2.5 M HCl)

Source of chirality: starting materials and enzymatic reaction

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

Andrei Y. Khimiuk, Alexei V. Korennykh, Luuk M. van Langen, Fred van Rantwijk, Roger A. Sheldon and Vytas K. Švedas*

Tetrahedron: Asymmetry *14 (2003) 3123*



$C_{15}H_{22}N_2O_3$

D-Phenylglycyl-L-isoleucine methyl ester

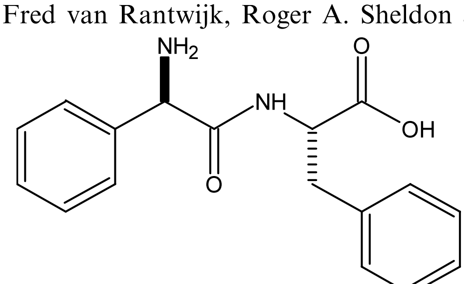
$[\alpha]_D^{20} = -76.8$ (*c* 1, EtOH)

Source of chirality: starting materials and enzymatic reaction

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

Andrei Y. Khimiuk, Alexei V. Korennykh, Luuk M. van Langen, Fred van Rantwijk, Roger A. Sheldon and Vytas K. Švedas*

Tetrahedron: Asymmetry *14 (2003) 3123*



$C_{17}H_{18}N_2O_3$

D-Phenylglycyl-L-phenylalanine

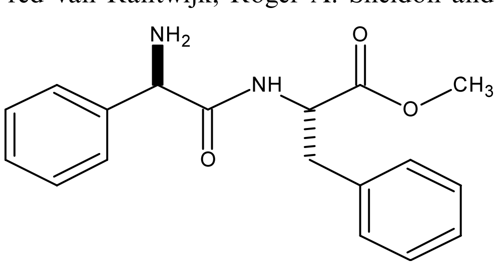
$[\alpha]_D^{20} = -25.4$ (*c* 1, 2.5 M HCl)

Source of chirality: starting materials and enzymatic reaction

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

Andrei Y. Khimiuk, Alexei V. Korennykh, Luuk M. van Langen, Fred van Rantwijk, Roger A. Sheldon and Vytas K. Švedas*

Tetrahedron: Asymmetry *14 (2003) 3123*



$C_{18}H_{20}N_2O_3$

D-Phenylglycyl-L-phenylalanine methyl ester

$[\alpha]_D^{20} = -40.2$ (*c* 1, EtOH)

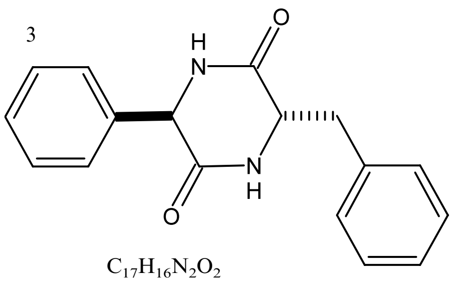
Source of chirality: starting materials and enzymatic reaction

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

Andrei Y. Khimiuk, Alexei V. Korennykh, Luuk M. van Langen, Fred van Rantwijk, Roger A. Sheldon and Vytas K. Švedas*

Tetrahedron: Asymmetry *14 (2003) 3123*

3



$C_{17}H_{16}N_2O_2$

(3*R*,6*S*)-3-Phenyl-6-(phenylmethyl)piperazine-2,5-dione

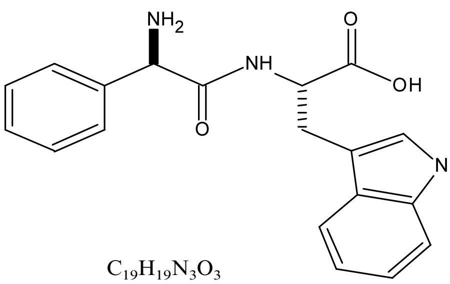
$[\alpha]_D^{20} = -17.4$ (*c* 1, DMSO)

Source of chirality: starting materials and enzymatic reaction

Absolute configuration: (3*R*,6*S*)

Andrei Y. Khimiuk, Alexei V. Korennykh, Luuk M. van Langen, Fred van Rantwijk, Roger A. Sheldon and Vytas K. Švedas*

Tetrahedron: Asymmetry *14 (2003) 3123*



$C_{19}H_{19}N_3O_3$

D-Phenylglycyl-L-tryptophan

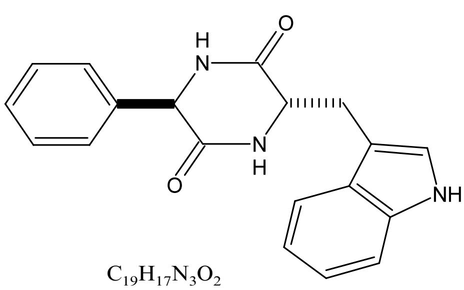
$[\alpha]_D^{20} = -72.8$ (*c* 1, 2.5 M HCl)

Source of chirality: starting materials and enzymatic reaction

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

Andrei Y. Khimiuk, Alexei V. Korennykh, Luuk M. van Langen, Fred van Rantwijk, Roger A. Sheldon and Vytas K. Švedas*

Tetrahedron: Asymmetry *14 (2003) 3123*



$C_{19}H_{17}N_3O_2$

(3*S*,6*R*)-3-(1*H*-Indol-3-ylmethyl)-6-phenylpiperazine-2,5-dione

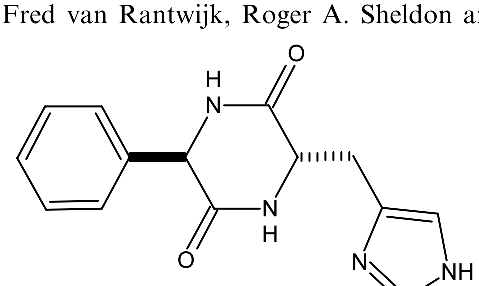
$[\alpha]_D^{20} = -34.8$ (*c* 1, DMSO)

Source of chirality: starting materials and enzymatic reaction

Absolute configuration: (3*S*,6*R*)

Andrei Y. Khimiuk, Alexei V. Korennykh, Luuk M. van Langen, Fred van Rantwijk, Roger A. Sheldon and Vytas K. Švedas*

Tetrahedron: Asymmetry *14 (2003) 3123*



$C_{14}H_{14}N_4O_2$

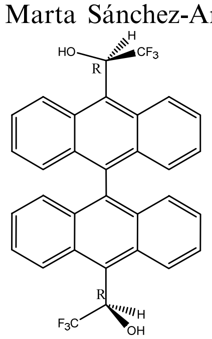
(3*S*,6*R*)-3-(1*H*-Imidazol-4-ylmethyl)-6-phenylpiperazine-2,5-dione

$[\alpha]_D^{20} = -40.6$ (*c* 1, DMSO)

Source of chirality: starting materials and enzymatic reaction

Absolute configuration: (3*S*,6*R*)

Marta Sánchez-Aris, Carla Estivill and Albert Virgili*	*Tetrahedron:* Asymmetry *14 (2003) 3129*

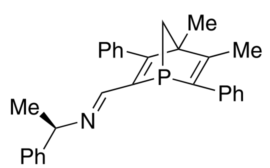


$[\alpha]_D^{25} = -50.5$ (*c* 1.9, CH_2Cl_2)

$C_{32}H_{20}F_6O_2$

(*R*,*R*)-α,α′-Bis(trifluoromethyl)-10,10′-(9,9′-bianthryl)dimethanol

François Mercier,* Franck Brebion, Romain Dupont and François Mathey*	*Tetrahedron:* Asymmetry *14 (2003) 3137*

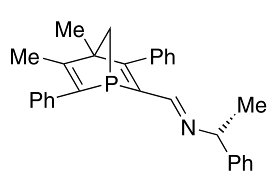


Ee = 100%
$[\alpha]_D^{20}$ −252.0 (*c* 1.0, $CHCl_3$)
Source of chirality: chiral substrates
Absolute configuration: $(R)_P,(R)_C$

$C_{29}H_{28}NP$

2-(α-Methylbenzyliminomethyl)-4,5-dimethyl-3,6-diphenyl-1-phosphabicyclo[2.2.1]hepta-2,5-diene

François Mercier,* Franck Brebion, Romain Dupont and François Mathey*	*Tetrahedron:* Asymmetry *14 (2003) 3137*

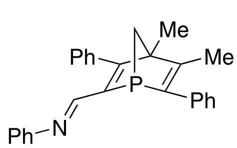


Ee = 100%
$[\alpha]_D^{20}$ +119.0 (*c* 1.0, CH_2Cl_2)
Source of chirality: chiral substrates
Absolute configuration: $(S)_P,(R)_C$

$C_{29}H_{28}NP$

2-(α-Methylbenzyliminomethyl)-4,5-dimethyl-3,6-diphenyl-1-phosphabicyclo[2.2.1]hepta-2,5-diene

François Mercier,* Franck Brebion, Romain Dupont and François Mathey*	*Tetrahedron:* Asymmetry *14 (2003) 3137*



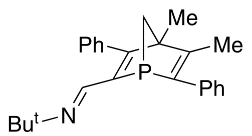
Ee = 100%
$[\alpha]_D^{20}$ −126.1 (*c* 1.0, acetone)
Source of chirality: chiral substrates
Absolute configuration: $(R)_P$

$C_{27}H_{24}NP$

2-(Phenyliminomethyl)-4,5-dimethyl-3,6-diphenyl-1-phosphabicyclo[2.2.1]hepta-2,5-diene

François Mercier,* Franck Brebion, Romain Dupont and François Mathey*

Tetrahedron: Asymmetry *14 (2003) 3137*



$C_{25}H_{28}NP$

2-(*tert*-Butyliminomethyl)-4,5-dimethyl-3,6-diphenyl-1-phosphabicyclo[2.2.1]hepta-2,5-diene

Ee = 100%

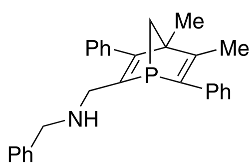
$[\alpha]_D^{20}$ −158.0 (*c* 0.9, $CHCl_3$)

Source of chirality: chiral substrates

Absolute configuration: $(R)_P$

François Mercier,* Franck Brebion, Romain Dupont and François Mathey*

Tetrahedron: Asymmetry *14 (2003) 3137*



$C_{28}H_{28}NP$

2-(Benzylaminomethyl)-4,5-dimethyl-3,6-diphenyl-1-phosphabicyclo[2.2.1]hepta-2,5-diene

Ee = 100%

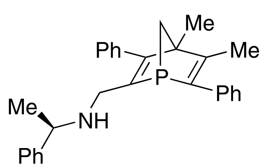
$[\alpha]_D^{20}$ −135 (*c* 0.9, CH_2Cl_2)

Source of chirality: chiral substrates

Absolute configuration: $(R)_P$

François Mercier,* Franck Brebion, Romain Dupont and François Mathey*

Tetrahedron: Asymmetry *14 (2003) 3137*



$C_{29}H_{30}NP$

2-(α-Methylbenzylaminomethyl)-4,5-dimethyl-3,6-diphenyl-1-phosphabicyclo[2.2.1]hepta-2,5-diene

Ee = 100%

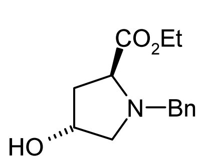
$[\alpha]_D^{20}$ −125 (*c* 1.1, CH_2Cl_2)

Source of chirality: chiral substrates

Absolute configuration: $(R)_P,(R)_C$

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3141*



$C_{14}H_{19}NO_3$

Ethyl (2*S*,4*R*)-1-benzyl-4-hydroxyprolinate

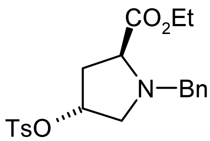
$[\alpha]_D^{20}$ = −56.3 (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3141*



$C_{21}H_{25}NO_5S$

Ethyl (2*S*,4*R*)-1-benzyl-4-(4-methylphenylsulfonyloxy)prolinate

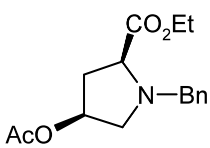
$[\alpha]_D^{20} = -13.8$ (*c* 0.99, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3141*



$C_{16}H_{21}NO_4$

Ethyl (2*S*,4*S*)-4-acetyloxy-1-benzylprolinate

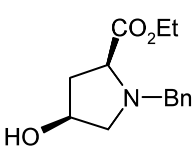
$[\alpha]_D^{20} = -55.0$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3141*



$C_{14}H_{19}NO_3$

Ethyl (2*S*,4*S*)-1-benzyl-4-hydroxyprolinate

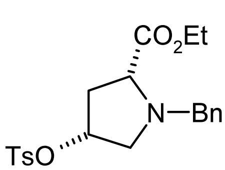
$[\alpha]_D^{20} = -38.2$ (*c* 0.99, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3141*



$C_{21}H_{25}NO_5S$

Ethyl (2*R*,4*R*)-1-benzyl-4-(4-methylphenylsulfonyloxy)prolinate

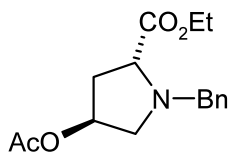
$[\alpha]_D^{20} = +39.2$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3141*



$C_{16}H_{21}NO_4$

Ethyl (2*R*,4*S*)-4-acetyloxy-1-benzylprolinate

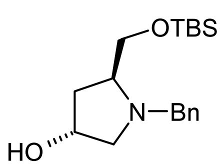
$[\alpha]_D^{20} = +36.6$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3141*



$C_{18}H_{31}NO_2Si$

(3*R*,5*S*)-1-Benzyl-5-(*tert*-butyldimethylsilyloxymethyl)pyrrolidin-3-ol

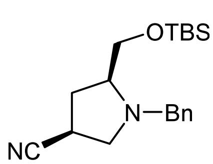
$[\alpha]_D^{20} = -46.0$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

Absolute configuration: 3*R*,5*S*

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3141*



$C_{19}H_{30}N_2OSi$

(3*S*,5*S*)-1-Benzyl-5-(*tert*-butyldimethylsilyloxymethyl)pyrrolidine-3-carbonitrile

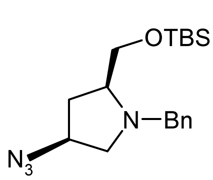
$[\alpha]_D^{20} = -67.5$ (*c* 0.07, $CHCl_3$)

Source of chirality: natural amino acid

Absolute configuration: 3*S*,5*S*

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3141*



$C_{18}H_{30}N_4OSi$

(2*S*,4*S*)-4-Azido-1-benzyl-2-(*tert*-butyldimethylsilyloxymethyl)pyrrolidine

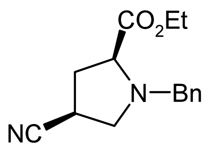
$[\alpha]_D^{20} = -79.0$ (*c* 0.3, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3141*



$C_{15}H_{18}N_2O_2$

Ethyl (2*S*,4*S*)-1-benzyl-4-cyanoprolinate

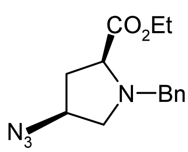
$[\alpha]_D^{20} = -17.9$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3141*



$C_{14}H_{18}N_4O_2$

Ethyl (2*S*,4*S*)-4-azido-1-benzylprolinate

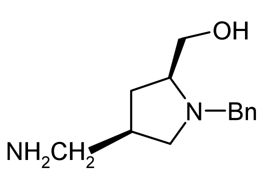
$[\alpha]_D^{20} = -57.5$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3141*



$C_{13}H_{20}N_2O$

(2*S*,4*R*)-(4-Aminomethyl-1-benzylpyrrolidin-2-yl)methanol

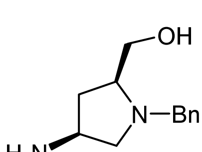
$[\alpha]_D^{20} = -30.7$ (*c* 0.27, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3141*



$C_{12}H_{18}N_2O$

(2*S*,4*S*)-(4-Amino-1-benzylpyrrolidin-2-yl)methanol

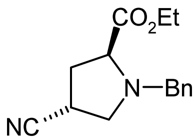
$[\alpha]_D^{20} = -14.2$ (*c* 0.5, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3141*



$C_{15}H_{18}N_2O_2$

Ethyl (2*S*,4*R*)-1-benzyl-4-cyanoprolinate

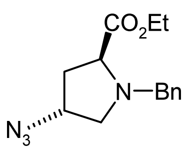
$[\alpha]_D^{20} = -64.8$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3141*



$C_{14}H_{18}N_4O_2$

Ethyl (2*S*,4*R*)-4-azido-1-benzylprolinate

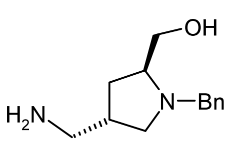
$[\alpha]_D^{20} = -53.2$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3141*



$C_{13}H_{20}N_2O$

(2*S*,4*S*)-(4-Aminomethyl-1-benzylpyrrolidin-2-yl)methanol

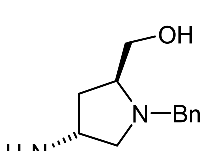
$[\alpha]_D^{20} = +27.9$ (*c* 0.96, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3141*



$C_{12}H_{18}N_2O$

(2*S*,4*R*)-(4-Amino-1-benzylpyrrolidin-2-yl)methanol

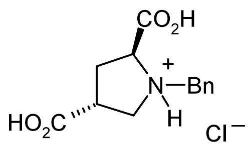
$[\alpha]_D^{20} = -65.8$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3141*



$C_{13}H_{15}NO_4 \times HCl$

(2*S*,4*R*)-1-Benzylpyrrolidine-2,4-dicarboxylic acid hydrochloride

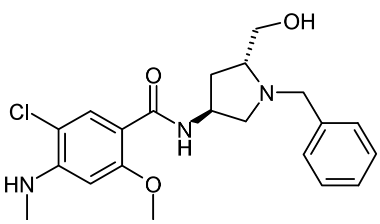
$[\alpha]_D^{20} = +29.4$ (*c* 0.78, MeOH)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3141*



$C_{21}H_{26}ClN_3O_3$

(3*S*,5*R*)-*N*-(1-Benzyl-5-hydroxymethyl-3-pyrrolidinyl)-5-chloro-2-methoxy-4-methylaminobenzamide

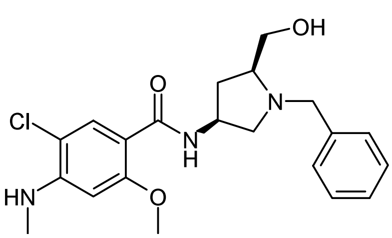
$[\alpha]_D^{20} = +64.4$ (*c* 0.15, $CHCl_3$)

Source of chirality: natural amino acid

Absolute configuration: 3*S*,5*R*

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3141*



$C_{21}H_{26}ClN_3O_3$

(3*S*,5*S*)-*N*-(1-Benzyl-5-hydroxymethyl-3-pyrrolidinyl)-5-chloro-2-methoxy-4-methylaminobenzamide

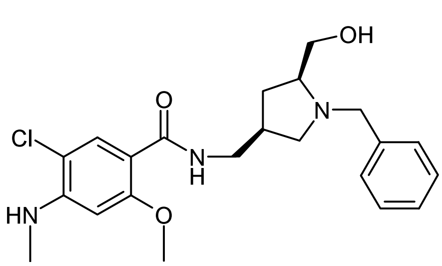
$[\alpha]_D^{20} = +42.3$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

Absolute configuration: 3*S*,5*S*

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3141*



$C_{22}H_{28}ClN_3O_3$

(3*R*,5*S*)-*N*-(1-Benzyl-5-hydroxymethyl-3-pyrrolidinylmethyl)-5-chloro-2-methoxy-4-methylaminobenzamide

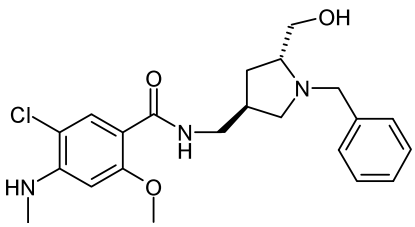
$[\alpha]_D^{20} = -35.6$ (*c* 0.32, $CHCl_3$)

Source of chirality: natural amino acid

Absolute configuration: 3*R*,5*S*

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3141*



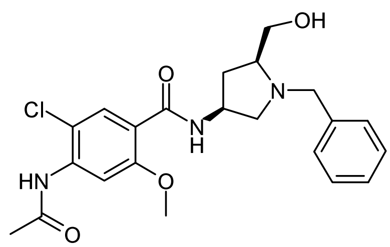
$[\alpha]_D^{20} = +30.1$ (c 0.05, $CHCl_3$)
Source of chirality: natural amino acid
Absolute configuration: 3*R*,5*R*

$C_{22}H_{28}ClN_3O_3$

(3*R*,5*R*)-*N*-(1-Benzyl-5-hydroxymethyl-3-pyrrolidinylmethyl)-5-chloro-2-methoxy-4-methylaminobenzamide

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3141*



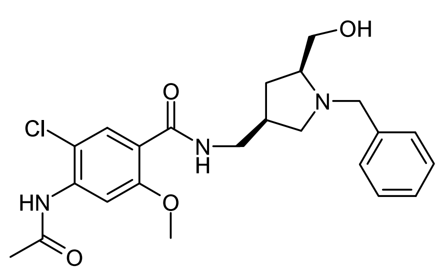
$[\alpha]_D^{20} = +60.1$ (c 0.23, $CHCl_3$)
Source of chirality: natural amino acid
Absolute configuration: 3*S*,5*S*

$C_{22}H_{26}ClN_3O_4$

(3*S*,5*S*)-4-Acetylamino-*N*-(1-benzyl-5-hydroxymethyl-3-pyrrolidinyl)-5-chloro-2-methoxybenzamide

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3141*



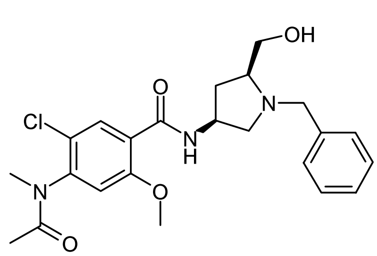
$[\alpha]_D^{20} = -52.0$ (c 0.03, $CHCl_3$)
Source of chirality: natural amino acid
Absolute configuration: 3*R*,5*S*

$C_{23}H_{28}ClN_3O_4$

(3*R*,5*S*)-4-Acetylamino-*N*-(1-benzyl-5-hydroxymethyl-3-pyrrolidinyl)5-chloro-2-methoxybenzamide

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3141*



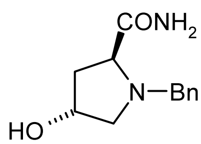
$[\alpha]_D^{20} = +11.5$ (c 0.82, $CHCl_3$)
Source of chirality: natural amino acid
Absolute configuration: 3*S*,5*S*

$C_{23}H_{28}ClN_3O_4$

(3*S*,5*S*)-4-(*N*-Acetyl-*N*-methylamino)-*N*-(1-benzyl-5-hydroxymethyl-3-pyrrolidinyl)-5-chloro-2-methoxybenzamide

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{12}H_{16}N_2O_2$

(2*S*,4*R*)-1-Benzyl-4-hydroxypyrrolidine-2-carboxamide

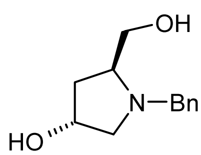
$[\alpha]_D^{20} = -79.6$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{12}H_{17}NO_2$

(3*R*,5*S*)-1-Benzyl-5-hydroxymethylpyrrolidin-3-ol

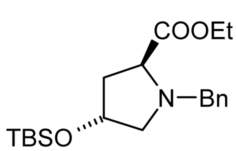
$[\alpha]_D^{20} = -58.4$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

Absolute configuration: 3*R*,5*S*

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{20}H_{33}NO_3Si$

Ethyl (2*S*,4*R*)-1-benzyl-4-(*tert*-butyldimethylsilyloxy)prolinate

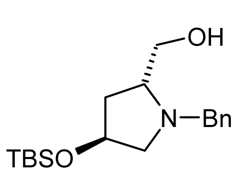
$[\alpha]_D^{20} = -41.0$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{18}H_{31}NO_2Si$

(3*R*,5*S*)-1-Benzyl-3-(*tert*-butyldimethylsilyloxy)-5-hydroxymethylpyrrolidin

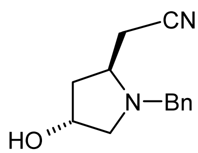
$[\alpha]_D^{20} = -36.5$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

Absolute configuration: 3*R*,5*S*

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{13}H_{16}N_2O$

(2*S*,4*R*)-(1-Benzyl-4-hydroxypyrrolidin-2-yl)acetonitrile

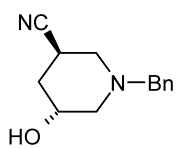
$[\alpha]_D^{20} = -67.1$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{13}H_{16}N_2O$

(3*R*,5*R*)-1-Benzyl-5-hydroxypiperidine-3-carbonitrile

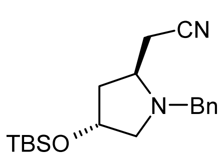
$[\alpha]_D^{20} = -7.0$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

Absolute configuration: 3*R*,5*R*

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{19}H_{30}N_2OSi$

(2*S*,4*R*)-[1-Benzyl-4-(*tert*-butyldimethylsilyloxy)pyrrolidin-2-yl]acetonitrile

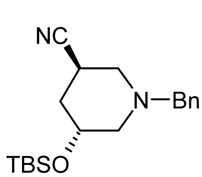
$[\alpha]_D^{20} = -41.0$ (*c* 0.63, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{19}H_{30}N_2OSi$

(3*R*,5*R*)-1-Benzyl-5-(*tert*-butyldimethylsilyloxy)piperidin-3-carbonitrile

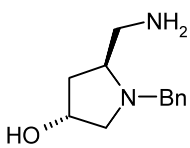
$[\alpha]_D^{20} = +18.4$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

Absolute configuration: 3*R*,5*R*

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{12}H_{18}N_2O$

(3*R*,5*S*)-5-Aminomethyl-1-benzylpyrrolidin-3-ol

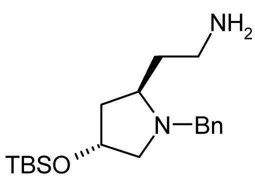
$[\alpha]_D^{20} = -54.6$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

Absolute configuration: 3*R*,5*S*

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{19}H_{34}N_2OSi$

(2*S*,4*R*)-2-[1-Benzyl-4-(*tert*-butyldimethylsilyloxy)pyrrolidin-2-yl]ethylamine

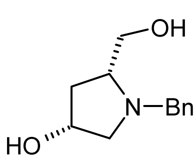
$[\alpha]_D^{20} = -68.0$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{12}H_{17}NO_2$

(3*R*,5*R*)-1-Benzyl-5-hydroxymethylpyrrolidin-3-ol

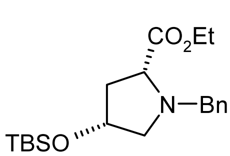
$[\alpha]_D^{20} = +35.8$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

Absolute configuration: 3*R*,5*R*

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{20}H_{33}NO_3Si$

Ethyl (2*R*,4*R*)-1-benzyl-4-(*tert*-butyldimethylsilyloxy)prolinate

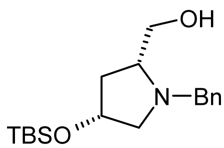
$[\alpha]_D^{20} = +42.0$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{18}H_{31}NO_2Si$

(3*R*,5*R*)-1-Benzyl-3-(*tert*-butyldimethylsilyloxy)-5-hydroxymethylpyrrolidin

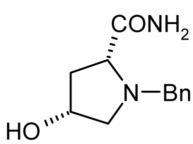
$[\alpha]_D^{20} = +46.2$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

Absolute configuration: 3*R*,5*R*

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{12}H_{16}N_2O_2$

(2*R*,4*R*)-1-Benzyl-4-hydroxypyrrolidine-2-carboxamide

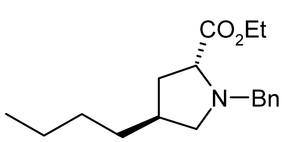
$[\alpha]_D^{20} = +39.6$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{18}H_{27}NO_2$

Ethyl (2*R*,4*S*)-1-benzyl-4-butylprolinate

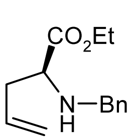
$[\alpha]_D^{20} = +59.0$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{14}H_{19}NO_2$

Ethyl (2*S*)-2-benzylaminopent-4-enoate

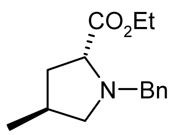
$[\alpha]_D^{20} = -18.0$ (*c* 0.28, $CHCl_3$)

Source of chirality: natural amino acid

Absolute configuration: 2*S*

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{15}H_{21}NO_2$

Ethyl (2*R*,4S)-1-benzyl-4-methylprolinate

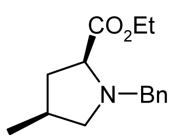
$[\alpha]_D^{20} = +48.7$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{15}H_{21}NO_2$

Ethyl (2*S*,4*S*)-1-benzyl-4-methylprolinate

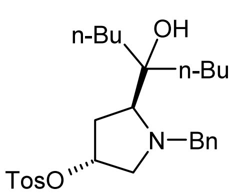
$[\alpha]_D^{20} = -43.2$ (*c* 0.04, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{27}H_{39}NO_4S$

(2*S*,4*R*)-1-Benzyl-5-(1-butyl-1-hydroxypentyl)pyrrolidin-3-yl tosylate

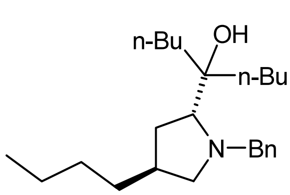
$[\alpha]_D^{20} = -28.8$ (*c* 0.8, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{24}H_{41}NO$

(2*R*,4*S*)-5-(1-Benzyl-4-butylpyrrolidin-2-yl)nonan-5-ol

$[\alpha]_D^{20} = +16.1$ (*c* 0.32, $CHCl_3$)

Source of chirality: natural amino acid

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

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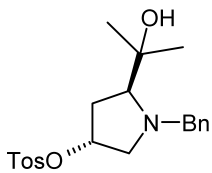
Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{21}H_{27}NO_4S$

(3*R*,5*S*)-1-Benzyl-5-(1-hydroxy-1-methylethyl)pyrrolidin-3-yl tosylate

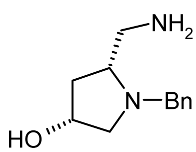
$[\alpha]_D^{20} = -26.1$ (*c* 0.23, $CHCl_3$)

Source of chirality: natural amino acid

Absolute configuration: 3*R*,5*S*

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{15}H_{21}NO_2$

(3*R*,5*R*)-5-Aminomethyl-1-benzylpyrrolidin-3-ol

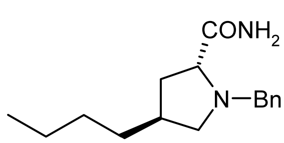
$[\alpha]_D^{20} = +30.3$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

Absolute configuration: 3*R*,5*R*

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{16}H_{24}N_2O$

(2*R*,4*S*)-1-Benzyl-4-butylpyrrolidine-2-carboxamide

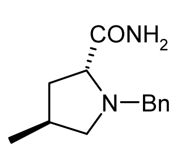
$[\alpha]_D^{20} = +82.3$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{13}H_{18}N_2O$

(2*R*,4*S*)-1-Benzyl-4-methylpyrrolidine-2-carboxamide

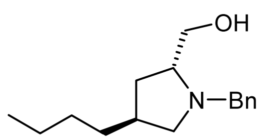
$[\alpha]_D^{20} = +74.9$ (*c* 0.7, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



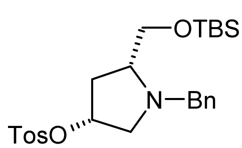
$C_{16}H_{25}NO$

(2*R*,4*S*)-(1-Benzyl-4-butylpyrrolidin-2-yl)methanol

$[\alpha]_D^{20} = +78.0$ (*c* 1.0, $CHCl_3$)
Source of chirality: natural amino acid
Absolute configuration: 2*R*,4*S*

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{25}H_{37}NO_4SSi$

(3*R*,5*R*)-1-Benzyl-5-(*tert*-butyldimethylsilyloxymethyl)pyrrolidin-3-yl tosylate

$[\alpha]_D^{20} = +76.7$ (*c* 1.0, $CHCl_3$)
Source of chirality: natural amino acid
Absolute configuration: 3*R*,5*R*

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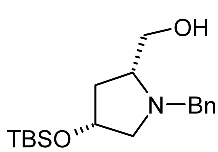
Tetrahedron: Asymmetry *14 (2003) 3153*



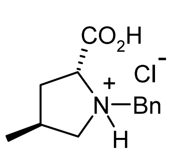
$C_{19}H_{23}NO_4S$

(3*R*,5*R*)-1-Benzyl-5-hydroxymethylpyrrolidin-3-yl tosylate

$[\alpha]_D^{20} = +38.9$ (*c* 1.0, $CHCl_3$)
Source of chirality: natural amino acid
Absolute configuration: 3*R*,5*R*

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



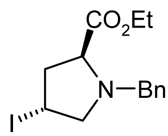
$C_{13}H_{17}NO_2$

(2*R*,4*S*)-1-Benzyl-4-methylpyrrolidin-2-carboxylic acid hydrochloride

$[\alpha]_D^{20} = +33.9$ (*c* 1.0, $CHCl_3$)
Source of chirality: natural amino acid
Absolute configuration: 2*R*,4*S*

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{14}H_{18}INO_2$

Ethyl (2*S*,4*R*)-1-benzyl-4-iodoprolinate

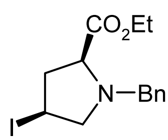
$[\alpha]_D^{20} = -62.1$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{14}H_{18}INO_2$

Ethyl (2*S*,4*S*)-1-benzyl-4-iodoprolinate

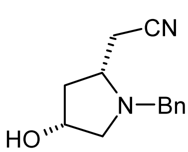
$[\alpha]_D^{20} = -20.9$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{13}H_{16}N_2O$

(2*R*,4*R*)-(1-Benzyl-4-hydroxypyrrolidin-2-yl)acetonitrile

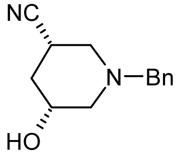
$[\alpha]_D^{20} = +40.3$ (*c* 0.3, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{13}H_{16}N_2O$

(3*S*,5*R*)-1-Benzyl-5-hydroxypiperidine-3-carbonitrile

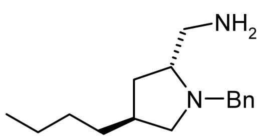
$[\alpha]_D^{20} = +17.3$ (*c* 0.13, $CHCl_3$)

Source of chirality: natural amino acid

Absolute configuration: 3*S*,5*R*

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{16}H_{26}N_2$

(2*R*,4*S*)-1-Benzyl-4-butylpyrrolidin-2-yl)methylamine

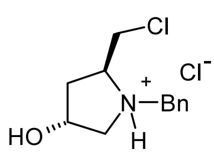
$[\alpha]_D^{20}$ = +84.0 (*c* 0.08, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{12}H_{16}ClNO \times HCl$

(3*R*,5*S*)-1-Benzyl-5-chloromethylpyrrolidin-3-ol hydrochloride

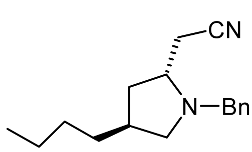
$[\alpha]_D^{20}$ = +2.3 (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

Absolute configuration: 3*R*,5*S*

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{17}H_{24}N_2$

(2*R*,4*S*)-(1-Benzyl-4-butylpyrrolidin-2-yl)acetonitrile

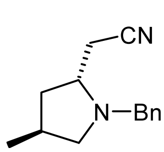
$[\alpha]_D^{20}$ = +41.4 (*c* 0.1, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{14}H_{18}N_2$

(2*R*,4*S*)-(1-Benzyl-4-methylpyrrolidin-2-yl)acetonitrile

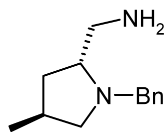
$[\alpha]_D^{20}$ = −72.6 (*c* 0.6, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{13}H_{20}N_2$

(2*R*,4*S*)-(1-Benzyl-4-methylpyrrolidin-2-yl)methylamine

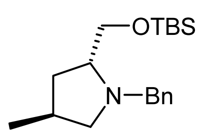
$[\alpha]_D^{20} = +70.4$ (*c* 0.13, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{19}H_{33}NOSi$

(2*R*,4*S*)-1-Benzyl-2-(*tert*-butyldimethylsilyloxymethyl)-4-methylpyrrolidine

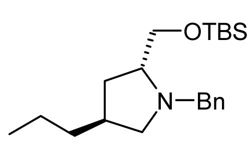
$[\alpha]_D^{20} = +63.2$ (*c* 0.85, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{21}H_{37}NOSi$

(2*R*,4*S*)-1-Benzyl-2-(*tert*-butyldimethylsilyloxymethyl)-4-propylpyrrolidine

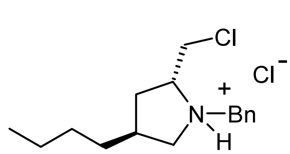
$[\alpha]_D^{20} = +39.5$ (*c* 0.41, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{16}H_{24}ClN \times HCl$

(2*R*,4*S*)-1-Benzyl-4-butyl-2-chloromethylpyrrolidine hydrochloride

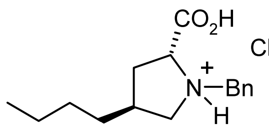
$[\alpha]_D^{20} = +24.8$ (*c* 0.61, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{16}H_{23}NO_2 \times HCl$

(2*R*,4*S*)-1-Benzyl-4-butylpyrrolidin-2-ylcarboxylic acid hydrochloride

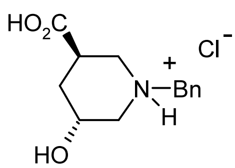
$[\alpha]_D^{20} = +37.1$ (*c* 0.85, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{13}H_{17}NO_3 \times HCl$

(3*R*,5*R*)-1-Benzyl-5-hydroxypiperidine-3-ylcarboxylic acid hydrochloride

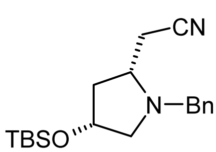
$[\alpha]_D^{20} = -0.2$ (*c* 2.68, MeOH)

Source of chirality: natural amino acid

Absolute configuration: 3*R*,5*R*

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{19}H_{30}N_2OSi$

(2*R*,4*R*)-[1-Benzyl-4-(*tert*-butyldimethylsilyloxy)pyrrolidin-2-yl]acetonitrile

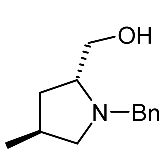
$[\alpha]_D^{20} = +35.3$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{13}H_{19}NO$

(2*R*,4*S*)-(1-Benzyl-4-methylpyrrolidin-2-yl)methanol

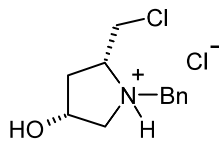
$[\alpha]_D^{20} = +63.5$ (*c* 1.0, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{12}H_{16}NOCl \times HCl$

(3*R*,5*R*)-1-Benzyl-5-chloromethylpyrrolidin-3-ol hydrochloride

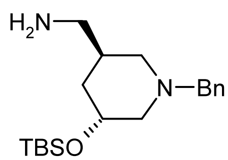
$[\alpha]_D^{20} = +8.8$ (*c* 0.1, $CHCl_3$)

Source of chirality: natural amino acid

Absolute configuration: 3*R*,5*R*

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{19}H_{34}N_2OSi$

(3*S*,5*R*)-[1-Benzyl-5-(*tert*-butyldimethylsilyloxy)piperidin-3-yl]methylamine

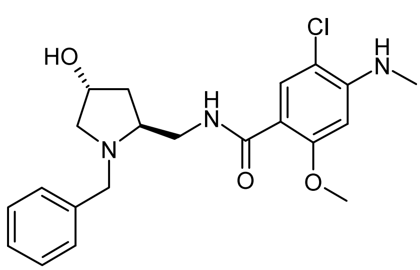
$[\alpha]_D^{20} = +42.2$ (*c* 0.32, $CHCl_3$)

Source of chirality: natural amino acid

Absolute configuration: 3*S*,5*R*

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{21}H_{26}ClN_3O_3$

(2*S*,4*R*)-*N*-[(1-Benzyl-4-hydroxypyrrolidin-2-yl)methyl]-5-chloro-2-methoxy-4-methylaminobenzamide

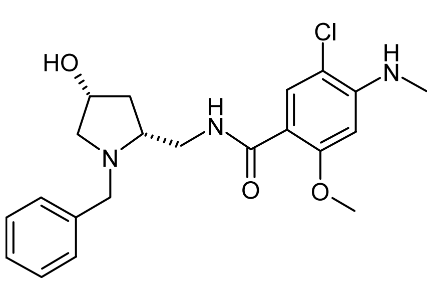
$[\alpha]_D^{20} = -122.2$ (*c* 0.09, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{21}H_{26}ClN_3O_3$

(2*R*,4*R*)-*N*-[(1-Benzyl-4-hydroxypyrrolidin-2-yl)methyl]-5-chloro-2-methoxy-4-methylaminobenzamide

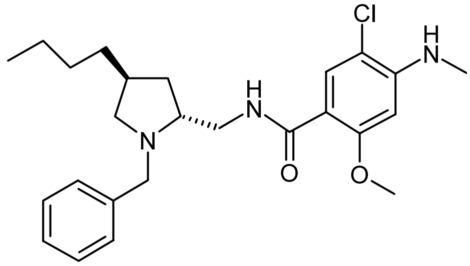
$[\alpha]_D^{20} = +47.2$ (*c* 0.62, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{25}H_{34}ClN_3O_2$

(2*R*,4*S*)-*N*-[(1-Benzyl-4-butylpyrrolidin-2-yl)methyl]-5-chloro-2-methoxy-4-methylaminobenzamide

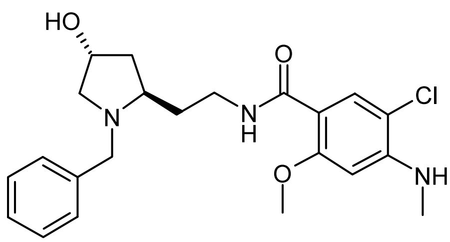
$[\alpha]_D^{20} = +89.5$ (*c* 0.29, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{22}H_{28}ClN_3O_3$

(2*S*,4*R*)-*N*-[2-(1-Benzyl-4-hydroxypyrrolidin-2-yl)ethyl]-5-chloro-2-methoxy-4-methylaminobenzamide

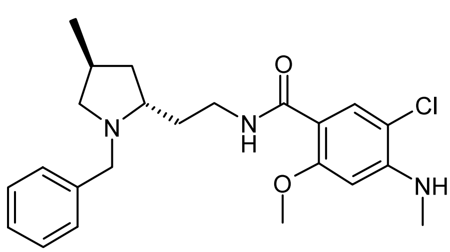
$[\alpha]_D^{20} = -36.8$ (*c* 0.13, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{23}H_{30}ClN_3O_2$

(2*R*,4*S*)-*N*-[2-(1-Benzyl-4-methylpyrrolidin-2-yl)ethyl]-5-chloro-2-methoxy-4-methylaminobenzamide

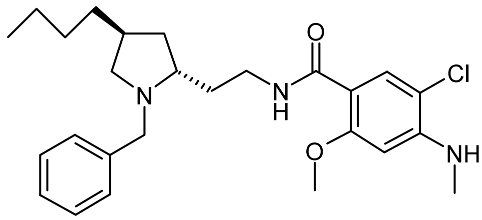
$[\alpha]_D^{20} = +48.4$ (*c* 0.15, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



$C_{26}H_{36}ClN_3O_2$

(2*R*,4*S*)-*N*-[2-(1-Benzyl-4-butylpyrrolidin-2-yl)ethyl]-5-chloro-2-methoxy-4-methylaminobenzamide

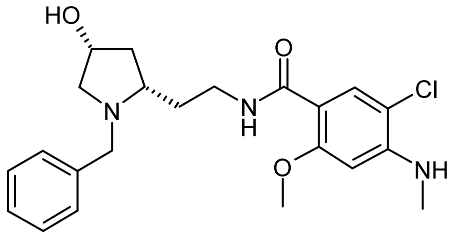
$[\alpha]_D^{20} = +84.0$ (*c* 0.19, $CHCl_3$)

Source of chirality: natural amino acid

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

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



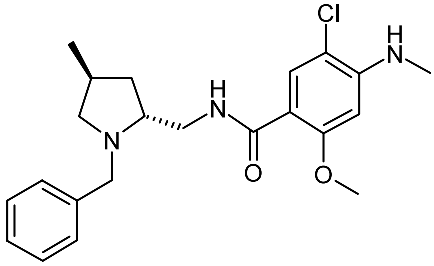
$[\alpha]_D^{20} = +40.0$ (c 0.05, $CHCl_3$)
Source of chirality: natural amino acid
Absolute configuration: 2*S*,4*R*

$C_{22}H_{28}ClN_3O_3$

(2*S*,4*R*)-*N*-[2-(1-Benzyl-4-hydroxypyrrolidin-2-yl)ethyl]-5-chloro-2-methoxy-4-methylaminobenzamide

Cornelia Heindl, Harald Hübner and Peter Gmeiner*

Tetrahedron: Asymmetry *14 (2003) 3153*



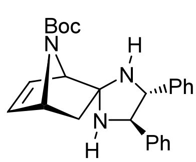
$[\alpha]_D^{20} = +69.5$ (c 0.1, $CHCl_3$)
Source of chirality: natural amino acid
Absolute configuration: 2*R*,4*S*

$C_{22}H_{28}ClN_3O_2$

(2*R*,4*S*)-*N*-[(1-Benzyl-4-methylpyrrolidin-2-yl)methyl]-5-chloro-2-methoxy-4-methylaminobenzamide

Antonio J. Moreno-Vargas and Pierre Vogel*

Tetrahedron: Asymmetry *14 (2003) 3173*



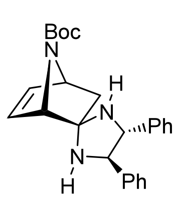
Ee ≥97% (chiral diamine)
$[\alpha]_D^{25} = +19$ (c 0.5, $CHCl_3$)
Source of chirality: resolution
Absolute configuration: (1*R*,4*R*,4′*R*,5′*R*)

$C_{25}H_{29}N_3O_2$

(1*R*,4*R*,4′*R*,5′*R*)-4′,5′-Diphenylspiro[7-(*tert*-butoxycarbonyl)-7-azabicyclo[2.2.1]hept-5-en-2,2′-imidazolidine]

Antonio J. Moreno-Vargas and Pierre Vogel*

Tetrahedron: Asymmetry *14 (2003) 3173*



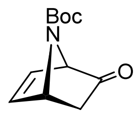
Ee ≥97% (chiral diamine)
$[\alpha]_D^{25} = +60$ (c 1.5, $CHCl_3$)
Source of chirality: resolution
Absolute configuration: (1*S*,4*S*,4′*R*,5′*R*)

$C_{25}H_{29}N_3O_2$

(1*S*,4*S*,4′*R*,5′*R*)-4′,5′-Diphenylspiro[7-(*tert*-butoxycarbonyl)-7-azabicyclo[2.2.1]hept-5-en-2,2′-imidazolidine]

Antonio J. Moreno-Vargas and Pierre Vogel*

Tetrahedron: Asymmetry *14 (2003) 3173*



$C_{11}H_{15}NO_3$

(1*R*,4*R*)-7-(*tert*-Butoxycarbonyl)-7-azabicyclo[2.2.1]hept-5-en-2-one

Ee ≥97% (chiral diamine)

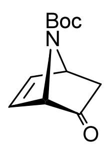
$[\alpha]_D^{25} = -360$ (*c* 0.25, $CHCl_3$)

Source of chirality: resolution

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

Antonio J. Moreno-Vargas and Pierre Vogel*

Tetrahedron: Asymmetry *14 (2003) 3173*



$C_{11}H_{15}NO_3$

(1*S*,4*S*)-7-(*tert*-Butoxycarbonyl)-7-azabicyclo[2.2.1]hept-5-en-2-one

Ee ≥97% (chiral diamine)

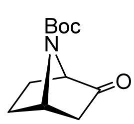
$[\alpha]_D^{25} = +384$ (*c* 0.9, $CHCl_3$)

Source of chirality: resolution

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

Antonio J. Moreno-Vargas and Pierre Vogel*

Tetrahedron: Asymmetry *14 (2003) 3173*



$C_{11}H_{17}NO_3$

(1*S*,4*R*)-7-(*tert*-Butoxycarbonyl)-7-azabicyclo[2.2.1]heptan-2-one

Ee ≥97% (chiral diamine)

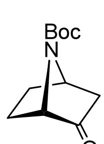
$[\alpha]_D^{25} = +74$ (*c* 1.0, $CHCl_3$)

Source of chirality: resolution

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

Antonio J. Moreno-Vargas and Pierre Vogel*

Tetrahedron: Asymmetry *14 (2003) 3173*



$C_{11}H_{17}NO_3$

(1*R*,4*S*)-7-(*tert*-Butoxycarbonyl)-7-azabicyclo[2.2.1]heptan-2-one

Ee ≥97% (chiral diamine)

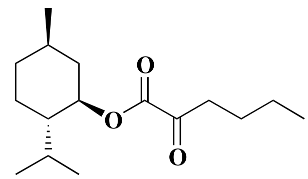
$[\alpha]_D^{25} = -73$ (*c* 1.0, $CHCl_3$)

Source of chirality: resolution

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

David I. MaGee,* Tammy C. Mallais and Marijanna Eic

Tetrahedron: Asymmetry *14 (2003) 3177*



$C_{16}H_{28}O_3$

(1*R*,2*S*,5*R*)-(−)-Menthyl 2-oxo-hexanoate

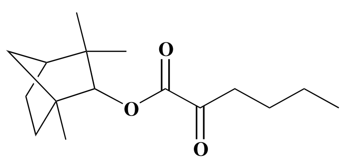
E.e. = 99%

$[\alpha]_D = -64.6$ ($c = 2.34$, EtOH)

Source of chirality: (1*R*,2*S*,5*R*)-(−)-menthol

David I. MaGee,* Tammy C. Mallais and Marijanna Eic

Tetrahedron: Asymmetry *14 (2003) 3177*



$C_{16}H_{26}O_3$

(1*R*)-(+)-*endo*-Fenchyl 2-oxo-hexanoate

E.e. = 96%

$[\alpha]_D = +33.8$ ($c = 0.34$, EtOH)

Source of chirality: (1*R*)-(+)-*endo*-fenchyl alcohol

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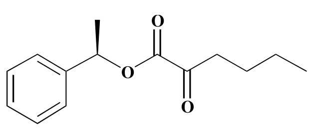
Tetrahedron: Asymmetry *14 (2003) 3177*



$C_{14}H_{18}O_3$

(*R*)-(+)-1-Phenylethyl 2-oxo-hexanoate

E.e. >99%

$[\alpha]_D = +2.2$ ($c = 1.08$, CH_2Cl_2)

Source of chirality: (*R*)-(+)-1-phenylethanol

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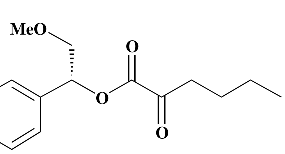
Tetrahedron: Asymmetry *14 (2003) 3177*



$C_{15}H_{20}O_3$

(*R*)-(−)-(2-Methoxy-1-phenyl)ethyl 2-oxo-hexanoate

E.e. >99%

$[\alpha]_D = -55.4$ ($c = 1.3$, EtOH)

Source of chirality: (*R*)-(−)-2-methoxy-1-phenylethanol

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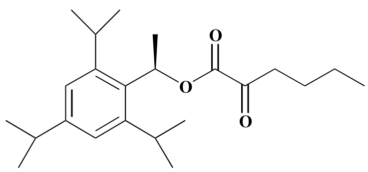
Tetrahedron: Asymmetry *14 (2003) 3177*



E.e. = 100%

$[\alpha]_D = -25.6$ ($c = 1.7$, CH_2Cl_2)

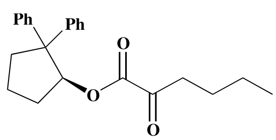
Source of chirality: (*R*)-(−)-1-(2,4,6-triisopropylphenyl)ethanol

$C_{23}H_{36}O_3$

(*R*)-(−)-1-(2,4,6-Triisopropylphenyl)ethyl 2-oxo-hexanoate

David I. MaGee,* Tammy C. Mallais and Marijanna Eic

Tetrahedron: Asymmetry *14 (2003) 3177*



E.e. >97%

$[\alpha]_D = +117.9$ ($c = 1.1$, EtOH)

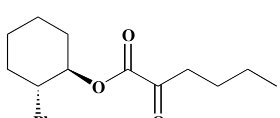
Source of chirality: (*S*)-2,2-diphenylcyclohexanol

$C_{23}H_{26}O_3$

(*S*)-(+)-2,2-Diphenylcyclohexyl 2-oxo-hexanoate

David I. MaGee,* Tammy C. Mallais and Marijanna Eic

Tetrahedron: Asymmetry *14 (2003) 3177*



E.e. >98%

$[\alpha]_D = -41.8$ ($c = 1.41$, EtOH)

Source of chirality: (1*R*,2*S*)-(−)-*trans*-2-phenyl-1-cyclohexanol

$C_{18}H_{24}O_3$

(1*R*,2*S*)-(−)-*trans*-2-Phenyl-1-cyclohexyl 2-oxo-hexanoate

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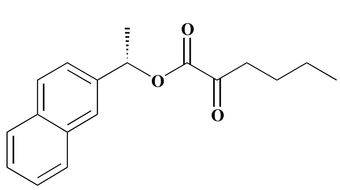
Tetrahedron: Asymmetry *14 (2003) 3177*



E.e. >99%

$[\alpha]_D = -39.3$ ($c = 1.37$, CH_2Cl_2)

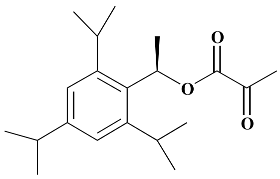
Source of chirality: (*S*)-(−)-1-(2-naphthyl)ethanol

$C_{18}H_{20}O_3$

(*S*)-(−)-1-(2-Naphthyl)ethyl 2-oxo-hexanoate

David I. MaGee,* Tammy C. Mallais and Marijanna Eic

Tetrahedron: Asymmetry *14 (2003) 3177*



$C_{20}H_{30}O_3$

(*R*)-(+)-1-(2,4,6-Triisopropylphenyl)ethyl 2-oxo-propanoate

E.e. = 97%

$[\alpha]_D$ = +20.6 (c = 2.7, CH_2Cl_2)

Source of chirality: (*R*)-(+)-1-(2,4,6-triisopropylphenyl)ethanol

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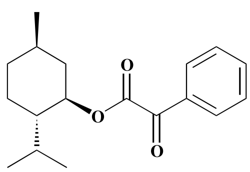
David I. MaGee,* Tammy C. Mallais and Marijanna Eic

Tetrahedron: Asymmetry *14 (2003) 3177*



$C_{18}H_{24}O_3$

(1*R*,2*S*,5*R*)-(−)-Menthyl 2-oxo-phenylacetate

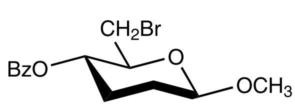
E.e. = 99%

$[\alpha]_D$ = −54.9 (c = 1.38, CH_2Cl_2)

Source of chirality: (1*R*,2*S*,5*R*)-(−)-menthol

Douglas S. Micalizzi, J. Patrick Dougherty, Lincoln A. Noecker, Garry R. Smith and Robert M. Giuliano*

Tetrahedron: Asymmetry *14 (2003) 3183*



$C_{14}H_{17}O_4Br$

Methyl 4-*O*-benzoyl-6-bromo-2,3,6-trideoxy-β-D-*erythro*-hexopyranoside

$[\alpha]_D^{23}$ = +14.6 (c 1.0, $CHCl_3$)

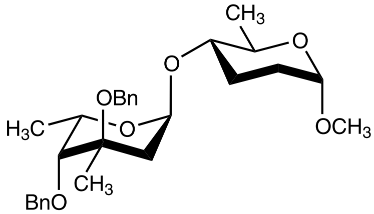
E.e. = 100%

Source of chirality: tri-*O*-acetyl-D-glucal

Absolute configuration: 1*S*,4*S*,5*S*

Douglas S. Micalizzi, J. Patrick Dougherty, Lincoln A. Noecker, Garry R. Smith and Robert M. Giuliano*

Tetrahedron: Asymmetry *14 (2003) 3183*



$C_{28}H_{38}O_6$

Methyl 3,4-di-*O*-2,6-dideoxy-3-*C*-methyl-α-L-*xylo*-hexopyranosyl-(1→4)-2,3,6-trideoxy-α-D-*erythro*-hexopyranoside

$[\alpha]_D^{23}$ = −63 (c 0.33, $CHCl_3$)

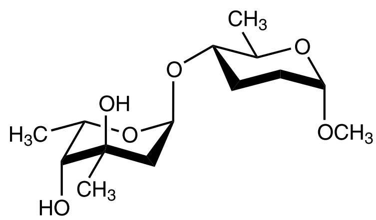
E.e. = 100%

Source of chirality: tri-*O*-acetyl-D-glucal and 2-deoxy-D-ribose

Absolute configuration: 1*S*,4*S*,5*R*,1′*S*,3′*R*,4′*R*,5′*S*

Douglas S. Micalizzi, J. Patrick Dougherty, Lincoln A. Noecker, Garry R. Smith and Robert M. Giuliano*

Tetrahedron: Asymmetry *14 (2003) 3183*



$C_{14}H_{26}O_6$

Methyl 2,6-dideoxy-3-*C*-methyl-α-L-*xylo*-hexopyranosyl-(1→4)-2,3,6-trideoxy-α-D-*erythro*-hexopyranoside

$[\alpha]_D^{23}=+44.7$ (*c* 0.94, $CHCl_3$)

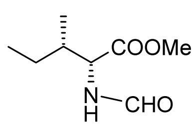
E.e. = 100%

Source of chirality: tri-*O*-acetyl-D-glucal and 2-deoxy-D-ribose

Absolute configuration: 1*S*,4*S*,5*R*,1′*S*,3′*R*,4′*R*,5′*S*

Mara Cambiè,* Paola D'Arrigo, Ezio Fasoli, Stefano Servi, Davide Tessaro, Francesco Canevotti and Lucio Del Corona

Tetrahedron: Asymmetry *14 (2003) 3189*



$C_8H_{15}NO_3$

N-Formyl-D-allo-isoleucine methyl ester

D.e. = 98% (HPLC)

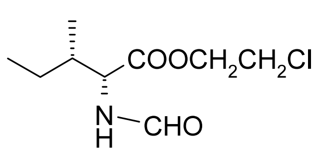
$[\alpha]_D^{20}=-32.5$ (*c* 1, $CHCl_3$)

Source of chirality: enzymatic diastereoselective hydrolysis

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

Mara Cambiè,* Paola D'Arrigo, Ezio Fasoli, Stefano Servi, Davide Tessaro, Francesco Canevotti and Lucio Del Corona

Tetrahedron: Asymmetry *14 (2003) 3189*



$C_9H_{16}ClNO_3$

N-Formyl-D-allo-isoleucine chloroethyl ester

D.e. = 96% (HPLC)

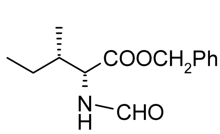
$[\alpha]_D^{20}=-13.5$ (*c* 1, $CHCl_3$)

Source of chirality: enzymatic diastereoselective hydrolysis

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

Mara Cambiè,* Paola D'Arrigo, Ezio Fasoli, Stefano Servi, Davide Tessaro, Francesco Canevotti and Lucio Del Corona

Tetrahedron: Asymmetry *14 (2003) 3189*



$C_{14}H_{19}NO_3$

N-Formyl-D-allo-isoleucine-benzyl ester

D.e. = 98% (HPLC)

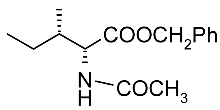
$[\alpha]_D^{20}=-7.3$ (*c* 1, $CHCl_3$)

Source of chirality: enzymatic diastereoselective hydrolysis

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

Mara Cambiè,* Paola D'Arrigo, Ezio Fasoli, Stefano Servi, Davide Tessaro, Francesco Canevotti and Lucio Del Corona

Tetrahedron: Asymmetry *14 (2003) 3189*



$C_{15}H_{21}NO_3$

N-Acetyl-D-allo-isoleucine-benzyl ester

D.e. >98% (HPLC)

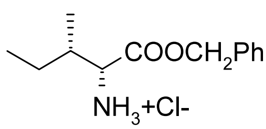
$[\alpha]_D^{20} = -13.6$ (c 1, $CHCl_3$)

Source of chirality: enzymatic diastereoselective hydrolysis

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

Mara Cambiè,* Paola D'Arrigo, Ezio Fasoli, Stefano Servi, Davide Tessaro, Francesco Canevotti and Lucio Del Corona

Tetrahedron: Asymmetry *14 (2003) 3189*



$C_{13}H_{22}ClNO_2$

D-Allo-isoleucine-benzyl ester hydrochloride

D.e. = 98% (HPLC)

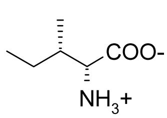
$[\alpha]_D^{20} = -25$ (c 2, H_2O)

Source of chirality: crystallisation

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

Mara Cambiè,* Paola D'Arrigo, Ezio Fasoli, Stefano Servi, Davide Tessaro, Francesco Canevotti and Lucio Del Corona

Tetrahedron: Asymmetry *14 (2003) 3189*



$C_{15}H_{21}NO_3$

D-Allo-isoleucine

D.e. = 98% (HPLC)

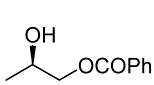
$[\alpha]_D^{20} = -36.2$ (c 2, 5N HCl)

Source of chirality: enzymatic diastereoselective hydrolysis

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

Pierangela Ciuffreda, Laura Alessandrini, Giancarlo Terraneo and Enzo Santaniello*

Tetrahedron: Asymmetry *14 (2003) 3197*



$C_{10}H_{12}O_5$

(2*R*)-2-Hydroxypropyl benzoate

Ee = 61%

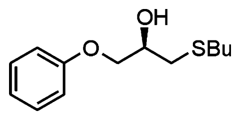
$[\alpha]_D^{25} = -12.9$ (c 1, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: 2*R*

Monika Wielechowska and Jan Plenkiewicz*

Tetrahedron: Asymmetry *14 (2003) 3203*



$C_{13}H_{20}O_2S$

(*R*)-(+)-1-Butylthio-3-phenoxypropan-2-ol

Ee = 99%

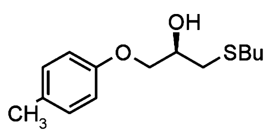
$[\alpha]_D^{22} = +4.5$ (*c* 1.76, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: *R*

Monika Wielechowska and Jan Plenkiewicz*

Tetrahedron: Asymmetry *14 (2003) 3203*



$C_{14}H_{22}O_2S$

(*R*)-(+)-1-Butylthio-3-(4-methylphenoxy)propan-2-ol

Ee = 85%

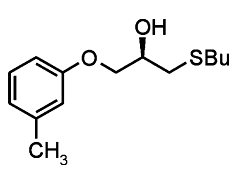
$[\alpha]_D^{22} = +4.9$ (*c* 1.0, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: *R*

Monika Wielechowska and Jan Plenkiewicz*

Tetrahedron: Asymmetry *14 (2003) 3203*



$C_{14}H_{22}O_2S$

(*R*)-(+)-1-Butylthio-3-(3-methylphenoxy)propan-2-ol

Ee = 86%

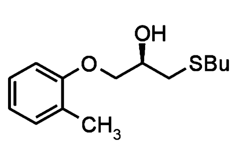
$[\alpha]_D^{22} = +5.8$ (*c* 1.98, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: *R*

Monika Wielechowska and Jan Plenkiewicz*

Tetrahedron: Asymmetry *14 (2003) 3203*



$C_{14}H_{22}O_2S$

(*R*)-(+)-1-Butylthio-3-(2-methylphenoxy)propan-2-ol

Ee = 43%

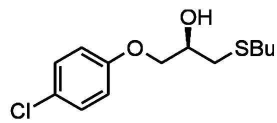
$[\alpha]_D^{22} = +1.6$ (*c* 0.54, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: *R*

Monika Wielechowska and Jan Plenkiewicz*

Tetrahedron: Asymmetry *14 (2003) 3203*



$C_{13}H_{19}ClO_2S$

(*R*)-(+)-1-Butylthio-3-(4-chlorophenoxy)propan-2-ol

Ee = 38%

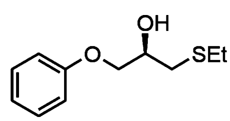
$[\alpha]_D^{22} = +3.6$ (*c* 2.95, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: *R*

Monika Wielechowska and Jan Plenkiewicz*

Tetrahedron: Asymmetry *14 (2003) 3203*



$C_{11}H_{16}O_2S$

(*R*)-(+)-1-Ethylthio-3-phenoxypropan-2-ol

Ee = 47%

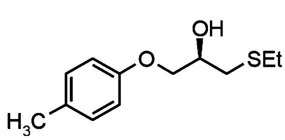
$[\alpha]_D^{22} = +2.9$ (*c* 2.09, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: *R*

Monika Wielechowska and Jan Plenkiewicz*

Tetrahedron: Asymmetry *14 (2003) 3203*



$C_{12}H_{18}O_2S$

(*R*)-(+)-1-Ethylthio-3-(4-methylphenoxy)propan-2-ol

Ee = 22%

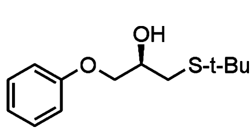
$[\alpha]_D^{22} = +1.6$ (*c* 1.82, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: *R*

Monika Wielechowska and Jan Plenkiewicz*

Tetrahedron: Asymmetry *14 (2003) 3203*



$C_{13}H_{20}O_2S$

(*R*)-(+)-1-*tert*-Butylthio-3-phenoxypropan-2-ol

Ee = 24%

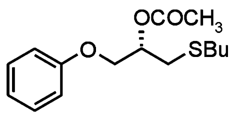
$[\alpha]_D^{22} = +1.6$ (1.90, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: *R*

Monika Wielechowska and Jan Plenkiewicz*

Tetrahedron: Asymmetry *14 (2003) 3203*



$C_{15}H_{22}O_3S$

(*S*)-(+)-1-Butylthio-3-phenoxypropan-2-ol acetate

Ee = 91%

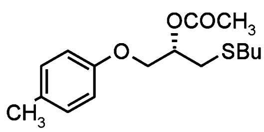
$[\alpha]_D^{22} = +6.4$ (c 1.72, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: *S*

Monika Wielechowska and Jan Plenkiewicz*

Tetrahedron: Asymmetry *14 (2003) 3203*



$C_{16}H_{24}O_3S$

(*S*)-(+)-1-Butylthio-3-(4-methylphenoxy)propan-2-ol acetate

Ee = 67%

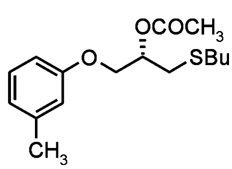
$[\alpha]_D^{24} = +5.0$ (c 1.79, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: *S*

Monika Wielechowska and Jan Plenkiewicz*

Tetrahedron: Asymmetry *14 (2003) 3203*



$C_{16}H_{24}O_3S$

(*S*)-(+)-1-Butylthio-3-(3-methylphenoxy)propan-2-ol acetate

Ee = 82%

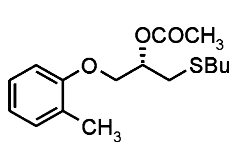
$[\alpha]_D^{24} = +6.1$ (c 1.81, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: *S*

Monika Wielechowska and Jan Plenkiewicz*

Tetrahedron: Asymmetry *14 (2003) 3203*



$C_{16}H_{24}O_3S$

(*S*)-(+)-1-Butylthio-3-(2-methylphenoxy)propan-2-ol acetate

Ee = 82%

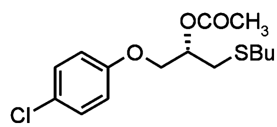
$[\alpha]_D^{24} = +13.9$ (c 0.54, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: *S*

Monika Wielechowska and Jan Plenkiewicz*

Tetrahedron: Asymmetry *14 (2003) 3203*



$C_{15}H_{21}ClO_3S$

(*S*)-(+)-1-Butylthio-3-(4-chlorophenoxy)propan-2-ol acetate

Ee = 73%

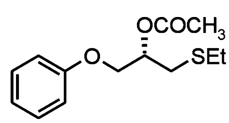
$[\alpha]_D^{24} = +4.6$ (*c* 1.83, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: *S*

Monika Wielechowska and Jan Plenkiewicz*

Tetrahedron: Asymmetry *14 (2003) 3203*



$C_{13}H_{18}O_3S$

(*S*)-(+)-1-Ethylthio-3-phenoxypropan-2-ol acetate

Ee = 83%

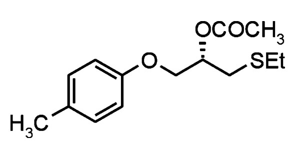
$[\alpha]_D^{24} = +5.6$ (*c* 1.70, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: *S*

Monika Wielechowska and Jan Plenkiewicz*

Tetrahedron: Asymmetry *14 (2003) 3203*



$C_{14}H_{20}O_3S$

(*S*)-(+)-1-Ethylthio-3-(4-methylphenoxy)propan-2-ol acetate

Ee = 24%

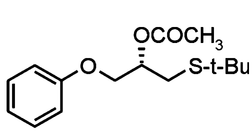
$[\alpha]_D^{24} = +3.5$ (*c* 1.70, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: *S*

Monika Wielechowska and Jan Plenkiewicz*

Tetrahedron: Asymmetry *14 (2003) 3203*



$C_{15}H_{22}O_3S$

(*S*)-(+)-1-*tert*-Butylthio-3-phenoxypropan-2-ol acetate

Ee = 67%

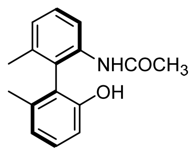
$[\alpha]_D^{22} = +4.8$ (*c* 1.60, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: *S*

Yuxue Liang, Shuang Gao, Huihui Wan, Yuanchun Hu, Huilin Chen, Zhuo Zheng and Xinquan Hu*

Tetrahedron: Asymmetry *14 (2003) 3211*



$C_{16}H_{17}NO_2$

(*R*)-(−)-2-(Acetamido)-2′-hydroxy-6,6′-dimethyl-1,1′-biphenyl

Ee >99%

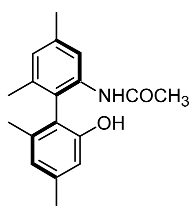
$[\alpha]_D^{23} = -7.9$ (*c* 0.5, THF)

Source of chirality: synthesized

Absolute configuration: *R*

Yuxue Liang, Shuang Gao, Huihui Wan, Yuanchun Hu, Huilin Chen, Zhuo Zheng and Xinquan Hu*

Tetrahedron: Asymmetry *14 (2003) 3211*



$C_{18}H_{21}NO_2$

(*R*)-(−)-2-(Acetamido)-2′-hydroxy-4,4′,6,6′-tetramethyl-1,1′-biphenyl

Ee >99%

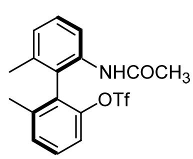
$[\alpha]_D^{23} = -7.6$ (*c* 0.5, THF)

Source of chirality: synthesized

Absolute configuration: *R*

Yuxue Liang, Shuang Gao, Huihui Wan, Yuanchun Hu, Huilin Chen, Zhuo Zheng and Xinquan Hu*

Tetrahedron: Asymmetry *14 (2003) 3211*



$C_{17}H_{16}F_3NO_4S$

(*R*)-(−)-2-(Acetamido)-2′-(trifluoromethylsulfonyloxy)-6,6′-dimethyl-1,1′-biphenyl

Ee >99%

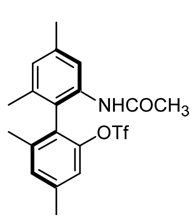
$[\alpha]_D^{23} = -36.3$ (*c* 0.5, THF)

Source of chirality: synthesized

Absolute configuration: *R*

Yuxue Liang, Shuang Gao, Huihui Wan, Yuanchun Hu, Huilin Chen, Zhuo Zheng and Xinquan Hu*

Tetrahedron: Asymmetry *14 (2003) 3211*



$C_{19}H_{20}F_3NO_4S$

(*R*)-(−)-2-(Acetamido)-2′-(trifluoromethylsulfonyloxy)-4,4′,6,6′-tetramethyl-1,1′-biphenyl

Ee >99%

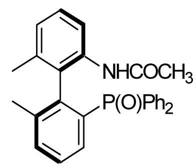
$[\alpha]_D^{23} = -38.4$ (*c* 0.5, THF)

Source of chirality: synthesized

Absolute configuration: *R*

Yuxue Liang, Shuang Gao, Huihui Wan, Yuanchun Hu, Huilin Chen, Zhuo Zheng and Xinquan Hu*

Tetrahedron: Asymmetry *14 (2003) 3211*



$C_{28}H_{26}NO_2P$

(*R*)-(−)-2-(Acetamido)-2′-(diphenylphosphinyl)-6,6′-dimethyl-1,1′-biphenyl

Ee >99%

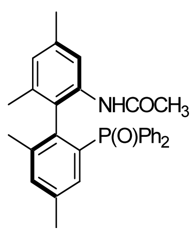
$[\alpha]_D^{23} = -130.4$ (*c* 0.5, THF)

Source of chirality: synthesized

Absolute configuration: *R*

Yuxue Liang, Shuang Gao, Huihui Wan, Yuanchun Hu, Huilin Chen, Zhuo Zheng and Xinquan Hu*

Tetrahedron: Asymmetry *14 (2003) 3211*



$C_{30}H_{30}NO_2P$

(*R*)-(−)-2-(Acetamido)-2′-(diphenylphosphinyl)-4,4′,6,6′-tetramethyl-1,1′-biphenyl

Ee >99%

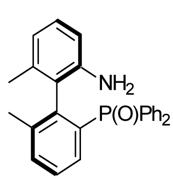
$[\alpha]_D^{23} = -94.3$ (*c* 0.5, THF)

Source of chirality: synthesized

Absolute configuration: *R*

Yuxue Liang, Shuang Gao, Huihui Wan, Yuanchun Hu, Huilin Chen, Zhuo Zheng and Xinquan Hu*

Tetrahedron: Asymmetry *14 (2003) 3211*



$C_{26}H_{24}NOP$

(*R*)-(−)-2-Amino-2′-(diphenylphosphinyl)-6,6′-dimethyl-1,1′-biphenyl

Ee >99%

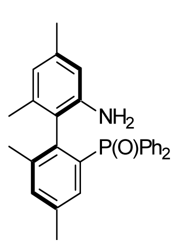
$[\alpha]_D^{24} = -87.9$ (*c* 0.5, THF)

Source of chirality: synthesized

Absolute configuration: *R*

Yuxue Liang, Shuang Gao, Huihui Wan, Yuanchun Hu, Huilin Chen, Zhuo Zheng and Xinquan Hu*

Tetrahedron: Asymmetry *14 (2003) 3211*



$C_{28}H_{28}NOP$

(*R*)-(−)-2-Amino-2′-(diphenylphosphinyl)-4,4′,6,6′-tetramethyl-1,1′-biphenyl

Ee >99%

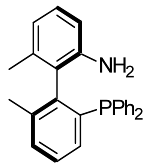
$[\alpha]_D^{23} = -78.7$ (*c* 0.5, THF)

Source of chirality: synthesized

Absolute configuration: *R*

Yuxue Liang, Shuang Gao, Huihui Wan, Yuanchun Hu, Huilin Chen, Zhuo Zheng and Xinquan Hu*

Tetrahedron: Asymmetry *14 (2003) 3211*



$C_{26}H_{24}NP$

(*R*)-(−)-2-Amino-2′-(diphenylphosphino)-6,6′-dimethyl-1,1′-biphenyl

Ee >99%

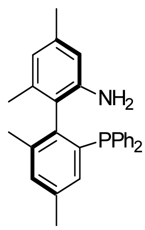
$[\alpha]_D^{23} = -83.9$ (*c* 0.5, THF)

Source of chirality: synthesized

Absolute configuration: *R*

Yuxue Liang, Shuang Gao, Huihui Wan, Yuanchun Hu, Huilin Chen, Zhuo Zheng and Xinquan Hu*

Tetrahedron: Asymmetry *14 (2003) 3211*



$C_{28}H_{28}NP$

(*R*)-(−)-2-Amino-2′-(diphenylphosphino)-4,4′,6,6′-tetramethyl-1,1′-biphenyl

Ee >99%

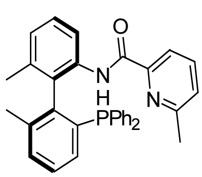
$[\alpha]_D^{23} = -78.4$ (*c* 0.5, THF)

Source of chirality: synthesized

Absolute configuration: *R*

Yuxue Liang, Shuang Gao, Huihui Wan, Yuanchun Hu, Huilin Chen, Zhuo Zheng and Xinquan Hu*

Tetrahedron: Asymmetry *14 (2003) 3211*



$C_{33}H_{29}N_2OP$

(*R*)-(−)-2-(6-Methyl-2-pyridinylcarboxamido)-2′-(diphenylphosphino)-6,6′-dimethyl-1,1′-biphenyl

Ee >99%

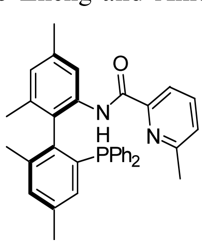
$[\alpha]_D^{23} = -176.6$ (*c* 0.5, THF)

Source of chirality: synthesized

Absolute configuration: *R*

Yuxue Liang, Shuang Gao, Huihui Wan, Yuanchun Hu, Huilin Chen, Zhuo Zheng and Xinquan Hu*

Tetrahedron: Asymmetry *14 (2003) 3211*



$C_{35}H_{33}N_2OP$

(*R*)-(−)-2-(6-Methyl-2-pyridinylcarboxamido)-2′-(diphenylphosphino)-4,4′,6,6′-tetramethyl-1,1′-biphenyl

Ee >99%

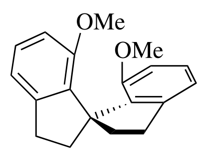
$[\alpha]_D^{23} = -180.9$ (*c* 0.5, THF)

Source of chirality: synthesized

Absolute configuration: *R*

Shou-Fei Zhu, Yu Fu, Jian-Hua Xie, Bin Liu, Liang Xing and Qi-Lin Zhou*

Tetrahedron: Asymmetry *14 (2003) 3219*



$C_{19}H_{20}O_2$

(*S*)-7,7′-Dimethoxy-1,1′-spirobiindane

E.e. = 100%

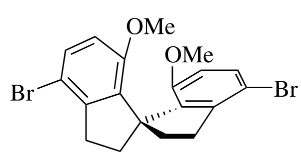
$[\alpha]_D^{25} = -40$ (c 0.5, CH_2Cl_2)

Source of chirality: chiral resolution

Absolute configuration: *S*

Shou-Fei Zhu, Yu Fu, Jian-Hua Xie, Bin Liu, Liang Xing and Qi-Lin Zhou*

Tetrahedron: Asymmetry *14 (2003) 3219*



$C_{19}H_{18}Br_2O_2$

(*S*)-4,4′-Dibromo-7,7′-dimethoxy-1,1′-spirobiindane

E.e. = 100%

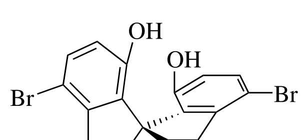
$[\alpha]_D^{25} = +26$ (c 0.5, CH_2Cl_2)

Source of chirality: chiral resolution

Absolute configuration: *S*

Shou-Fei Zhu, Yu Fu, Jian-Hua Xie, Bin Liu, Liang Xing and Qi-Lin Zhou*

Tetrahedron: Asymmetry *14 (2003) 3219*



$C_{17}H_{14}Br_2O_2$

(*S*)-4,4′-Dibromo-7,7′-dihydroxy-1,1′-spirobiindane

E.e. = 100%

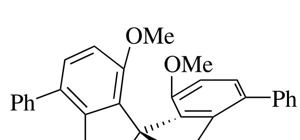
$[\alpha]_D^{25} = +184$ (c 0.5, CH_2Cl_2)

Source of chirality: chiral resolution

Absolute configuration: *S*

Shou-Fei Zhu, Yu Fu, Jian-Hua Xie, Bin Liu, Liang Xing and Qi-Lin Zhou*

Tetrahedron: Asymmetry *14 (2003) 3219*



$C_{31}H_{28}O_2$

(*S*)-4,4′-Diphenyl-7,7′-dimethoxy-1,1′-spirobiindane

E.e. = 100%

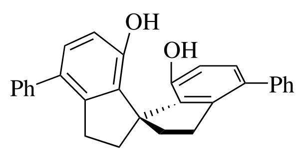
$[\alpha]_D^{25} = +6$ (c 0.5, CH_2Cl_2)

Source of chirality: chiral resolution

Absolute configuration: *S*

Shou-Fei Zhu, Yu Fu, Jian-Hua Xie, Bin Liu, Liang Xing
and Qi-Lin Zhou*

Tetrahedron: Asymmetry *14 (2003) 3219*



$C_{29}H_{24}O_2$

(*S*)-4,4′-Diphenyl-7,7′-dihydroxy-1,1′-spirobiindane

E.e. = 100%

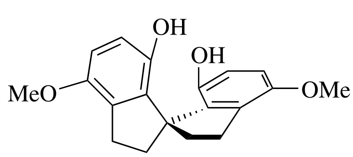
$[\alpha]_D^{25} = +142$ (*c* 0.5, CH_2Cl_2)

Source of chirality: chiral resolution

Absolute configuration: *S*

Shou-Fei Zhu, Yu Fu, Jian-Hua Xie, Bin Liu, Liang Xing
and Qi-Lin Zhou*

Tetrahedron: Asymmetry *14 (2003) 3219*



$C_{19}H_{20}O_4$

(*S*)-4,4′-Dimethoxy-7,7′-dihydroxy-1,1′-spirobiindane

E.e. = 100%

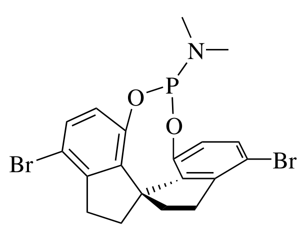
$[\alpha]_D^{25} = -16$ (*c* 0.5, CH_2Cl_2)

Source of chirality: chiral resolution

Absolute configuration: *S*

Shou-Fei Zhu, Yu Fu, Jian-Hua Xie, Bin Liu, Liang Xing
and Qi-Lin Zhou*

Tetrahedron: Asymmetry *14 (2003) 3219*



$C_{19}H_{18}Br_2NO_2P$

(*S*)-*O*,*O*′-[4,4′-Dibromo-1,1′-spirobiindane-7,7′-diyl]-*N*,*N*-dimethylphosphoramidite

E.e. = 100%

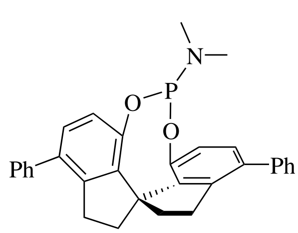
$[\alpha]_D^{25} = -208$ (*c* 0.5, CH_2Cl_2)

Source of chirality: chiral resolution

Absolute configuration: *S*

Shou-Fei Zhu, Yu Fu, Jian-Hua Xie, Bin Liu, Liang Xing
and Qi-Lin Zhou*

Tetrahedron: Asymmetry *14 (2003) 3219*



$C_{31}H_{28}NO_2P$

(*S*)-*O*,*O*′-[4,4′-Diphenyl-1,1′-spirobiindane-7,7′-diyl]-*N*,*N*-dimethylphosphoramidite

E.e. = 100%

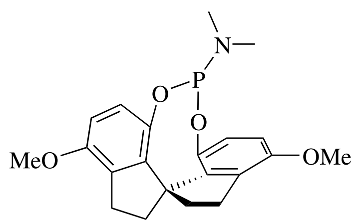
$[\alpha]_D^{25} = -216$ (*c* 0.5, CH_2Cl_2)

Source of chirality: chiral resolution

Absolute configuration: *S*

Shou-Fei Zhu, Yu Fu, Jian-Hua Xie, Bin Liu, Liang Xing and Qi-Lin Zhou*

Tetrahedron: Asymmetry *14 (2003) 3219*



$C_{21}H_{24}NO_4P$

(*S*)-*O*,*O*′-[4,4′-Dimethoxy-1,1′-spirobiindane-7,7′-diyl]-*N*,*N*-dimethylphosphoramidite

E.e. = 100%

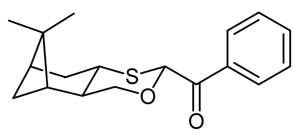
$[\alpha]_D^{25} = -220$ (*c* 0.5, CH_2Cl_2)

Source of chirality: chiral resolution

Absolute configuration: *S*

María Elena Vargas-Díaz, Luis Chacón-García, Pedro Velázquez, Joaquín Tamariz, Pedro Joseph-Nathan and L. Gerardo Zepeda*

Tetrahedron: Asymmetry *14 (2003) 3225*



$C_{18}H_{22}O_2S$

(1*S*,2*R*,5*R*,7*S*,9*R*)-5-Benzoyl-10,10-dimethyl-4-oxa-6-thiatricyclo[7.1.1.0^{2,7}]undecane

Dr >99% (NMR)

$[\alpha]_D^{25} = -68.4$

Source of chirality: (–)-myrtenal

Absolute configuration: (1*S*,2*R*,5*R*,7*S*,9*R*)

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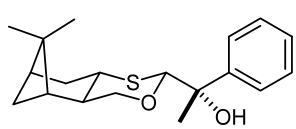
Tetrahedron: Asymmetry *14 (2003) 3225*



$C_{19}H_{26}O_2S$

(1*S*,2*R*,5*R*,7*S*,9*R*)-5-[(1′*S*)-1′-Hydroxy-1′-phenyl-1′-ethyl)]-10,10-dimethyl-4-oxa-6-thiatricyclo[7.1.1.0^{2,7}]undecane

Dr >99% (NMR)

$[\alpha]_D^{25} = -62.4$

Source of chirality: (–)-myrtenal

Absolute configuration: (1*S*,2*R*,5*R*,7*S*,9*R*,1′*S*)

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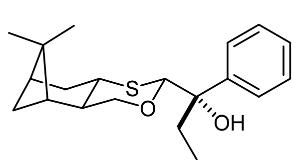
Tetrahedron: Asymmetry *14 (2003) 3225*



$C_{20}H_{28}O_2S$

(1*S*,2*R*,5*R*,7*S*,9*R*)-5-[(1′*S*)-1′-Hydroxy-1′-phenyl-1′-propyl)]-10,10-dimethyl-4-oxa-6-thiatricyclo[7.1.1.0^{2,7}]undecane

Dr >99% (NMR)

$[\alpha]_D^{25} = -72.8$

Source of chirality: (–)-myrtenal

Absolute configuration: (1*S*,2*R*,5*R*,7*S*,9*R*,1′*S*)

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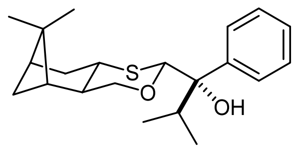
Tetrahedron: Asymmetry *14 (2003) 3225*



$C_{21}H_{30}O_2S$

(1*S*,2*R*,5*R*,7*S*,9*R*)-5-[(1′*S*)-1′-Hydroxy-2′-methyl-1′-phenyl-1′-propyl)]-10,10-dimethyl-4-oxa-6-thiatricyclo[7.1.1.0^{2,7}]undecane

Dr >99% (NMR)
$[\alpha]_D^{25} = -68.1$
Source of chirality: (–)-myrtenal
Absolute configuration: (1*S*,2*R*,5*R*,7*S*,9*R*,1′*S*)

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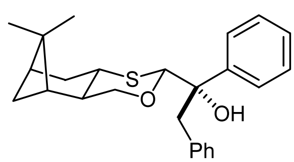
Tetrahedron: Asymmetry *14 (2003) 3225*



$C_{25}H_{30}O_2S$

(1*S*,2*R*,5*R*,7*S*,9*R*)-5-[(1′*S*)-1′-Hydroxy-1′,2′-diphenyl-1′-ethyl)]-10,10-dimethyl-4-oxa-6-thiatricyclo[7.1.1.0^{2,7}]undecane

Dr >99% (NMR)
$[\alpha]_D^{24} = -86.6$
Source of chirality: (–)-myrtenal
Absolute configuration: (1*S*,2*R*,5*R*,7*S*,9*R*,1′*S*)

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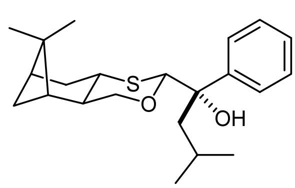
Tetrahedron: Asymmetry *14 (2003) 3225*



$C_{22}H_{32}O_2S$

(1*S*,2*R*,5*R*,7*S*,9*R*)-5-[(1′*S*)-1′-Hydroxy-3′-methyl-1′-phenyl-1′-butyl)]-10,10-dimethyl-4-oxa-6-thiatricyclo[7.1.1.0^{2,7}]undecane

Dr >99% (NMR)
$[\alpha]_D^{20} = -68.8$
Source of chirality: (–)-myrtenal
Absolute configuration: (1*S*,2*R*,5*R*,7*S*,9*R*,1′*S*)

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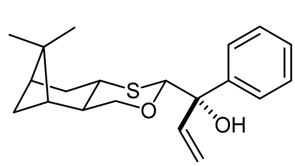
Tetrahedron: Asymmetry *14 (2003) 3225*



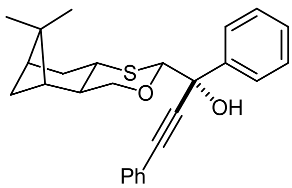
$C_{20}H_{26}O_2S$

(1*S*,2*R*,5*R*,7*S*,9*R*)-5-[(1′*S*)-1′-Hydroxy-1′-phenyl-2′-propen-1′-yl)]-10,10-dimethyl-4-oxa-6-thiatricyclo[7.1.1.0^{2,7}]undecane

Dr >99% (NMR)
$[\alpha]_D^{25} = -68.1$
Source of chirality: (–)-myrtenal
Absolute configuration: (1*S*,2*R*,5*R*,7*S*,9*R*,1′*S*)

María Elena Vargas-Díaz, Luis Chacón-García, Pedro Velázquez, Joaquín Tamariz, Pedro Joseph-Nathan and L. Gerardo Zepeda*

Tetrahedron: Asymmetry *14 (2003) 3225*



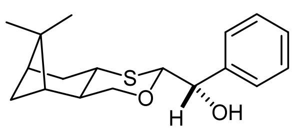
$C_{26}H_{28}O_2S$

(1*S*,2*R*,5*R*,7*S*,9*R*)-5-[(1′*S*)-1′-Hydroxy-1′,3′-diphenyl-2′-propyn-1′-yl)]-10,10-dimethyl-4-oxa-6-thiatricyclo[7.1.1.0^{2,7}]undecane

Dr >99% (NMR)
$[\alpha]_D^{25} = -27.1$
Source of chirality: (–)-myrtenal
Absolute configuration: (1*S*,2*R*,5*R*,7*S*,9*R*,1′*S*)

María Elena Vargas-Díaz, Luis Chacón-García, Pedro Velázquez, Joaquín Tamariz, Pedro Joseph-Nathan and L. Gerardo Zepeda*

Tetrahedron: Asymmetry *14 (2003) 3225*



$C_{18}H_{24}O_2S$

(1*S*,2*R*,5*R*,7*S*,9*R*)-5-[(*S*)-1′-Hydroxymethylphenyl)]-10,10-dimethyl-4-oxa-6-thiatricyclo[7.1.1.0^{2,7}]undecane

Dr >99% (NMR)
$[\alpha]_D^{25} = -45.9$
Source of chirality: (–)-myrtenal
Absolute configuration: (1*S*,2*R*,5*R*,7*S*,9*R*,*S*)

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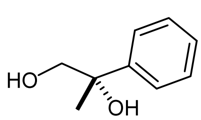
Tetrahedron: Asymmetry *14 (2003) 3225*



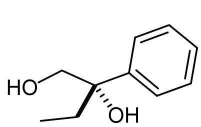
$C_9H_{12}O_2$

(*S*)-(+)-2-Phenylpropane-1,2-diol

Ee >99%
$[\alpha]_D^{23} = +5.7$
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

María Elena Vargas-Díaz, Luis Chacón-García, Pedro Velázquez, Joaquín Tamariz, Pedro Joseph-Nathan and L. Gerardo Zepeda*

Tetrahedron: Asymmetry *14 (2003) 3225*



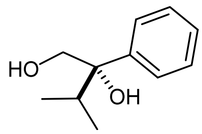
$C_{10}H_{14}O_2$

(*S*)-(–)-2-Phenylbutane-1,2-diol

Ee >98%
$[\alpha]_D^{25} = -7.2$
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

María Elena Vargas-Díaz, Luis Chacón-García, Pedro Velázquez, Joaquín Tamariz, Pedro Joseph-Nathan and L. Gerardo Zepeda*

Tetrahedron: Asymmetry *14 (2003) 3225*



$C_{11}H_{16}O_2$

(*S*)-(−)-3-Methyl-2-phenylbutane-1,2-diol

Ee >98%

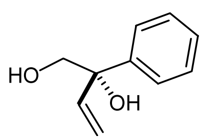
$[\alpha]_D^{20} = -19.5$

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)

María Elena Vargas-Díaz, Luis Chacón-García, Pedro Velázquez, Joaquín Tamariz, Pedro Joseph-Nathan and L. Gerardo Zepeda*

Tetrahedron: Asymmetry *14 (2003) 3225*



$C_{10}H_{12}O_2$

(*S*)-(−)-2-Phenylbut-3-ene-1,2-diol

Ee >98%

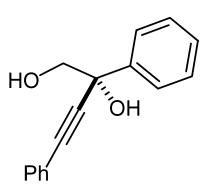
$[\alpha]_D^{20} = -43.4$

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)

María Elena Vargas-Díaz, Luis Chacón-García, Pedro Velázquez, Joaquín Tamariz, Pedro Joseph-Nathan and L. Gerardo Zepeda*

Tetrahedron: Asymmetry *14 (2003) 3225*



$C_{16}H_{14}O_2$

(*S*)-(+)-2,4-Diphenylbut-3-yne-1,2-diol

Ee >99%

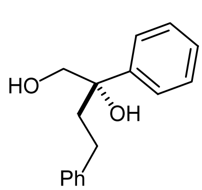
$[\alpha]_D^{20} = +11.0$

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)

María Elena Vargas-Díaz, Luis Chacón-García, Pedro Velázquez, Joaquín Tamariz, Pedro Joseph-Nathan and L. Gerardo Zepeda*

Tetrahedron: Asymmetry *14 (2003) 3225*



$C_{16}H_{18}O_2$

(*S*)-(+)-2,4-Diphenylbutane-1,2-diol

Ee >99%

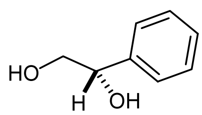
$[\alpha]_D^{23} = +10.6$

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)

María Elena Vargas-Díaz, Luis Chacón-García, Pedro Velázquez, Joaquín Tamariz, Pedro Joseph-Nathan and L. Gerardo Zepeda*

Tetrahedron: Asymmetry *14 (2003) 3225*



$C_8H_{10}O_2$

(*S*)-(+)-1-Phenylethane-1,2-diol

Ee >99%

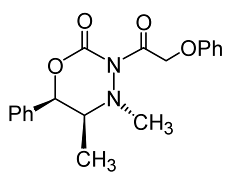
$[\alpha]_D^{23} = +38.6$

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)

Trisha R. Hoover and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *14 (2003) 3233*



$C_{19}H_{20}N_2O_4$

(4*R*,5*S*,6*R*)-3,4,5,6-Tetrahydro-4,5-dimethyl-3-(2-phenoxyacetyl)-6-phenyl-2*H*-1,3,4-oxadiazin-2-one

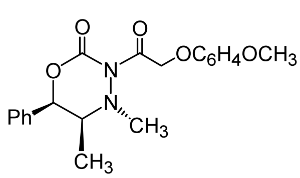
$[\alpha]_D^{25} = -41.8$ (*c* 1.14, methanol)

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

Absolute configuration: (4*R*,5*S*,6*R*)

Trisha R. Hoover and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *14 (2003) 3233*



$C_{20}H_{22}N_2O_5$

(4*R*,5*S*,6*R*)-3,4,5,6-Tetrahydro-3-[2-(4-methoxyphenoxy)acetyl]-4,5-dimethyl-6-phenyl-2*H*-1,3,4-oxadiazin-2-one

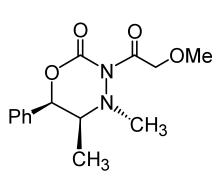
$[\alpha]_D^{25} = -40.5$ (*c* 1.66, methanol)

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

Absolute configuration: (4*R*,5*S*,6*R*)

Trisha R. Hoover and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *14 (2003) 3233*



$C_{14}H_{18}N_2O_4$

(4*R*,5*S*,6*R*)-3-(2-Methoxyacetyl)-4,5-dimethyl-6-phenyl-2*H*-1,3,4-oxadiazin-2-one

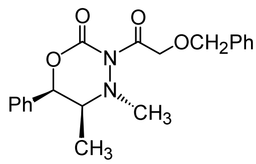
$[\alpha]_D^{25} = -70.9$ (*c* 1.86, methanol)

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

Absolute configuration: (4*R*,5*S*,6*R*)

Trisha R. Hoover and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *14 (2003) 3233*

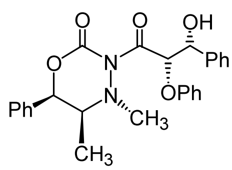


$[\alpha]_D^{25} = -55.7$ (*c* 2.15, methanol)
Source of chirality: (1*R*,2*S*)-ephedrine
Absolute configuration: (4*R*,5*S*,6*R*)

$C_{20}H_{23}N_2O_4$
(4*R*,5*S*,6*R*)-3-(2-Benzyloxyacetyl)-3,4,5,6-tetrahydro-4,5-dimethyl-6-phenyl-2*H*-1,3,4-oxadiazin-2-one

Trisha R. Hoover and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *14 (2003) 3233*

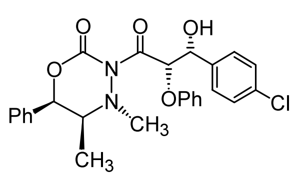


$[\alpha]_D^{25} = -6.0$ (*c* 2.46, methanol)
Source of chirality: (1*R*,2*S*)-ephedrine
Absolute configuration: (2′*S*,3′*R*,4*R*,5*S*,6*R*)

$C_{26}H_{26}N_2O_5$
(2′*S*,3′*R*,4*R*,5*S*,6*R*)-3,4,5,6-Tetrahydro-3-(3-hydroxy-2-phenoxy-3-phenylpropionyl)-4,5-dimethyl-6-phenyl-2*H*-1,3,4-oxadiazin-2-one

Trisha R. Hoover and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *14 (2003) 3233*

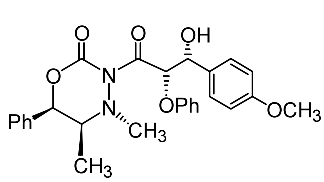


$[\alpha]_D^{25} = -1.4$ (*c* 2.22, methanol)
Source of chirality: (1*R*,2*S*)-ephedrine
Absolute configuration: (2′*S*,3′*R*,4*R*,5*S*,6*R*)

$C_{26}H_{26}N_2O_5Cl$
(2′*S*,3′*R*,4*R*,5*S*,6*R*)-3-[3-(4-Chlorophenyl)-3-hydroxy-2-phenoxypropionyl]-3,4,5,6-tetrahydro-4,5-dimethyl-6-phenyl-2*H*-1,3,4-oxadiazin-2-one

Trisha R. Hoover and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *14 (2003) 3233*

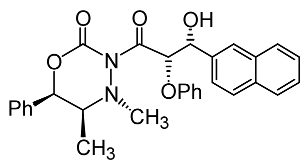


$[\alpha]_D^{25} = -20.8$ (*c* 2.29, methanol)
Source of chirality: (1*R*,2*S*)-ephedrine
Absolute configuration: (2′*S*,3′*R*,4*R*,5*S*,6*R*)

$C_{27}H_{28}N_2O_5$
(2′*S*,3′*R*,4*R*,5*S*,6*R*)-3,4,5,6-Tetrahydro-3-[3-hydroxy-3-(4-methoxyphenyl)-2-phenoxy-propionyl]-4,5-dimethyl-6-phenyl-2*H*-1,3,4-oxadiazin-one

Trisha R. Hoover and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *14 (2003) 3233*

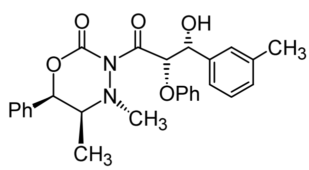


$[\alpha]_D^{25} = +10.3$ (*c* 2.00, methanol)
Source of chirality: (1*R*,2*S*)-ephedrine
Absolute configuration: (2′*S*,3′*R*,4*R*,5*S*,6*R*)

$C_{30}H_{28}N_2O_5$
(2′*S*,3′*R*,4*R*,5*S*,6*R*)-3,4,5,6-Tetrahydro-3-(3-hydroxy-3-naphthalen-2-yl-2-phenoxy-propionyl)-4,5-dimethyl-6-phenyl-2*H*-1,3,4-oxadiazin-2-one

Trisha R. Hoover and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *14 (2003) 3233*

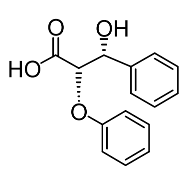


$[\alpha]_D^{25} = -6.0$ (*c* 1.28, methanol)
Source of chirality: (1*R*,2*S*)-ephedrine
Absolute configuration: (2′*S*,3′*R*,4*R*,5*S*,6*R*)

$C_{27}H_{28}N_2O_5$
(2′*S*,3′*R*,4*R*,5*S*,6*R*)-3,4,5,6-Tetrahydro-3-(3-hydroxy-2-phenoxy-3-*m*-tolylpropionyl)-4,5-dimethyl-6-phenyl-2*H*-1,3,4-oxadiazin-2-one

Trisha R. Hoover and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *14 (2003) 3233*

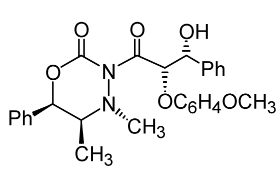


$[\alpha]_D^{25} = -41.3$ (*c* 1.73, ethanol)
Source of chirality: (1*R*,2*S*)-ephedrine
Absolute configuration: 2*S*,3*R*

$C_{15}H_{15}O_4$
(+)-(2*S*,3*R*)-3-Hydroxy-2-phenoxy-3-phenylpropionic acid

Trisha R. Hoover and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *14 (2003) 3233*

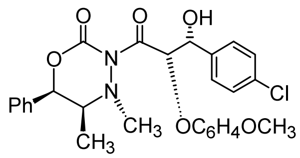


$[\alpha]_D^{25} = -13.7$ (*c* 2.10, methanol)
Source of chirality: (1*R*,2*S*)-ephedrine
Absolute configuration: (2′*S*,3′*R*,4*R*,5*S*,6*R*)

$C_{27}H_{28}N_2O_6$
(2′*S*,3′*R*,4*R*,5*S*,6*R*)-3,4,5,6-Tetrahydro-3-[3-hydroxy-2-(4-methoxyphenoxy)-3-phenylpropionyl]-4,5-dimethyl-6-phenyl-2*H*-1,3,4-oxadiazin-2-one

Trisha R. Hoover and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *14 (2003) 3233*



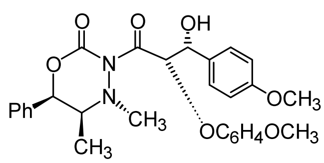
$C_{27}H_{28}N_2O_6Cl$

$[\alpha]_D^{25} = -6.5$ (*c* 2.20, methanol)
Source of chirality: (1*R*,2*S*)-ephedrine
Absolute configuration: (2′*S*,3′*R*,4*R*,5*S*,6*R*)

(2′*S*,3′*R*,4*R*,5*S*,6*R*)-3-[3-(4-Chlorophenyl)-3-hydroxy-2-(4-methoxyphenoxy)propionyl]-3,4,5,6-tetrahydro-4,5-dimethyl-6-phenyl-2*H*-1,3,4-oxadiazin-2-one

Trisha R. Hoover and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *14 (2003) 3233*



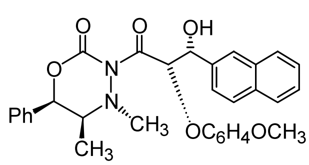
$C_{28}H_{30}N_2O_6$

$[\alpha]_D = -14.5$ (*c* 2.58, methanol)
Source of chirality: (1*R*,2*S*)-ephedrine
Absolute configuration: (2′*S*,3′*R*,4*R*,5*S*,6*R*)

(2′*S*,3′*R*,4*S*,5*S*,6*R*)-3,4,5,6-Tetrahydro-3-[3-Hydroxy-2-(4-methoxyphenoxy)-3-(4-methoxyphenyl)propionyl]-4,5-dimethyl-6-phenyl-2*H*-1,3,4-oxadiazin-2-one

Trisha R. Hoover and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *14 (2003) 3233*



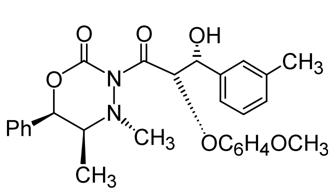
$C_{31}H_{30}N_2O_6$

$[\alpha]_D^{25} = +2.2$ (*c* 1.92, methanol)
Source of chirality: (1*R*,2*S*)-ephedrine
Absolute configuration: (2′*S*,3′*R*,4*R*,5*S*,6*R*)

(2′*S*,3′*R*,4*R*,5*S*,6*R*)-3,4,5,6-Tetrahydro-3-[3-hydroxy-2-(4-methoxyphenoxy)-3-naphthalen-2-yl-propionyl]-4,5-dimethyl-6-phenyl-2*H*-1,3,4-oxadiazin-2-one

Trisha R. Hoover and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *14 (2003) 3233*



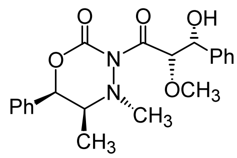
$C_{28}H_{30}N_2O_6$

$[\alpha]_D^{25} = -10.4$ (*c* 2.71, methanol)
Source of chirality: (1*R*,2*S*)-ephedrine
Absolute configuration: (2′*S*,3′*R*,4*R*,5*S*,6*R*)

(2′*S*,3′*R*,4*R*,5*S*,6*R*)-3,4,5,6-Tetrahydro-3-[3-hydroxy-2-(4-methoxyphenoxy)-3-*m*-tolylpropionyl]-4,5-dimethyl-6-phenyl-2*H*-1,3,4-oxadiazin-2-one

Trisha R. Hoover and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *14 (2003) 3233*



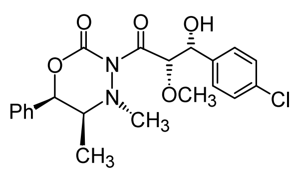
$[\alpha]_D^{25}=-60.8$ (*c* 1.98, methanol)
Source of chirality: (1*R*,2*S*)-ephedrine
Absolute configuration: : (2′*S*,3′*R*,4*R*,5*S*,6*R*)

$C_{21}H_{24}N_2O_5$

(2′*S*,3′*R*,4*R*,5*S*,6*R*)-3,4,5,6-Tetrahydro-3-(3-hydroxy-2-methoxy-3-phenylpropionyl)-4,5-dimethyl-6-phenyl-2*H*-1,3,4-oxadiazin-2-one

Trisha R. Hoover and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *14 (2003) 3233*



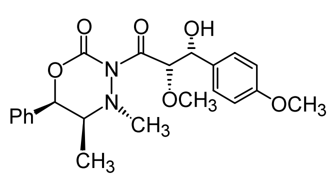
$[\alpha]_D^{25}=-44.1$ (*c* 2.45, methanol)
Source of chirality: (1*R*,2*S*)-ephedrine
Absolute configuration: (2′*S*,3′*R*,4*R*,5*S*,6*R*)

$C_{21}H_{24}N_2O_5Cl$

(2′*S*,3′*R*,4*R*,5*S*,6*R*)-3-[3-(4-Chlorophenyl)-3-hydroxy-2-methoxypropionyl]-3,4,5,6-tetrahydro-4,5-dimethyl-6-phenyl-2*H*-1,3,4-oxadiazin-2-one

Trisha R. Hoover and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *14 (2003) 3233*



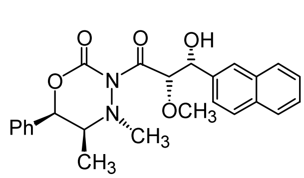
$[\alpha]_D^{25}=-41.8$ (*c* 2.33, methanol)
Source of chirality: (1*R*,2*S*)-ephedrine
Absolute configuration: (2′*S*,3′*R*,4*R*,5*S*,6*R*)

$C_{22}H_{26}N_2O_6$

(2′*S*,3′*R*,4*R*,5*S*,6*R*)-3,4,5,6-Tetrahydro-3-[3-hydroxy-2-methoxy-3-(4-methoxyphenyl)propionyl]-4,5-dimethyl-6-phenyl-2*H*-1,3,4-oxadiazin-2-one

Trisha R. Hoover and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *14 (2003) 3233*



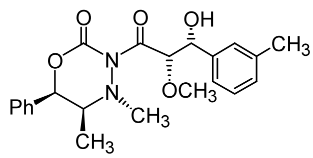
$[\alpha]_D^{25}=-56.9$ (*c* 1.77, methanol)
Source of chirality: (1*R*,2*S*)-ephedrine
Absolute configuration: (2′*S*,3′*R*,4*R*,5*S*,6*R*)

$C_{25}H_{26}N_2O_5$

(2′*S*,3′*R*,4*R*,5*S*,6*R*)-3,4,5,6-Tetrahydro-3-(3-hydroxy-2-methoxy-3-naphthalen-2-yl-propionyl)-4,5-dimethyl-6-phenyl-2*H*-1,3,4-oxadiazin-2-one

Trisha R. Hoover and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *14 (2003) 3233*



$C_{22}H_{26}N_2O_5$

(2′*S*,3′*R*,4*R*,5*S*,6*R*)-3,4,5,6-Tetrahydro-3-(3-hydroxy-2-methoxy-3-*m*-tolylpropionyl)-4,5-dimethyl-6-phenyl-2*H*-1,3,4-oxadiazin-2-one

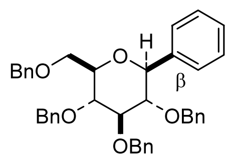
$[\alpha]_D^{25} = -28.6$ (*c* 2.28, methanol)

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

Absolute configuration: (2′*S*,3′*R*,4*R*,5*S*,6*R*)

Bruce A. Ellsworth,* Abigail G. Doyle, Manorama Patel, Janet Caceres-Cortes, Wei Meng, Prashant P. Deshpande, Annie Pullockaran and William N. Washburn

Tetrahedron: Asymmetry *14 (2003) 3243*



$C_{40}H_{40}O_5$

(1*S*)-2,3,4,6-Tetra-*O*-benzyl-1*C*-phenyl-1-deoxyglucose

$[\alpha]_D^{25} = +11.1$ (*c* 0.38, $CHCl_3$)

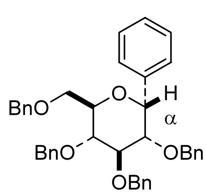
De >95% ([1]H NMR)

Source of chirality: tetra-*O*-benzyl-D-gluconolactone and asymmetric reduction at the anomeric center

Absolute configuration: (1*S*,2*S*,3*R*,4*R*,5*R*)

Bruce A. Ellsworth,* Abigail G. Doyle, Manorama Patel, Janet Caceres-Cortes, Wei Meng, Prashant P. Deshpande, Annie Pullockaran and William N. Washburn

Tetrahedron: Asymmetry *14 (2003) 3243*



$C_{40}H_{40}O_5$

(1*R*)-2,3,4,6-Tetra-*O*-benzyl-1*C*-phenyl-1-deoxyglucose

$[\alpha]_D^{25} = +95.5$ (*c* 0.02, $CDCl_3$)

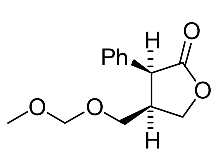
De >95% ([1]H NMR)

Source of chirality: tetra-*O*-benzyl-D-gluconolactone and asymmetric reduction at the anomeric center

Absolute configuration: (1*R*,2*S*,3*R*,4*R*,5*R*)

Paulo Marcos Donate,* Daniel Frederico, Rosangela da Silva, Mauricio Gomes Constantino, Gino Del Ponte and Pierina Sueli Bonatto*

Tetrahedron: Asymmetry *14 (2003) 3253*



$C_{13}H_{16}O_4$

4-[(Methoxymethoxy)methyl]-3-phenyldihydrofuran-2-(3*H*)-one

E.e. = 98.5%

$[\alpha]_D^{25} = -7.3$ (*c* 0.5, MeOH)

Source of chirality: (*S*)-BINAP–rhodium complex

Paulo Marcos Donate,* Daniel Frederico, Rosangela da Silva,
Mauricio Gomes Constantino, Gino Del Ponte
and Pierina Sueli Bonatto*

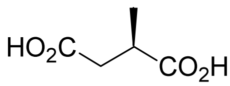
Tetrahedron: Asymmetry *14 (2003) 3253*

E.e. = 97%

$[\alpha]_D^{25} = +16.4$ (*c* 15.2, EtOH)

Source of chirality: (*R*)-BINAP–rhodium complex

Absolute configuration (2*R*)



$C_5H_8O_4$

(2*R*)-2-Methyl-succinic acid