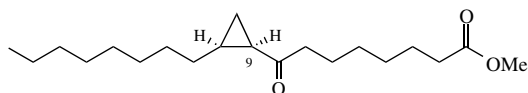


Stereochemistry abstracts

Laura J. Stuart and Peter H. Buist*

Tetrahedron: Asymmetry 15 (2004) 401



$C_{20}H_{36}O_3$

Methyl (Z)-8-(2-(1-oxo)-octylcyclopropane-1-yl)-8-oxo-octanoate

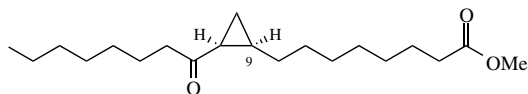
$[\alpha]_D^{21} = -14.8$ (c 0.9, Et₂O)

Source of chirality: oxidation of dihydrosterculate

Absolute configuration: (9*R*,10*S*)

Laura J. Stuart and Peter H. Buist*

Tetrahedron: Asymmetry 15 (2004) 401



$C_{20}H_{36}O_3$

Methyl (Z)-8-(2-(1-oxo)-octylcyclopropane-1-yl)-octanoate

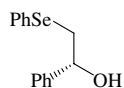
$[\alpha]_D^{21} = +20.7$ (c 1.0, Et₂O)

Source of chirality: oxidation of dihydrosterculate

Absolute configuration: (9*R*,10*S*)

Marcello Tiecco,* Lorenzo Testaferri, Luana Bagnoli, Valentina Purgatorio, Andrea Temperini, Francesca Marini and Claudio Santi

Tetrahedron: Asymmetry 15 (2004) 405



$C_{14}H_{14}OSe$

(1*R*)-1-Phenyl-2-(phenylseleno)ethanol

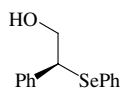
$[\alpha]_D^{24} = -14.6$ (c 1.70, CHCl₃)

Source of chirality: (*R*)-Phenyloxirane

Absolute configuration: 1*R*

Marcello Tiecco,* Lorenzo Testaferri, Luana Bagnoli, Valentina Purgatorio, Andrea Temperini, Francesca Marini and Claudio Santi

Tetrahedron: Asymmetry 15 (2004) 405



$C_{14}H_{14}OSe$

(2*S*)-2-Phenyl-2-(phenylseleno)ethanol

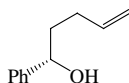
$[\alpha]_D^{26} = +130.0$ (c 2.20, CHCl₃)

Source of chirality: (*R*)-Phenyloxirane

Absolute configuration: 2*S*

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Claudio Santi

Tetrahedron: Asymmetry 15 (2004) 405



$C_{11}H_{14}O$

(1*S*)-1-Phenylpent-4-en-1-ol

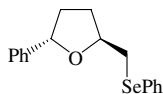
$[\alpha]_D^{24} = -31.0$ (*c* 3.37, $CHCl_3$)

Source of chirality: (*R*)-Phenyloxirane

Absolute configuration: 1*S*

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Valentina Purgatorio, Andrea Temperini, Francesca Marini and
Claudio Santi

Tetrahedron: Asymmetry 15 (2004) 405



$C_{17}H_{18}OSe$

(2*S*,5*S*)-2-Phenyl-5-[(phenylseleno)methyl]tetrahydrofuran

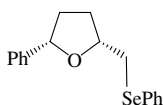
$[\alpha]_D^{25} = -59.6$ (*c* 0.69, $CHCl_3$)

Source of chirality: (*R*)-Phenyloxirane

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

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Valentina Purgatorio, Andrea Temperini, Francesca Marini and
Claudio Santi

Tetrahedron: Asymmetry 15 (2004) 405



$C_{17}H_{18}OSe$

(2*S*,5*R*)-2-Phenyl-5-[(phenylseleno)methyl]tetrahydrofuran

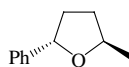
$[\alpha]_D^{26} = -26.8$ (*c* 1.51, $CHCl_3$)

Source of chirality: (*R*)-Phenyloxirane

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

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Valentina Purgatorio, Andrea Temperini, Francesca Marini and
Claudio Santi

Tetrahedron: Asymmetry 15 (2004) 405



$C_{11}H_{14}O$

(2*R*,5*S*)-2-Methyl-5-phenyltetrahydrofuran

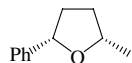
$[\alpha]_D^{25} = -57.1$ (*c* 1.87, $CHCl_3$)

Source of chirality: (*R*)-Phenyloxirane

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

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Claudio Santi

Tetrahedron: Asymmetry 15 (2004) 405



C₁₁H₁₄O

(2*S*,5*S*)-2-Methyl-5-phenyltetrahydrofuran

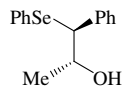
$[\alpha]_D^{23} = -26.6$ (*c* 0.57, CHCl₃)

Source of chirality: (*R*)-Phenyloxirane

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

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Claudio Santi

Tetrahedron: Asymmetry 15 (2004) 405



C₁₅H₁₆OSe

(1*S*,2*R*)-1-Phenyl-1-(phenylseleno)propan-2-ol

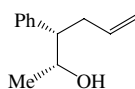
$[\alpha]_D^{20} = +255.1$ (*c* 1.96, CHCl₃)

Source of chirality: (1*R*,2*R*)-1-Phenyl-
propylene oxide

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

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Claudio Santi

Tetrahedron: Asymmetry 15 (2004) 405



C₁₂H₁₆O

(2*R*,3*S*)-3-Phenylhex-5-en-2-ol

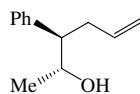
$[\alpha]_D^{21} = +23.2$ (*c* 2.05, CHCl₃)

Source of chirality: (1*R*,2*R*)-1-Phenyl-
propylene oxide

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

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Claudio Santi

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C₁₂H₁₆O

(2*R*,3*R*)-3-Phenylhex-5-en-2-ol

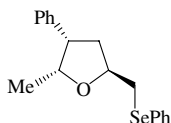
$[\alpha]_D^{21} = -33.8$ (*c* 2.0, CHCl₃)

Source of chirality: (1*R*,2*R*)-1-Phenyl-
propylene oxide

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

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Valentina Purgatorio, Andrea Temperini, Francesca Marini and
Claudio Santi

Tetrahedron: Asymmetry 15 (2004) 405



$C_{18}H_{20}OSe$
(2*R*,3*S*,5*S*)-2-Methyl-3-phenyl-5-[(phenylseleno)methyl]tetrahydrofuran

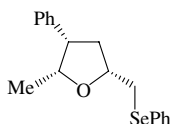
$$[\alpha]_D^{24} = +16.8 (c 1.61, CHCl_3)$$

Source of chirality: (1*R*,2*R*)-1-Phenylpropylene oxide

Absolute configuration: 2*R*,3*S*,5*S*

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Valentina Purgatorio, Andrea Temperini, Francesca Marini and
Claudio Santi

Tetrahedron: Asymmetry 15 (2004) 405



$C_{18}H_{20}OSe$
(2*R*,3*S*,5*R*)-2-Methyl-3-phenyl-5-[(phenylseleno)methyl]tetrahydrofuran

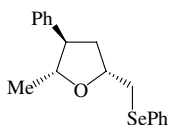
$$[\alpha]_D^{25} = +120.0 (c 2.37, CHCl_3)$$

Source of chirality: (1*R*,2*R*)-1-Phenylpropylene oxide

Absolute configuration: 2*R*,3*S*,5*R*

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Valentina Purgatorio, Andrea Temperini, Francesca Marini and
Claudio Santi

Tetrahedron: Asymmetry 15 (2004) 405



$C_{18}H_{20}OSe$
(2*R*,3*R*,5*R*)-2-Methyl-3-phenyl-5-[(phenylseleno)methyl]tetrahydrofuran

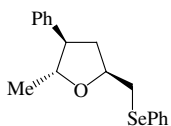
$$[\alpha]_D^{22} = +34.9 (c 1.33, CHCl_3)$$

Source of chirality: (1*R*,2*R*)-1-Phenylpropylene oxide

Absolute configuration: 2*R*,3*R*,5*R*

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Valentina Purgatorio, Andrea Temperini, Francesca Marini and
Claudio Santi

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$C_{18}H_{20}OSe$
(2*R*,3*R*,5*S*)-2-Methyl-3-phenyl-5-[(phenylseleno)methyl]tetrahydrofuran

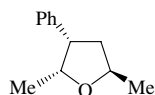
$$[\alpha]_D^{24} = -55.4 (c 2.45, CHCl_3)$$

Source of chirality: (1*R*,2*R*)-1-Phenylpropylene oxide

Absolute configuration: 2*R*,3*R*,5*S*

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Valentina Purgatorio, Andrea Temperini, Francesca Marini and
Claudio Santi

Tetrahedron: Asymmetry 15 (2004) 405



$C_{12}H_{16}O$

(2*R*,3*S*,5*R*)-2,5-Dimethyl-3-phenyltetrahydrofuran

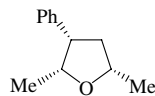
$[\alpha]_D^{26} = +66.9$ (*c* 1.29, $CHCl_3$)

Source of chirality: (1*R*,2*R*)-1-Phenylpropylene oxide

Absolute configuration: 2*R*,3*S*,5*R*

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Valentina Purgatorio, Andrea Temperini, Francesca Marini and
Claudio Santi

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$C_{12}H_{16}O$

(2*R*,3*S*,5*S*)-2,5-Dimethyl-3-phenyltetrahydrofuran

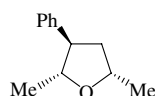
$[\alpha]_D^{24} = +113.0$ (*c* 0.76, $CHCl_3$)

Source of chirality: (1*R*,2*R*)-1-Phenylpropylene oxide

Absolute configuration: 2*R*,3*S*,5*S*

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Valentina Purgatorio, Andrea Temperini, Francesca Marini and
Claudio Santi

Tetrahedron: Asymmetry 15 (2004) 405



$C_{12}H_{16}O$

(2*R*,3*R*,5*S*)-2,5-Dimethyl-3-phenyltetrahydrofuran

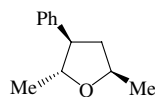
$[\alpha]_D^{22} = +8.16$ (*c* 1.03, $CHCl_3$)

Source of chirality: (1*R*,2*R*)-1-Phenylpropylene oxide

Absolute configuration: 2*R*,3*R*,5*S*

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Valentina Purgatorio, Andrea Temperini, Francesca Marini and
Claudio Santi

Tetrahedron: Asymmetry 15 (2004) 405



$C_{12}H_{16}O$

(2*R*,3*R*,5*R*)-2,5-Dimethyl-3-phenyltetrahydrofuran

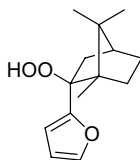
$[\alpha]_D^{23} = +15.3$ (*c* 1.0, $CHCl_3$)

Source of chirality: (1*R*,2*R*)-1-Phenylpropylene oxide

Absolute configuration: 2*R*,3*R*,5*R*

Alessandra Lattanzi,* Patrizia Iannece and Arrigo Scettri

Tetrahedron: Asymmetry 15 (2004) 413



C₁₄H₂₀O₃

(1*S*,2*S*,4*S*)-2-*exo*-Hydroperoxy-2-*endo*-(2'-furyl)-1,7,7-trimethylbicyclo[2.2.1] heptane

Ee >99%

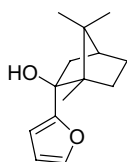
$[\alpha]_D^{24} = +49.9$ (c 1.00, CHCl₃)

Source of chirality: stereoselective synthesis

Absolute configuration: 2*S*

Alessandra Lattanzi,* Patrizia Iannece and Arrigo Scettri

Tetrahedron: Asymmetry 15 (2004) 413



C₁₄H₂₀O₂

(1*S*,2*S*,4*S*)-2-*exo*-Hydroxy-2-*endo*-(2'-furyl)-1,7,7-trimethylbicyclo[2.2.1] heptane

Ee >99%

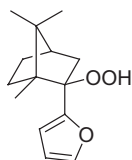
$[\alpha]_D^{24} = +41.0$ (c 1.58, CHCl₃)

Source of chirality: stereoselective synthesis

Absolute configuration: 2*S*

Alessandra Lattanzi,* Patrizia Iannece and Arrigo Scettri

Tetrahedron: Asymmetry 15 (2004) 413



C₁₄H₂₀O₃

(1*R*,2*R*,4*R*)-2-*exo*-Hydroperoxy-2-*endo*-(2'-furyl)-1,7,7-trimethylbicyclo[2.2.1] heptane

Ee >99%

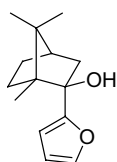
$[\alpha]_D^{24} = -50.4$ (c 1.00, CHCl₃)

Source of chirality: stereoselective synthesis

Absolute configuration: 2*R*

Alessandra Lattanzi,* Patrizia Iannece and Arrigo Scettri

Tetrahedron: Asymmetry 15 (2004) 413



C₁₄H₂₀O₂

(1*R*,2*R*,4*R*)-2-*exo*-Hydroxy-2-*endo*-(2'-furyl)-1,7,7-trimethylbicyclo[2.2.1] heptane

Ee >99%

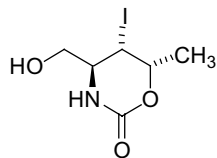
$[\alpha]_D^{24} = -39.4$ (c 1.58, CHCl₃)

Source of chirality: stereoselective synthesis

Absolute configuration: 2*R*

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José Sepúlveda-Arques and Mario Orena

Tetrahedron: Asymmetry 15 (2004) 419



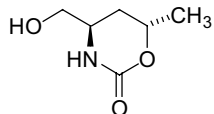
$[\alpha]_D = -70$ (*c* 1.08, MeOH)
Absolute configuration: 4*S*,5*S*,6*R*

C₆H₁₀INO₃

(4*S*,5*S*,6*R*)-4-Hydroxymethyl-5-yodo-6-methyl-1,3-oxazin-2-one

M. Eugenia González-Rosende,* J. Miquel Jordá-Gregori,
José Sepúlveda-Arques and Mario Orena

Tetrahedron: Asymmetry 15 (2004) 419



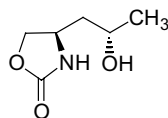
$[\alpha]_D = -78.7$ (*c* 1, MeOH)
Absolute configuration: 4*R*,6*S*

C₆H₁₁NO₃

(4*S*,6*S*)-4-Hydroxymethyl-6-methyl-1,3-oxazin-2-one

M. Eugenia González-Rosende,* J. Miquel Jordá-Gregori,
José Sepúlveda-Arques and Mario Orena

Tetrahedron: Asymmetry 15 (2004) 419



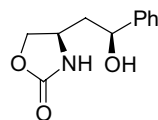
$[\alpha]_D = +10.9$ (*c* 0.96, MeOH)
Absolute configuration: 4*R*,2*S*

C₆H₁₁NO₃

(4*R*)-4-[(2*S*)-2-Hydroxypropyl]-1,3-oxazolidin-2-one

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José Sepúlveda-Arques and Mario Orena

Tetrahedron: Asymmetry 15 (2004) 419



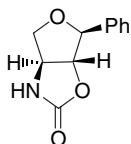
$[\alpha]_D = -8.13$ (*c* 0.96, MeOH)
Absolute configuration: 4*R*,2*S*

C₁₁H₁₃NO₃

(4*R*)-4-[(2*S*)-2-Hydroxy-2-phenylethyl]-1,3-oxazolidin-2-one

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José Sepúlveda-Arques and Mario Orena

Tetrahedron: Asymmetry 15 (2004) 419

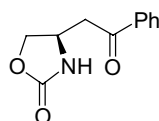


$C_{11}H_{11}NO_3$
(3a*R*,4*S*,6a*R*)-4-Phenyltetrahydrofuro[3a-*d*][1,3]oxazol-2(3*H*)-one

$[\alpha]_D = +79.7$ (*c* 1.04, MeOH)
Absolute configuration: 3a*R*,4*S*,6a*R*

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José Sepúlveda-Arques and Mario Orena

Tetrahedron: Asymmetry 15 (2004) 419

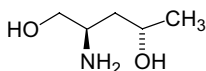


$C_{11}H_{11}NO_3$
(4*R*)-4-(2-Oxo-2-phenylethyl)-1,3-oxazolidin-2-one

$[\alpha]_D = +3.9$ (*c* 1, MeOH)
Absolute configuration: 4*R*

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José Sepúlveda-Arques and Mario Orena

Tetrahedron: Asymmetry 15 (2004) 419

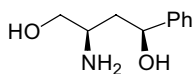


$C_5H_{13}NO_2$
(2*R*,4*S*)-2-Amino-pentane-1,4-diol

$[\alpha]_D = +10.7$ (*c* 1.02, MeOH)
Absolute configuration: 2*R*,4*S*

M. Eugenia González-Rosende,* J. Miquel Jordá-Gregori,
José Sepúlveda-Arques and Mario Orena

Tetrahedron: Asymmetry 15 (2004) 419

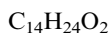
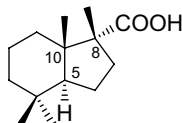


$C_{10}H_{15}NO_2$
(1*S*,3*R*)-3-Amino-1-phenylbutane-1,4-diol

$[\alpha]_D = -3.46$ (*c* 1.04, MeOH)
Absolute configuration: 1*S*,3*R*

Veaceslav Kulcitzki, Nikon Ungur, Margherita Gavagnin,*
Marianna Carbone and Guido Cimino

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(5*S*,8*R*,10*S*)-Austrodoric acid

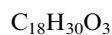
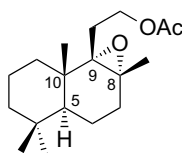
$[\alpha]_D^{25} -16$ (*c* 0.1, $CHCl_3$)

Source of chirality: natural

Absolute configuration: 5*S*,8*R*,10*S*

Veaceslav Kulcitzki, Nikon Ungur, Margherita Gavagnin,*
Marianna Carbone and Guido Cimino

Tetrahedron: Asymmetry 15 (2004) 423



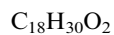
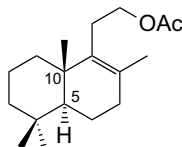
(5*S*,8*R*,9*S*,10*S*)-8,9-Epoxy-bicyclohomofarnes-12-yl acetate

$[\alpha]_D^{25} +50.3$ (*c* 0.7, $CHCl_3$)

Absolute configuration: 5*S*,8*R*,9*S*,10*S*

Veaceslav Kulcitzki, Nikon Ungur, Margherita Gavagnin,*
Marianna Carbone and Guido Cimino

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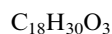
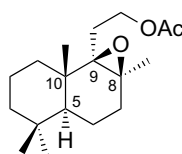
(5*S*,10*S*)-Bicyclo-homofarnes-8(9)-en-12-yl acetate

$[\alpha]_D^{25} +117.1$ (*c* 1.4, $CHCl_3$)

Absolute configuration: 5*S*,10*S*

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Marianna Carbone and Guido Cimino

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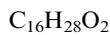
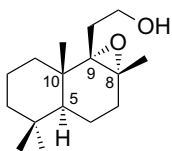
(5*S*,8*S*,9*R*,10*S*)-8,9-Epoxy-bicyclo-homofarnes-12-yl acetate

$[\alpha]_D^{25} +30.6$ (*c* 0.6, $CHCl_3$)

Absolute configuration: 5*S*,8*S*,9*R*,10*S*

Veaceslav Kulcitki, Nicon Ungur, Margherita Gavagnin,*
Marianna Carbone and Guido Cimino

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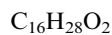
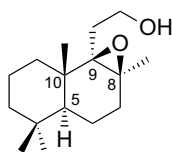
(5S,8R,9S,10S)-8,9-Epoxy-bicyclo-homofarnes-12-ol

$[\alpha]_D^{25} +29.1$ (c 0.5, $CHCl_3$)

Absolute configuration: 5S,8R,9S,10S

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Marianna Carbone and Guido Cimino

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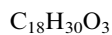
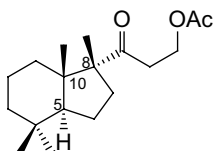
(5S,8S,9R,10S)-8,9-Epoxy-bicyclo-homofarnes-12-ol

$[\alpha]_D^{25} +17.6$ (c 0.6, $CHCl_3$)

Absolute configuration: 5S,8S,9R,10S

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Marianna Carbone and Guido Cimino

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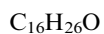
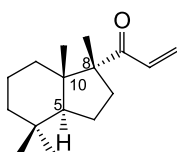
(5S,8R,10S)-9-(2-Acetoxy-ethyl)-austrodor-9-one

$[\alpha]_D^{25} -2.4$ (c 1.6, $CHCl_3$)

Absolute configuration: 5S,8R,10S

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Marianna Carbone and Guido Cimino

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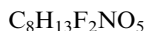
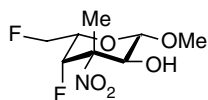
(5S,8R,10S)-9-Vinyl-austrodor-9-one

$[\alpha]_D^{25} -6.4$ (c 0.3, $CHCl_3$)

Absolute configuration: 5S,8R,10S

Yolanda Vera-Ayoso, Pastora Borrachero,
Francisca Cabrera-Escribano,* Ana T. Carmona and
Manuel Gómez-Guillén

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Methyl 3,4,6-trideoxy-4,6-difluoro-3-C-methyl-3-nitro- β -L-galactopyranoside

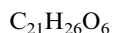
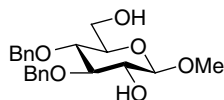
$$[\alpha]_D^{23} = +4.7 (c 0.75, CHCl_3)$$

Source of chirality: methyl α -D-gluco-
pyranoside, and stereoselective Baer and
 S_N2 DAST reactions

Absolute configuration: 1S,2S,3S,4S,5S;
assigned on the analogy of enantiomerically
pure precursor and NMR

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Methyl 3,4-di-O-benzyl- β -D-glucopyranoside

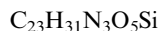
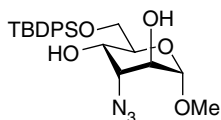
$$[\alpha]_D^{22} = -5.8 (c 1.2, acetone)$$

Source of chirality: methyl β -D-gluco-
pyranoside

Absolute configuration: 1R,2R,3S,4R,5R;
assigned on the analogy of enantiomerically
pure precursor

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Manuel Gómez-Guillén

Tetrahedron: Asymmetry 15 (2004) 429



Methyl 3-azido-6-O-*tert*-butyl-diphenylsilyl-3-deoxy- α -D-altropyranoside

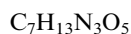
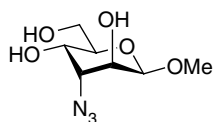
$$[\alpha]_D^{25} = +35.7 (c 0.9, acetone)$$

Source of chirality: methyl 3-azido-3-
deoxy- α -D-altropyranoside

Absolute configuration: 1S,2S,3R,4S,5R;
assigned on the analogy of precursor and
NMR

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Methyl 3-azido-3-deoxy- β -D-altropyranoside

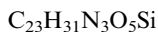
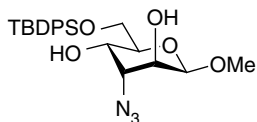
$$[\alpha]_D^{23} = -124.4 (c 0.57, acetone)$$

Source of chirality: methyl 3-azido-4,6-O-
benzylidene-3-deoxy- β -D-altropyranoside

Absolute configuration: 1R,2R,3S,4R,5R;
assigned on the analogy of precursor and
NMR

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Methyl 3-azido-6-*O*-*tert*-butyl-diphenylsilyl-3-deoxy- β -D-altropyranoside

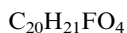
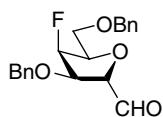
$$[\alpha]_D^{25} = -58.2 (c 0.78, \text{acetone})$$

Source of chirality: methyl 3-azido-4,6-*O*-benzylidene-3-deoxy- β -D-altropyranoside

Absolute configuration: 1*R*,2*R*,3*S*,4*R*,5*R*;
assigned on the analogy of precursor and
NMR

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2,5-Anhydro-3,6-di-*O*-benzyl-4-deoxy-4-fluoro-*aldehydo*-D-talose

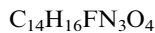
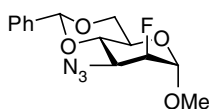
$$[\alpha]_D^{22} = +29.6 (c 1.02, \text{acetone})$$

Source of chirality: methyl 3-*O*-benzyl-4,6-*O*-benzylidene- β -D-glucopyranoside and rearrangement reaction

Absolute configuration: 2*S*,3*R*,4*S*,5*R*;
assigned on the analogy of precursor and
NMR

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Methyl 3-azido-4,6-*O*-benzylidene-2,3-dideoxy-2-fluoro- α -D-mannopyranoside

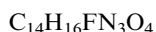
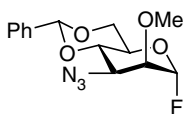
$$[\alpha]_D^{22} = +60.8 (c 0.53, \text{acetone})$$

Source of chirality: methyl 3-azido-4,6-*O*-benzylidene-3-deoxy- α -D-glucopyranoside and S_N2 fluorination by DAST

Absolute configuration: 1*S*,2*S*,3*S*,4*S*,5*R*;
assigned on the analogy of precursor and
NMR

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3-Azido-4,6-*O*-benzylidene-3-deoxy-2-*O*-methyl- α -D-mannopyranosyl fluoride

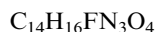
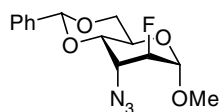
$$[\alpha]_D^{22} = -23.4 (c 0.82, \text{acetone})$$

Source of chirality: methyl 3-azido-4,6-*O*-benzylidene-3-deoxy- β -D-glucopyranoside and rearrangement by DAST

Absolute configuration: 1*R*,2*S*,3*S*,4*S*,5*R*;
assigned on the analogy of precursor and
NMR

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Methyl 3-azido-4,6-*O*-benzylidene-2,3-dideoxy-2-fluoro- α -D-altropyranoside

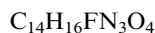
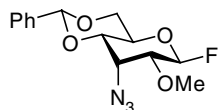
$$[\alpha]_D^{22} = +40.8 (c 1, \text{acetone})$$

Source of chirality: methyl 3-azido-4,6-*O*-benzylidene-3-deoxy- α -D-altropyranoside and fluorination by DAST

Absolute configuration: 1*S*,2*S*,3*R*,4*S*,5*R*;
assigned on the analogy of precursor and NMR

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3-Azido-4,6-*O*-benzylidene-3-deoxy-2-*O*-methyl- β -D-allopyranosyl fluoride

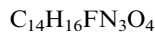
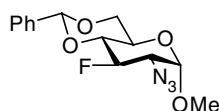
$$[\alpha]_D^{23} = -83.5 (c 0.9, \text{acetone})$$

Source of chirality: methyl 3-azido-4,6-*O*-benzylidene-3-deoxy- α -D-altropyranoside and rearrangement by DAST

Absolute configuration: 1*S*,2*R*,3*R*,4*S*,5*R*;
assigned on the analogy of precursor and NMR

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Methyl 2-azido-4,6-*O*-benzylidene-2,3-dideoxy-3-fluoro- α -D-glucopyranoside

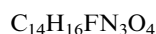
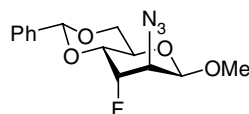
$$[\alpha]_D^{23} = +63.2 (c 0.94, \text{acetone})$$

Source of chirality: methyl 3-azido-4,6-*O*-benzylidene-3-deoxy- α -D-altropyranoside and rearrangement by DAST

Absolute configuration: 1*S*,2*S*,3*R*,4*R*,5*R*;
assigned on the analogy of precursor and NMR

Yolanda Vera-Ayoso, Pastora Borrachero,
Francisca Cabrera-Escribano,* Ana T. Carmona and
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Methyl 2-azido-4,6-*O*-benzylidene-2,3-dideoxy-3-fluoro- β -D-altropyranoside

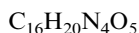
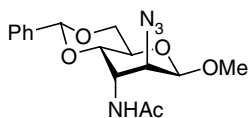
$$[\alpha]_D^{22} = -107.3 (c 1.14, \text{acetone})$$

Source of chirality: methyl 3-azido-4,6-*O*-benzylidene-3-deoxy- β -D-altropyranoside and rearrangement by DAST

Absolute configuration: 1*R*,2*R*,3*S*,4*R*,5*R*;
assigned on the analogy of precursor and NMR

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Francisca Cabrera-Escribano,* Ana T. Carmona and
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Methyl 3-acetamido-2-azido-4,6-*O*-benzylidene-2,3-dideoxy- β -D-altropyranoside

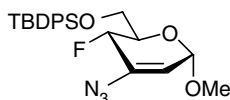
$$[\alpha]_D^{24} = -54.6 (c 0.80, \text{acetone})$$

Source of chirality: methyl 3-azido-4,6-*O*-benzylidene-3-deoxy- β -D-altropyranoside and rearrangement reaction

Absolute configuration: 1*R*,2*S*,3*S*,4*S*,5*R*;
assigned on the analogy of precursor and NMR

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Francisca Cabrera-Escribano,* Ana T. Carmona and
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Methyl 3-azido-6-*O*-*tert*-butyl-diphenylsilyl-2,3,4-trideoxy-4-fluoro- α -D-*erythro*-hex-2-enopyranoside

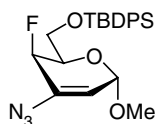
$$[\alpha]_D^{25} = -1.8 (c 0.67, \text{acetone})$$

Source of chirality: methyl 3-azido-3-deoxy- α -D-altropyranoside and reaction with DAST

Absolute configuration: 1*S*,4*S*,5*R*;
assigned on the analogy of precursor and NMR

Yolanda Vera-Ayoso, Pastora Borrachero,
Francisca Cabrera-Escribano,* Ana T. Carmona and
Manuel Gómez-Guillén

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Methyl 3-azido-6-*O*-*tert*-butyl-diphenylsilyl-2,3,4-trideoxy-4-fluoro- α -D-*threo*-hex-2-enopyranoside

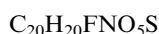
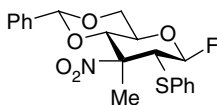
$$[\alpha]_D^{25} = -4.4 (c 0.60, \text{acetone})$$

Source of chirality: methyl 3-azido-3-deoxy- α -D-altropyranoside and reaction with DAST

Absolute configuration: 1*S*,4*R*,5*R*;
assigned on the analogy of precursor and NMR

Yolanda Vera-Ayoso, Pastora Borrachero,
Francisca Cabrera-Escribano,* Ana T. Carmona and
Manuel Gómez-Guillén

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4,6-*O*-Benzylidene-2,3-dideoxy-3-*C*-methyl-3-nitro-2-phenylthio- β -D-glucopyranosyl fluoride

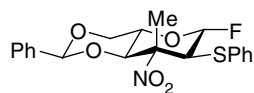
$$[\alpha]_D^{26} = -92.3 (c 0.65, \text{acetone})$$

Source of chirality: methyl α -D-glucopyranoside and stereoselective Baer and rearrangement reactions

Absolute configuration: 1*S*,2*R*,3*S*,4*S*,5*R*;
assigned on the analogy of enantiomerically pure precursor and NMR

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Francisca Cabrera-Escribano,* Ana T. Carmona and
Manuel Gómez-Guillén

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$C_{20}H_{20}FNO_5S$

4,6-*O*-Benzylidene-2,3-dideoxy-3-*C*-methyl-3-nitro-2-phenylthio- β -L-glucopyranosyl fluoride

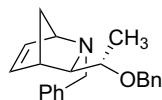
$[\alpha]_D^{23} = +84.5$ (*c* 0.84, acetone)

Source of chirality: methyl α -D-glucopyranoside and stereoselective Baer and rearrangement reactions

Absolute configuration: 1*R*,2*S*,3*R*,4*R*,5*S*;
assigned on the analogy of enantiomerically pure precursor and NMR

Anna Trifonova and Pher G. Andersson*

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$C_{22}H_{25}NO$

(3*R*)-2-Benzyl-3-((1'*S*)-benzyloxyethyl)-2-azabicyclo-[2.2.1]-hept-5-ene

Ee >97%

$[\alpha]_D^{24} = -42.5$ (*c* 1.06, $CHCl_3$)

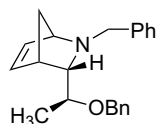
Source of chirality: (*S*)-(-)-lactate

Colorless oil

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

Anna Trifonova and Pher G. Andersson*

Tetrahedron: Asymmetry 15 (2004) 445



$C_{22}H_{25}NO$

(3*S*)-2-Benzyl-3-((1'*S*)-benzyloxyethyl)-2-azabicyclo-[2.2.1]-hept-5-ene

Ee >97%

$[\alpha]_D^{24} = -27$ (*c* 1.0, $CHCl_3$)

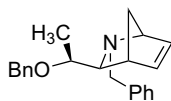
Source of chirality: (*S*)-(-)-lactate

Yellow oil

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

Anna Trifonova and Pher G. Andersson*

Tetrahedron: Asymmetry 15 (2004) 445



$C_{22}H_{25}NO$

(3*R*)-2-Benzyl-3-((1'*S*)-benzyloxyethyl)-2-azabicyclo-[2.2.1]-hept-5-ene

Ee >97%

$[\alpha]_D^{24} = +76$ (*c* 1.15, $CHCl_3$)

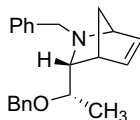
Source of chirality: (*S*)-(-)-lactate

Yellow oil

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

Anna Trifonova and Pher G. Andersson*

Tetrahedron: Asymmetry 15 (2004) 445



$C_{22}H_{25}NO$

(3*S*)-2-Benzyl-3-((1'*S*)-benzyloxyethyl)-2-azabicyclo-[2.2.1]-hept-5-ene

Ee >97%

$[\alpha]_D^{24} = +135$ (c 0.80, $CHCl_3$)

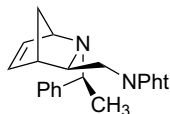
Source of chirality: (*S*)-(-)-lactate

Light-yellow oil

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

Anna Trifonova and Pher G. Andersson*

Tetrahedron: Asymmetry 15 (2004) 445



$C_{23}H_{21}N_2O_2$

2'-((3*R*)-2-((1*S*)-Phenylethylamino)-2-azabicyclo-[2.2.1]-hept-5-ene-3-ylmethyl)-isoindole-1',3'-dione

Ee >99%

$[\alpha]_D^{22} = -84$ (c 3.0, $CHCl_3$)

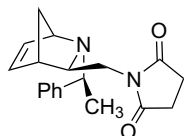
Source of chirality: (1*S*)-phenylethyl amine

Light-yellow oil

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

Anna Trifonova and Pher G. Andersson*

Tetrahedron: Asymmetry 15 (2004) 445



$C_{19}H_{22}N_2O_2$

2'-((3*R*)-2-((1*S*)-Phenylethylamino)-2-azabicyclo-[2.2.1]-hept-5-ene-3-ylmethyl)-pyrrolidine-1',3'-dione

Ee >99%

$[\alpha]_D^{22} = -33.5$ (c 1.0, $CHCl_3$)

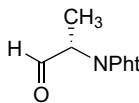
Source of chirality: (1*S*)-phenylethyl amine

White crystals

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

Anna Trifonova and Pher G. Andersson*

Tetrahedron: Asymmetry 15 (2004) 445



$C_{11}H_9NO_3$

(2*S*)-2-Phthalimidopropanal

Ee = 97%

$[\alpha]_D^{24} = -43$ (c 1.0, C_6H_6)

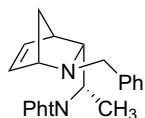
Source of chirality: L-alanine

White crystals

Absolute configuration: (2*S*)

Anna Trifonova and Pher G. Andersson*

Tetrahedron: Asymmetry 15 (2004) 445



$C_{23}H_{22}N_2O_2$

2'-((1*S*)-((3*R*)-2-Benzyl-2-azabicyclo-[2.2.1]-hept-5-ene-3-yl)-ethyl)-isoindole-1',3'-dione

Ee = 90%

$[\alpha]_D^{22} = +24$ (c 1.0, $CHCl_3$)

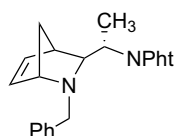
Source of chirality: L-alaninol

Light-yellow oil

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

Anna Trifonova and Pher G. Andersson*

Tetrahedron: Asymmetry 15 (2004) 445



$C_{23}H_{22}N_2O_2$

2'-((1*S*)-((3*S*)-2-Benzyl-2-azabicyclo-[2.2.1]-hept-5-ene-3-yl)-ethyl)-isoindole-1',3'-dione

Ee = 90%

$[\alpha]_D^{22} = +2.5$ (c 1.0, $CHCl_3$)

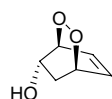
Source of chirality: L-alaninol

Light-yellow oil

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

M. Serdar Gültekin, Murat Çelik, Engin Turkut, Cihangir Tanyeli* and Metin Balcı*

Tetrahedron: Asymmetry 15 (2004) 453



$C_6H_8O_3$

(1*R*,4*R*,5*R*)-2,3-Dioxabicyclo[2.2.2]oct-7-en-5-ol

Ee = 91%

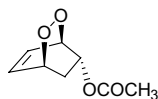
$[\alpha]_D^{25} = -23.3$ (c 0.2, MeOH)

Source of chirality: enzymatic resolution

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

M. Serdar Gültekin, Murat Çelik, Engin Turkut, Cihangir Tanyeli* and Metin Balcı*

Tetrahedron: Asymmetry 15 (2004) 453



$C_8H_{10}O_4$

(1*S*,4*S*,5*S*)-2,3-Dioxabicyclo[2.2.2]oct-7-en-5-yl acetate

Ee = 72%

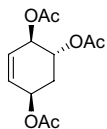
$[\alpha]_D^{25} = +16.9$ (c 0.1, MeOH)

Source of chirality: enzymatic resolution

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

M. Serdar Gültekin, Murat Çelik, Engin Turkut, Cihangir Tanyeli* and Metin Balci*

Tetrahedron: Asymmetry 15 (2004) 453



C₁₂H₁₆O₆

(1*R*,2*R*,5*R*)-(-)-2,5-Bis(acetyloxy)cyclohex-3-en-1-yl acetate

Ee = 91%

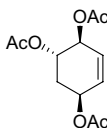
[α]_D²⁵ = -4.8 (*c* 0.3, MeOH)

Source of chirality: enzymatic resolution

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

M. Serdar Gültekin, Murat Çelik, Engin Turkut, Cihangir Tanyeli* and Metin Balci*

Tetrahedron: Asymmetry 15 (2004) 453



C₁₂H₁₆O₆

(1*S*,2*S*,5*S*)-(+)-2,5-Bis(acetyloxy)cyclohex-3-en-1-yl acetate

Ee = 72%

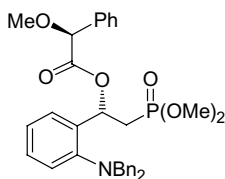
[α]_D²⁵ = +3.8 (*c* 0.3, MeOH)

Source of chirality: enzymatic resolution

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

Angelina González-Morales, Daniel Díaz-Coutiño, Mario Fernández-Zertuche, Oscar García-Barradas and Mario Ordóñez*

Tetrahedron: Asymmetry 15 (2004) 457



C₃₃H₃₆NO₆P

Dimethyl (*S*)-2-(2-*N,N*-dibenzylaminophenyl)-2-[(*S*)-*O*-menthylmandelate]ethylphosphonate

De >98%

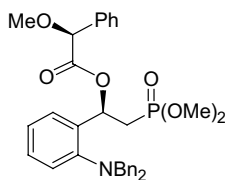
[α]_D = +23.8 (*c* = 14, CHCl₃)

Source of chirality: chemical resolution

Absolute configuration: (*S,S*)

Angelina González-Morales, Daniel Díaz-Coutiño, Mario Fernández-Zertuche, Oscar García-Barradas and Mario Ordóñez*

Tetrahedron: Asymmetry 15 (2004) 457



C₃₃H₃₆NO₆P

Dimethyl (*R*)-2-(2-*N,N*-dibenzylaminophenyl)-2-[(*S*)-*O*-menthylmandelate]ethylphosphonate

De >98%

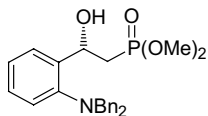
[α]_D = +35.1 (*c* = 5.3, CHCl₃)

Source of chirality: chemical resolution

Absolute configuration: (*R,S*)

Angelina González-Morales, Daniel Díaz-Coutiño,
Mario Fernández-Zertuche, Oscar García-Barradas and
Mario Ordóñez*

Tetrahedron: Asymmetry 15 (2004) 457



$C_{24}H_{28}NO_4P$

Dimethyl (*S*)-2-(2-*N,N*-dibenzylaminophenyl)-2-hydroxyethylphosphonate

Ee >94%

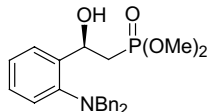
$[\alpha]_D = +5.9$ ($c = 1.4$, $CHCl_3$)

Source of chirality: chemical resolution

Absolute configuration: (*S*)

Angelina González-Morales, Daniel Díaz-Coutiño,
Mario Fernández-Zertuche, Oscar García-Barradas and
Mario Ordóñez*

Tetrahedron: Asymmetry 15 (2004) 457



$C_{24}H_{28}NO_4P$

Dimethyl (*R*)-2-(2-*N,N*-dibenzylaminophenyl)-2-hydroxyethylphosphonate

Ee >98%

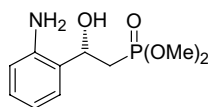
$[\alpha]_D = -6.1$ ($c = 1.14$, $CHCl_3$)

Source of chirality: chemical resolution

Absolute configuration: (*R*)

Angelina González-Morales, Daniel Díaz-Coutiño,
Mario Fernández-Zertuche, Oscar García-Barradas and
Mario Ordóñez*

Tetrahedron: Asymmetry 15 (2004) 457



$C_{10}H_{16}NO_4P$

Dimethyl (*S*)-2-(2-aminophenyl)-2-hydroxyethylphosphonate

Ee >95%

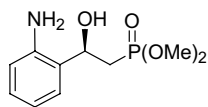
$[\alpha]_D = +13.3$ ($c = 1.2$, $CHCl_3$)

Source of chirality: chemical resolution

Absolute configuration: (*S*)

Angelina González-Morales, Daniel Díaz-Coutiño,
Mario Fernández-Zertuche, Oscar García-Barradas and
Mario Ordóñez*

Tetrahedron: Asymmetry 15 (2004) 457



$C_{10}H_{16}NO_4P$

Dimethyl (*R*)-2-(2-aminophenyl)-2-hydroxyethylphosphonate

Ee >98%

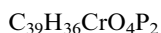
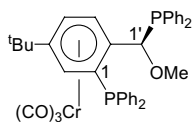
$[\alpha]_D = -13.7$ ($c = 1.4$, $CHCl_3$)

Source of chirality: chemical resolution

Absolute configuration: (*R*)

Susan E. Gibson,* Hasim Ibrahim, Corinne Pasquier
and Vishwanath M. Swamy

Tetrahedron: Asymmetry 15 (2004) 465



(-)-(1*pR*,1'*R*)-Tricarbonyl[1-diphenylphosphine-2-(1'-diphenylphosphine-1'-methoxymethyl)-5-*tert*-butylbenzene]-chromium(0)

Ee = 97%

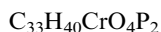
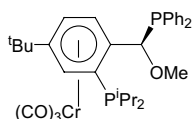
$[\alpha]_{\text{D}}^{24} = -242$ (c 0.5, CH₂Cl₂)

Source of chirality: α -methylbenzylamine

Absolute configuration: 1*pR*,1'*R*

Susan E. Gibson,* Hasim Ibrahim, Corinne Pasquier
and Vishwanath M. Swamy

Tetrahedron: Asymmetry 15 (2004) 465



(-)-(1*pR*,1'*R*)-Tricarbonyl[1-diisopropylphosphine-2-(1'-diphenylphosphine-1'-methoxymethyl)-5-*tert*-butylbenzene]-chromium(0)

Ee = 97%

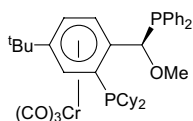
$[\alpha]_{\text{D}}^{24} = -48.2$ (c 0.5, CH₂Cl₂)

Source of chirality: α -methylbenzylamine

Absolute configuration: 1*pR*,1'*R*

Susan E. Gibson,* Hasim Ibrahim, Corinne Pasquier
and Vishwanath M. Swamy

Tetrahedron: Asymmetry 15 (2004) 465



(-)-(1*pR*,1'*R*)-Tricarbonyl[1-dicyclohexylphosphine-2-(1'-diphenylphosphine-1'-methoxymethyl)-5-*tert*-butylbenzene]-chromium(0)

Ee = 97%

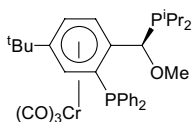
$[\alpha]_{\text{D}}^{24} = -111.2$ (c 0.5, CH₂Cl₂)

Source of chirality: α -methylbenzylamine

Absolute configuration: 1*pR*,1'*R*

Susan E. Gibson,* Hasim Ibrahim, Corinne Pasquier
and Vishwanath M. Swamy

Tetrahedron: Asymmetry 15 (2004) 465



(-)-(1*pR*,1'*R*)-Tricarbonyl[1-diphenylphosphine-2-(1'-diisopropylphosphine-1'-methoxymethyl)-5-*tert*-butylbenzene]-chromium(0)

Ee = 96%

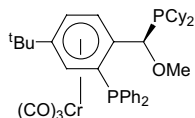
$[\alpha]_{\text{D}}^{24} = -104.6$ (c 0.5, CH₂Cl₂)

Source of chirality: α -methylbenzylamine

Absolute configuration: 1*pR*,1'*R*

Susan E. Gibson,* Hasim Ibrahim, Corinne Pasquier
and Vishwanath M. Swamy

Tetrahedron: Asymmetry 15 (2004) 465



(-)-(1*pR*,1'*R*)-Tricarbonyl[1-diphenylphosphine-2-(1'-dicyclohexylphosphine-1'-methoxymethyl)-5-*tert*-butylbenzene]-chromium(0)

Ee = 97%

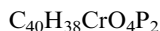
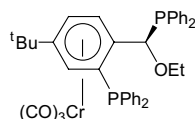
$[\alpha]_{\text{D}}^{24} = -82.9$ (c 0.5, CH₂Cl₂)

Source of chirality: α -methylbenzylamine

Absolute configuration: 1*pR*,1'*R*

Susan E. Gibson,* Hasim Ibrahim, Corinne Pasquier
and Vishwanath M. Swamy

Tetrahedron: Asymmetry 15 (2004) 465



(-)-(1*pR*,1'*R*)-Tricarbonyl[1-diphenylphosphine-2-(1'-diphenylphosphine-1'-ethoxymethyl)-5-*tert*-butylbenzene]-chromium(0)

Ee = 84%

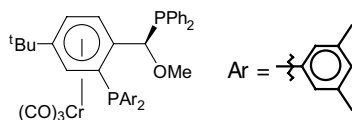
$[\alpha]_{\text{D}}^{24} = -162$ (c 0.5, CH₂Cl₂)

Source of chirality: α -methylbenzylamine

Absolute configuration: 1*pR*,1'*R*

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and Vishwanath M. Swamy

Tetrahedron: Asymmetry 15 (2004) 465



(-)-(1*pR*,1'*R*)-Tricarbonyl[1-di(3,5-dimethylphenyl)phosphine-2-(1'-diphenylphosphine-1'-methoxymethyl)-5-*tert*-butylbenzene]chromium(0)

Ee = 95%

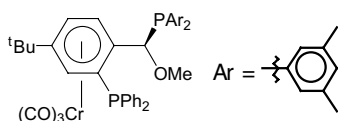
$[\alpha]_{\text{D}}^{24} = -171$ (c 0.5, CH₂Cl₂)

Source of chirality: α -methylbenzylamine

Absolute configuration: 1*pR*,1'*R*

Susan E. Gibson,* Hasim Ibrahim, Corinne Pasquier
and Vishwanath M. Swamy

Tetrahedron: Asymmetry 15 (2004) 465



(-)-(1*pR*,1'*R*)-Tricarbonyl[1-diphenylphosphine-2-(1'-di-3,5-dimethylphenylphosphine-1'-methoxymethyl)-5-*tert*-butylbenzene]chromium(0)

Ee = 95%

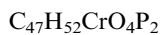
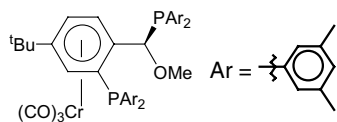
$[\alpha]_{\text{D}}^{24} = -132$ (c 0.5, CH₂Cl₂)

Source of chirality: α -methylbenzylamine

Absolute configuration: 1*pR*,1'*R*

Susan E. Gibson,* Hasim Ibrahim, Corinne Pasquier
and Vishwanath M. Swamy

Tetrahedron: Asymmetry 15 (2004) 465



(-)-(1*pR*,1'*R*)-Tricarbonyl[1-di(3,5-dimethylphenyl)phosphine-2-(1'-di(3,5-dimethylphenyl)phosphine-1'-methoxy-methyl)-5-*tert*-butylbenzene]chromium(0)

Ee = 97%

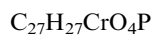
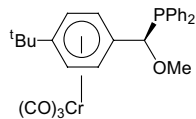
$[\alpha]_D^{24} = -27.6$ (c 0.5, CH₂Cl₂)

Source of chirality: α -methylbenzylamine

Absolute configuration: 1*pR*,1'*R*

Susan E. Gibson,* Hasim Ibrahim, Corinne Pasquier
and Vishwanath M. Swamy

Tetrahedron: Asymmetry 15 (2004) 465



(+)-(R)-Tricarbonyl[1-(1-diphenylphosphine-1-methoxymethyl)-4-*tert*-butylbenzene]chromium(0)

Ee = 97%

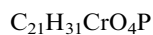
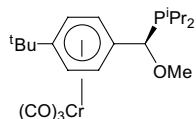
$[\alpha]_D^{24} = +66.1$ (c 0.75, CH₂Cl₂)

Source of chirality: α -methylbenzylamine

Absolute configuration: R

Susan E. Gibson,* Hasim Ibrahim, Corinne Pasquier
and Vishwanath M. Swamy

Tetrahedron: Asymmetry 15 (2004) 465



(+)-(R)-Tricarbonyl[1-(1-di-*iso*-propylphosphine-1-methoxymethyl)-4-*tert*-butylbenzene]chromium(0)

Ee = 97%

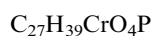
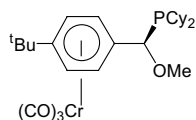
$[\alpha]_D^{24} = +109.4$ (c 0.5, CH₂Cl₂)

Source of chirality: α -methylbenzylamine

Absolute configuration: R

Susan E. Gibson,* Hasim Ibrahim, Corinne Pasquier
and Vishwanath M. Swamy

Tetrahedron: Asymmetry 15 (2004) 465



(+)-(R)-Tricarbonyl[1-(1-dicyclohexylphosphine-1-methoxymethyl)-4-*tert*-butylbenzene]chromium(0)

Ee = 96%

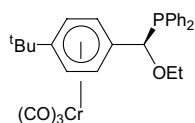
$[\alpha]_D^{24} = +83.4$ (c 0.5, CH₂Cl₂)

Source of chirality: α -methylbenzylamine

Absolute configuration: R

Susan E. Gibson,* Hasim Ibrahim, Corinne Pasquier
and Vishwanath M. Swamy

Tetrahedron: Asymmetry 15 (2004) 465



$C_{28}H_{29}CrO_4P$

(+)-(R)-Tricarbonyl[1-(1-diphenylphosphine-1-ethoxymethyl)-4-tert-butylbenzene]chromium(0)

Ee = 97%

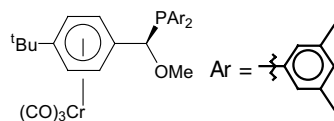
$[\alpha]_D^{24} = +133.4$ (c 0.25, CH_2Cl_2)

Source of chirality: α -methylbenzylamine

Absolute configuration: R

Susan E. Gibson,* Hasim Ibrahim, Corinne Pasquier
and Vishwanath M. Swamy

Tetrahedron: Asymmetry 15 (2004) 465



$C_{39}H_{36}CrO_4P_2$

(+)-(R)-Tricarbonyl[1-(di-(3,5-dimethylphenyl)phosphine-1-methoxymethyl)-4-tert-butylbenzene]chromium(0)

Ee = 97%

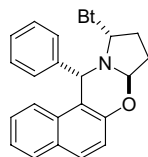
$[\alpha]_D^{24} = +36.4$ (c 0.5, CH_2Cl_2)

Source of chirality: α -methylbenzylamine

Absolute configuration: R

Xuenong Xu, Jun Lu, Yanmei Dong, Rui Li, Zongming Ge and
Yuefei Hu*

Tetrahedron: Asymmetry 15 (2004) 475



$C_{27}H_{22}N_4O$

(7aR,10R,12S)-10-(1-Benzotriazolyl)-12-phenyl-7a,8,9,10-tetrahydro-12H-naphtho[1,2-e]pyrrolo[2,1-b][1,3]oxazine

Ee = 100%

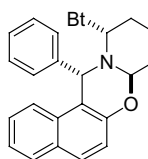
$[\alpha]_D^{25} = +101.6$ (c 1.25, $CHCl_3$)

Source of chirality: S-Betti base

Absolute configuration: 7aR,10R,12S

Xuenong Xu, Jun Lu, Yanmei Dong, Rui Li, Zongming Ge and
Yuefei Hu*

Tetrahedron: Asymmetry 15 (2004) 475



$C_{28}H_{24}N_4O$

(7aR,11R,13S)-11-(1-Benzotriazolyl)-13-phenyl-8,9,10,11-tetrahydro-7aH,13H-naphtho[1,2-e]pyrido[2,1-b][1,3]oxazine

Ee = 100%

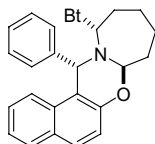
$[\alpha]_D^{25} = +152.6$ (c 1.6, $CHCl_3$)

Source of chirality: S-Betti base

Absolute configuration: 7aR,11R,13S

Xuenong Xu, Jun Lu, Yanmei Dong, Rui Li, Zongming Ge and Yuefei Hu*

Tetrahedron: Asymmetry 15 (2004) 475



C₂₉H₂₆N₄O

(7aR,12R,14S)-12-(1-Benzotriazolyl)-14-phenyl-7a,8,9,10,11,12-hexahydro-14H-naphtho[1',2':5,6][1,3]oxazino[2,1-b]azepine

Ee = 100%

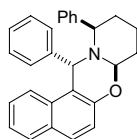
[α]_D²⁵ = +146.2 (c 0.9, CHCl₃)

Source of chirality: S-Betti base

Absolute configuration: 7aR,12R,14S

Xuenong Xu, Jun Lu, Yanmei Dong, Rui Li, Zongming Ge and Yuefei Hu*

Tetrahedron: Asymmetry 15 (2004) 475



C₂₈H₂₅NO

(7aR,11R,13S)-11,13-Diphenyl-8,9,10,11-tetrahydro-7aH,13H-naphtho[1,2-e]pyrido[2,1-b][1,3]oxazine

Ee >99%

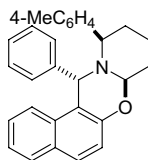
[α]_D²⁵ = +110.1 (c 0.21, CHCl₃)

Source of chirality: synthesized

Absolute configuration: 7aR,11R,13S
(assigned by NMR spectroscopic and single crystal X-ray diffraction analysis)

Xuenong Xu, Jun Lu, Yanmei Dong, Rui Li, Zongming Ge and Yuefei Hu*

Tetrahedron: Asymmetry 15 (2004) 475



C₂₉H₂₇NO

(7aR,11R,13S)-11-(4-Methylphenyl)-13-phenyl-8,9,10,11-tetrahydro-7aH,13H-naphtho[1,2-e]pyrido[2,1-b][1,3]oxazine

Ee >99%

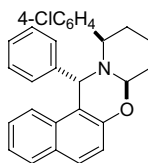
[α]_D²⁵ = +97.1 (c 0.3, CHCl₃)

Source of chirality: synthesized

Absolute configuration: 7aR,11R,13S
(assigned by NMR spectroscopic and single crystal X-ray diffraction analysis)

Xuenong Xu, Jun Lu, Yanmei Dong, Rui Li, Zongming Ge and Yuefei Hu*

Tetrahedron: Asymmetry 15 (2004) 475



C₂₈H₂₄ClNO

(7aR,11R,13S)-11-(4-Chlorophenyl)-13-phenyl-8,9,10,11-tetrahydro-7aH,13H-naphtho[1,2-e]pyrido[2,1-b][1,3]oxazine

Ee >99%

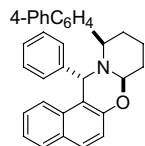
[α]_D²⁵ = +124 (c 0.1, CHCl₃)

Source of chirality: synthesized

Absolute configuration: 7aR,11R,13S
(assigned by NMR spectroscopic and single crystal X-ray diffraction analysis)

Xuenong Xu, Jun Lu, Yanmei Dong, Rui Li, Zongming Ge and Yuefei Hu*

Tetrahedron: Asymmetry 15 (2004) 475



C₃₄H₂₉NO

(7aR,11R,13S)-11-(4-Phenylphenyl)-13-phenyl-8,9,10,11-tetrahydro-7aH,13H-naphtho[1,2-e]pyrido[2,1-b][1,3]oxazine

Ee >99%

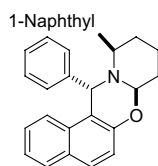
[α]_D²⁵ = +95.4 (c 0.2, CHCl₃)

Source of chirality: synthesized

Absolute configuration: 7aR,11R,13S
(assigned by NMR spectroscopic and single crystal X-ray diffraction analysis)

Xuenong Xu, Jun Lu, Yanmei Dong, Rui Li, Zongming Ge and Yuefei Hu*

Tetrahedron: Asymmetry 15 (2004) 475



C₃₂H₂₇NO

(7aR,11R,13S)-11-(1-Naphthyl)-13-phenyl-8,9,10,11-tetrahydro-7aH,13H-naphtho[1,2-e]pyrido[2,1-b][1,3]oxazine

Ee >99%

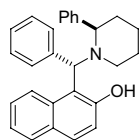
[α]_D²⁵ = +290.5 (c 0.3, CHCl₃)

Source of chirality: synthesized

Absolute configuration: 7aR,11R,13S
(assigned by NMR spectroscopic and single crystal X-ray diffraction analysis)

Xuenong Xu, Jun Lu, Yanmei Dong, Rui Li, Zongming Ge and Yuefei Hu*

Tetrahedron: Asymmetry 15 (2004) 475



C₂₈H₂₇NO

(S)-1-[α -[(R)-2-Phenylpiperidyl]benzyl]-2-naphthol

Ee >99%

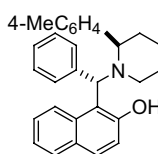
[α]_D²⁵ = +46.8 (c 0.3, CHCl₃)

Source of chirality: synthesized

Absolute configuration: S,R (assigned by NMR spectroscopic)

Xuenong Xu, Jun Lu, Yanmei Dong, Rui Li, Zongming Ge and Yuefei Hu*

Tetrahedron: Asymmetry 15 (2004) 475



C₂₉H₂₉NO

(S)-1-[α -[(R)-2-(4-Methylphenyl)piperidyl]benzyl]-2-naphthol

Ee >99%

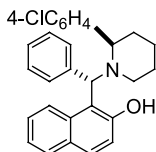
[α]_D²⁵ = +28.9 (c 0.2, CHCl₃)

Source of chirality: synthesized

Absolute configuration: S,R (assigned by NMR spectroscopic)

Xuenong Xu, Jun Lu, Yanmei Dong, Rui Li, Zongming Ge and Yuefei Hu*

Tetrahedron: Asymmetry 15 (2004) 475



$C_{28}H_{26}ClNO$

(S)-1-[α -[(R)-2-(4-Chlorophenyl)piperidyl]benzyl]-2-naphthol

Ee >99%

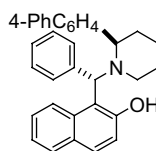
$[\alpha]_D^{25} = +54.6$ (c 0.2, $CHCl_3$)

Source of chirality: synthesized

Absolute configuration: *S,R* (assigned by NMR spectroscopic)

Xuenong Xu, Jun Lu, Yanmei Dong, Rui Li, Zongming Ge and Yuefei Hu*

Tetrahedron: Asymmetry 15 (2004) 475



$C_{34}H_{31}NO$

(S)-1-[α -[(R)-2-(4-Phenylphenyl)piperidyl]benzyl]-2-naphthol

Ee >99%

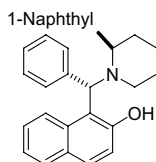
$[\alpha]_D^{25} = +64.6$ (c 0.1, $CHCl_3$)

Source of chirality: synthesized

Absolute configuration: *S,R* (assigned by NMR spectroscopic)

Xuenong Xu, Jun Lu, Yanmei Dong, Rui Li, Zongming Ge and Yuefei Hu*

Tetrahedron: Asymmetry 15 (2004) 475



$C_{32}H_{29}NO$

(S)-1-[α -[(R)-2-(1-Naphthyl)piperidyl]benzyl]-2-naphthol

Ee >99%

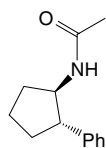
$[\alpha]_D^{25} = +194.5$ (c 0.3, $CHCl_3$)

Source of chirality: synthesized

Absolute configuration: *S,R* (assigned by NMR spectroscopic)

Javier González-Sabín, Vicente Gotor* and Francisca Rebolledo*

Tetrahedron: Asymmetry 15 (2004) 481



$C_{13}H_{17}NO$

(1*R*,2*S*)-*N*-(2-Phenylcyclopentyl)acetamide

Ee = 97% (HPLC, Chiralcel-OD)

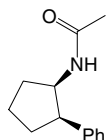
$[\alpha]_D^{20} = -39.8$ (c 1.00, $CHCl_3$)

Source of chirality: enzymatic resolution

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

Javier González-Sabín, Vicente Gotor* and Francisca Rebolledo*

Tetrahedron: Asymmetry 15 (2004) 481



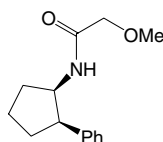
C₁₃H₁₇NO

(1*R*,2*R*)-*N*-(2-Phenylcyclopentyl)acetamide

Ee = 85% (HPLC, Chiralcel-OD)
[α]_D²⁰ = +88.7 (*c* 1.00, CHCl₃)
Source of chirality: enzymatic resolution
Absolute configuration: 1*R*,2*R*

Javier González-Sabín, Vicente Gotor* and Francisca Rebolledo*

Tetrahedron: Asymmetry 15 (2004) 481



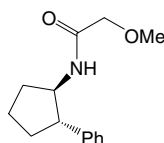
C₁₄H₁₉NO₂

(1*R*,2*R*)-*N*-(2-Phenylcyclopentyl)methoxyacetamide

Ee >99% (HPLC, Chiralcel-OD)
[α]_D²⁰ = +54.1 (*c* 1.00, CHCl₃)
Source of chirality: enzymatic resolution
Absolute configuration: 1*R*,2*R*

Javier González-Sabín, Vicente Gotor* and Francisca Rebolledo*

Tetrahedron: Asymmetry 15 (2004) 481



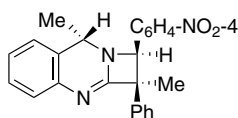
C₁₄H₁₉NO₂

(1*R*,2*S*)-*N*-(2-Phenylcyclopentyl)methoxyacetamide

Ee >99% (HPLC, Chiralcel-OD)
[α]_D²⁰ = -44.0 (*c* 1.00, CHCl₃)
Source of chirality: enzymatic resolution
Absolute configuration: 1*R*,2*S*

Mateo Alajarín,* Angel Vidal, Fulgencio Tovar and
M. Carmen Ramírez de Arellano

Tetrahedron: Asymmetry 15 (2004) 489



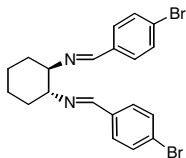
C₂₄H₂₁N₃O₂

(1*S*,2*R*,8*S*)-1,2-*cis*-1,8-*trans*-2,8-Dimethyl-1-(4-nitrophenyl)-2-phenyl-1,2-dihydroazeto[2,1-*b*]quinazoline

[α]_D = +216.0 (*c* 5 × 10⁻³, CH₂Cl₂)
Source of chirality: resolution of the
starting material
Absolute configuration: (1*S*,2*R*,8*S*)

Anne Brethon, Joël J. E. Moreau* and Michel Wong Chi Man

Tetrahedron: Asymmetry 15 (2004) 495

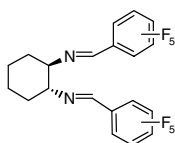


$C_{20}H_{20}N_2Br_2$
(1*R*,2*R*)-*N,N'*-Di(4'-bromobenzylidene)-1,2-diaminocyclohexane

$[\alpha]_D^{25} = -266.5$ (*c* 1.23, $CHCl_3$)
Source of chirality:(1*R*,2*R*)-diamino-
cyclohexane

Anne Brethon, Joël J. E. Moreau* and Michel Wong Chi Man

Tetrahedron: Asymmetry 15 (2004) 495

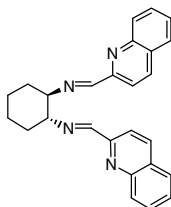


$C_{20}H_{12}N_2F_{10}$
(1*R*,2*R*)-*N,N'*-Di(2',3',4',5',6'-pentafluorobenzylidene)-1,2-diaminocyclohexane

$[\alpha]_D^{25} = -172$ (*c* 1.03, CH_2Cl_2)
Source of chirality:(1*R*,2*R*)-diamino-
cyclohexane

Anne Brethon, Joël J. E. Moreau* and Michel Wong Chi Man

Tetrahedron: Asymmetry 15 (2004) 495

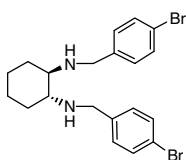


$C_{26}H_{24}N_4$
(1*R*,2*R*)-*N,N'*-Di(quinoline-2'-methylidene)-1,2-diaminocyclohexane

$[\alpha]_D^{25} = +90.3$ (*c* 1, CH_2Cl_2)
Source of chirality:(1*R*,2*R*)-diamino-
cyclohexane

Anne Brethon, Joël J. E. Moreau* and Michel Wong Chi Man

Tetrahedron: Asymmetry 15 (2004) 495

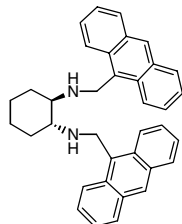


$C_{20}H_{24}N_2Br_2$
(1*R*,2*R*)-*N,N'*-Di(4'-bromobenzyl)-1,2-diaminocyclohexane

$[\alpha]_D^{25} = -39.6$ (*c* 1.12, $CHCl_3$)
Source of chirality:(1*R*,2*R*)-*N,N'*-di(4'-
bromobenzylidene)-1,2-diaminocyclo-
hexane

Anne Brethon, Joël J. E. Moreau* and Michel Wong Chi Man

Tetrahedron: Asymmetry 15 (2004) 495



$C_{36}H_{34}N_2$

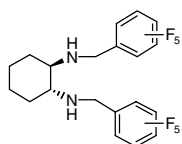
(1*R*,2*R*)-*N,N'*-Di(anthracenyl-9'-methylene)-1,2-diaminocyclohexane

$[\alpha]_D^{25} = +242.9$ (*c* 1.14, $CHCl_3$)

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

Anne Brethon, Joël J. E. Moreau* and Michel Wong Chi Man

Tetrahedron: Asymmetry 15 (2004) 495



$C_{20}H_{16}N_2F_{10}$

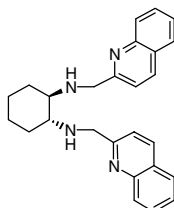
(1*R*,2*R*)-*N,N'*-Di(2',3',4',5',6'-pentafluorobenzyl)-1,2-diaminocyclohexane

$[\alpha]_D^{25} = -55$ (*c* 1.04, CH_2Cl_2)

Source of chirality: (1*R*,2*R*)-*N,N'*-di(2',3',4',5',6'-pentafluorobenzylidene)-1,2-diaminocyclohexane

Anne Brethon, Joël J. E. Moreau* and Michel Wong Chi Man

Tetrahedron: Asymmetry 15 (2004) 495



$C_{26}H_{28}N_4$

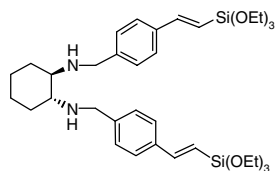
(1*R*,2*R*)-*N,N'*-Di(quinoline-2'-methylene)-1,2-diaminocyclohexane

$[\alpha]_D^{25} = -42.7$ (*c* 1.1, CH_2Cl_2)

Source of chirality: (1*R*,2*R*)-*N,N'*-di(quinoline-2'-methylidene)-1,2-diaminocyclohexane

Anne Brethon, Joël J. E. Moreau* and Michel Wong Chi Man

Tetrahedron: Asymmetry 15 (2004) 495



$C_{36}H_{58}N_2O_6Si_2$

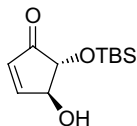
(1*R*,2*R*)-*N,N'*-Bis(4'-(triethoxysilyl)ethenyl)benzyl)-1,2-diaminocyclohexane

$[\alpha]_D^{25} = -30.3$ (*c* 0.33, THF)

Source of chirality: (1*R*,2*R*)-*N,N'*-di(4'-bromobenzyl)-1,2-diaminocyclohexane

Zac C. Etheridge and Stephen Caddick*

Tetrahedron: Asymmetry 15 (2004) 503



$C_{11}H_{20}O_3Si$
(4*S*,5*R*)-4-Hydroxy-5-*t*-butyldimethylsilyloxy-cyclopent-2-en-1-one

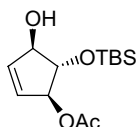
$[\alpha]_D^{25} = +91.8$ (*c* 1.14, $CHCl_3$)

Source of chirality: lipase-mediated kinetic resolution

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

Zac C. Etheridge and Stephen Caddick*

Tetrahedron: Asymmetry 15 (2004) 503



$C_{13}H_{24}O_4Si$
(3*S*,4*R*,5*R*)-3-Acetoxy-4-*t*-butyldimethylsilyloxy-5-hydroxy-cyclopent-2-ene

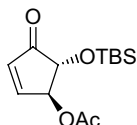
$[\alpha]_D^{30} = +61.5$ (*c* 1.0, $CHCl_3$)

Source of chirality: starting material and diastereoselective reduction

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

Zac C. Etheridge and Stephen Caddick*

Tetrahedron: Asymmetry 15 (2004) 503



$C_{13}H_{22}O_4Si$
(4*S*,5*R*)-4-Acetoxy-5-*t*-butyldimethylsilyloxy-cyclopenten-1-one

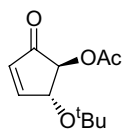
$[\alpha]_D^{30} = +145.4$ (*c* 1.02, $CHCl_3$)

Source of chirality: lipase-mediated kinetic resolution

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

Zac C. Etheridge and Stephen Caddick*

Tetrahedron: Asymmetry 15 (2004) 503



$C_{11}H_{16}O_4Si$
(4*R*,5*S*)-4-*t*-Butoxy-5-acetoxy-cyclopent-2-en-1-one

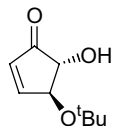
$[\alpha]_D^{28} = -142.3$ (*c* 1.0, $CHCl_3$)

Source of chirality: lipase-mediated kinetic resolution

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

Zac C. Etheridge and Stephen Caddick*

Tetrahedron: Asymmetry 15 (2004) 503



C₉H₁₄O₃

(4*S*,5*R*)-4-*t*-Butoxy-5-hydroxy-cyclopent-1-ene

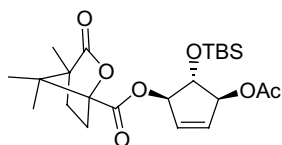
$[\alpha]_D^{28} = +25.7$ (*c* 1.0, CHCl₃)

Source of chirality: lipase-mediated kinetic resolution

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

Zac C. Etheridge and Stephen Caddick*

Tetrahedron: Asymmetry 15 (2004) 503



C₂₃H₃₆O₇Si

(3*S*,4*R*,5*R*)-3-Acetoxy-4-*t*-butyldimethylsilyloxy-5-camphanoxycyclopent-2-ene

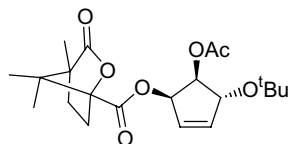
$[\alpha]_D^{18} = -28.9$ (*c* 1.4, CHCl₃)

Source of chirality: starting materials

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

Zac C. Etheridge and Stephen Caddick*

Tetrahedron: Asymmetry 15 (2004) 503



C₂₁H₃₀O₇

(3*S*,4*R*,5*R*)-3-Acetoxy-4-*t*-butyldimethylsilyloxy-5-camphanoxycyclopent-2-ene

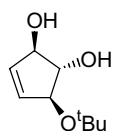
$[\alpha]_D^{18} = -13.1$ (*c* 1.0, CHCl₃)

Source of chirality: starting materials

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

Zac C. Etheridge and Stephen Caddick*

Tetrahedron: Asymmetry 15 (2004) 503



C₉H₁₆O₃

(3*S*,4*S*,5*R*)-3-*t*-Butoxy-4,5-dihydroxy-cyclopent-1-ene

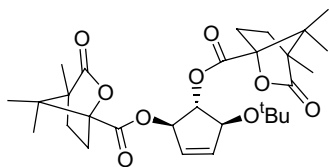
$[\alpha]_D^{18} = +11.4$ (*c* 0.35, CHCl₃)

Source of chirality: starting material and diastereoselective reduction

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

Zac C. Etheridge and Stephen Caddick*

Tetrahedron: Asymmetry 15 (2004) 503



C₂₉H₄₄O₉N

(3*S*,4*R*,5*R*)-3-*t*-Butoxy-4,5-biscamphanoxy-cyclopent-2-ene

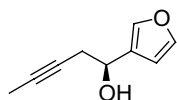
$[\alpha]_D^{18} = +24.2$ (*c* 0.75, CHCl₃)

Source of chirality: starting materials

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

Laurent Commeiras and Jean-Luc Parrain*

Tetrahedron: Asymmetry 15 (2004) 509



C₉H₁₀O₂

(-)-1-(3-Furyl)pent-3-yn-1-ol

Ee >99%

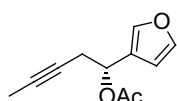
$[\alpha]_D^{24} = -32.8$ (*c* 1, CHCl₃)

Source of chirality: enzymatic resolution

Absolute configuration: *S*

Laurent Commeiras and Jean-Luc Parrain*

Tetrahedron: Asymmetry 15 (2004) 509



C₁₁H₁₂O₃

(+)-1-(3-Furyl)pent-3-yn-1-yl acetate

Ee = 92%

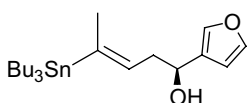
$[\alpha]_D^{24} = +41.4$ (*c* 1, CHCl₃)

Source of chirality: enzymatic resolution

Absolute configuration: *R*

Laurent Commeiras and Jean-Luc Parrain*

Tetrahedron: Asymmetry 15 (2004) 509



C₂₁H₃₈O₂Sn

(-)-(E)-4-Tributylstannyl-1-(3-furyl)pent-3-en-1-ol

Ee = not determined

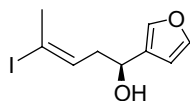
$[\alpha]_D^{24} = -11.7$ (*c* 1, CHCl₃)

Source of chirality: enzymatic resolution

Absolute configuration: *S*

Laurent Commeiras and Jean-Luc Parrain*

Tetrahedron: Asymmetry 15 (2004) 509



$C_9H_{11}IO_2$

(-)-(E)-1-(3-Furyl)-4-iodopent-3-en-1-ol

Ee = not determined

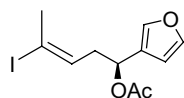
$[\alpha]_D^{24} = -13.0$ (c 1, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: *S*

Laurent Commeiras and Jean-Luc Parrain*

Tetrahedron: Asymmetry 15 (2004) 509



$C_{11}H_{13}IO_3$

(-)-(E)-1-(3-Furyl)-4-iodopent-3-en-1-yl acetate

Ee >99%

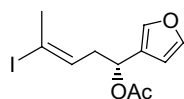
$[\alpha]_D^{24} = -26.6$ (c 1, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: *S*

Laurent Commeiras and Jean-Luc Parrain*

Tetrahedron: Asymmetry 15 (2004) 509



$C_{11}H_{13}IO_3$

(+)-(E)-1-(3-Furyl)-4-iodopent-3-en-1-yl acetate

Ee = 92%

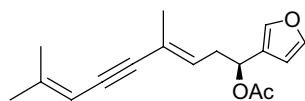
$[\alpha]_D^{24} = +25.0$ (c 1, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: *R*

Laurent Commeiras and Jean-Luc Parrain*

Tetrahedron: Asymmetry 15 (2004) 509



$C_{17}H_{20}O_3$

(-)-Furocaulerpin

Ee = not determined

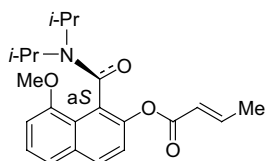
$[\alpha]_D^{24} = -14.6$ (c 1, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: *S*

Wei-Min Dai,* Yan Zhang and Ye Zhang

Tetrahedron: Asymmetry 15 (2004) 525



$C_{22}H_{27}NO_4$

(+)-(aS)-N,N-Diisopropyl-2-[2'-(E)-butenoyloxy]-8-methoxy-1-naphthamide

Ee = 100% (HPLC)

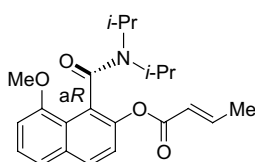
$[\alpha]_D^{25} = +59.9$ (c 0.81, $CHCl_3$)

Source of chirality: asymmetric reaction
(AD) and HPLC separation

Absolute configuration: aS

Wei-Min Dai,* Yan Zhang and Ye Zhang

Tetrahedron: Asymmetry 15 (2004) 525



$C_{22}H_{27}NO_4$

(-)-(aR)-N,N-Diisopropyl-2-[2'-(E)-butenoyloxy]-8-methoxy-1-naphthamide

Ee = 100% (HPLC)

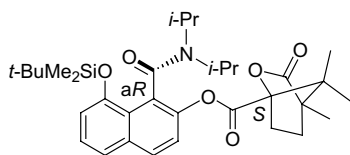
$[\alpha]_D^{25} = -59.4$ (c 0.81, $CHCl_3$)

Source of chirality: HPLC separation

Absolute configuration: aR

Wei-Min Dai,* Yan Zhang and Ye Zhang

Tetrahedron: Asymmetry 15 (2004) 525



$C_{33}H_{47}NO_6Si$

(-)-(aR,1'S,4'R)-N,N-Diisopropyl-8-(*tert*-butylidimethylsilyloxy)-2-{4',7',7'-trimethyl-3'-oxo-2'-oxabicyclo-[2.2.1]heptanecarbonyloxy}-1-naphthamide

Ee = 100% (HPLC)

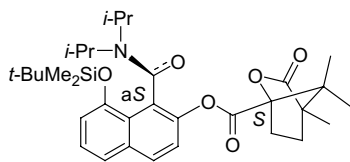
$[\alpha]_D^{25} = -88.4$ (c 1.0, $CHCl_3$)

Source of chirality: chemical resolution

Absolute configuration: aR,S

Wei-Min Dai,* Yan Zhang and Ye Zhang

Tetrahedron: Asymmetry 15 (2004) 525



$C_{33}H_{47}NO_6Si$

(+)-(aS,1'S,4'R)-N,N-Diisopropyl-8-(*tert*-butylidimethylsilyloxy)-2-{4',7',7'-trimethyl-3'-oxo-2'-oxabicyclo-[2.2.1]heptanecarbonyloxy}-1-naphthamide

Ee = 100% (HPLC, X-ray)

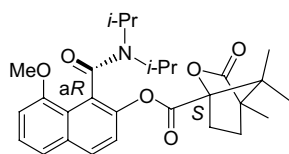
$[\alpha]_D^{25} = +114.5$ (c 1.0, $CHCl_3$)

Source of chirality: chemical resolution

Absolute configuration: aS,S

Wei-Min Dai,* Yan Zhang and Ye Zhang

Tetrahedron: Asymmetry 15 (2004) 525



$C_{28}H_{35}NO_6$

(-)-(aR,1'S,4'R)-N,N-Diisopropyl-8-methoxy-2-{4',7',7'-trimethyl-3'-oxo-2'-oxabicyclo[2.2.1]heptanecarbonyloxy}-1-naphthamide

Ee = 100% (HPLC)

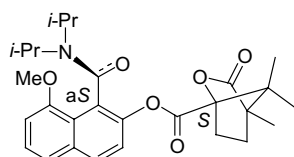
$[\alpha]_D^{25} = -7.8$ (c 0.6, $CHCl_3$)

Source of chirality: chemical resolution

Absolute configuration: aR,S

Wei-Min Dai,* Yan Zhang and Ye Zhang

Tetrahedron: Asymmetry 15 (2004) 525



$C_{28}H_{35}NO_6$

(+)-(aS,1'S,4'R)-N,N-Diisopropyl-8-methoxy-2-{4',7',7'-trimethyl-3'-oxo-2'-oxabicyclo[2.2.1]heptanecarbonyloxy}-1-naphthamide

Ee = 100% (HPLC)

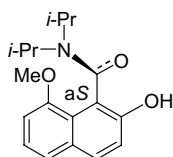
$[\alpha]_D^{25} = +21.7$ (c 0.5, $CHCl_3$)

Source of chirality: chemical resolution

Absolute configuration: aS,S

Wei-Min Dai,* Yan Zhang and Ye Zhang

Tetrahedron: Asymmetry 15 (2004) 525



$C_{18}H_{23}NO_3$

(+)-(aS)-N,N-Diisopropyl-2-hydroxy-8-methoxy-1-naphthamide

Ee = 86.8% (HPLC)

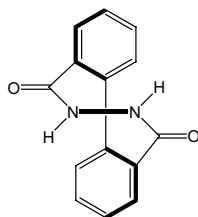
$[\alpha]_D^{25} = +20.7$ (c 1.0, $CHCl_3$)

Source of chirality: chemical resolution and asymmetric reaction (AD)

Absolute configuration: aS

Denis A. Lenev,* Konstantin A. Lyssenko, Denis G. Golovanov, Oliver Weingart, Volker Buß and Remir G. Kostyanovsky

Tetrahedron: Asymmetry 15 (2004) 537



$C_{14}H_{10}N_2O_2$

6,7-Dihydro-dibenzo[d,f][1,2]diazocine-5,8-dione

Configuration: (R)-(+), estimated from X-ray analysis of diastereomeric derivative

Specific rotation: (c 0.7 MeCN, 15 °C)

$[\alpha]_{578} = 144$, $[\alpha]_{546} = 171$, $[\alpha]_{436} = 386$,

$[\alpha]_{406} = 483$, $[\alpha]_{366} = 834$

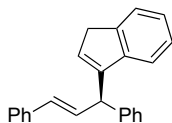
Circular dichroism: λ_{max} , nm, $\Delta\epsilon$, $M^{-1} cm^{-1}$

(3.5×10^{-4} M, EtOH, cell 1 mm): 241, 29.8; 221, 42

Enantiomeric purity: >90%, estimated from 1H NMR with chiral shift reagent $Eu(tfc)_3$

Tamio Hayashi,* Toshimasa Suzuka, Atsushi Okada and Motoi Kawatsura

Tetrahedron: Asymmetry 15 (2004) 545



$C_{24}H_{20}$

(*R*)-1,3-Diphenyl-3-(3*H*-inden-1-yl)propene

Ee >99% (by preparation method)

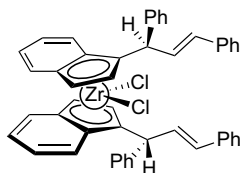
$[\alpha]_D^{20} = -74.3$ (c 1.02, $CHCl_3$)

Source of chirality: chiral catalyst

Absolute configuration: *R*

Tamio Hayashi,* Toshimasa Suzuka, Atsushi Okada and Motoi Kawatsura

Tetrahedron: Asymmetry 15 (2004) 545



$C_{48}H_{38}Cl_2Zr$

Dichloro-bis[1-((*R*)-1,3-diphenyl-2-propenyl]indenyl]zirconium(IV)

Ee >99% (by preparation method)

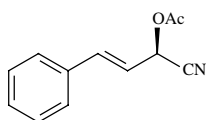
$[\alpha]_D^{20} = +95.2$ (c 0.96, $CHCl_3$)

Source of chirality: chiral catalyst

Absolute configuration: *R,R*

Nitin W. Fadnavis,* Kasiraman R. Radhika and Kallakunta Vasantha Madhuri

Tetrahedron: Asymmetry 15 (2004) 549



$C_{12}H_{11}NO_2$

(*R*)-2-Acetoxy-4-phenyl-(*E*)-but-3-enenitrile

Ee >99%

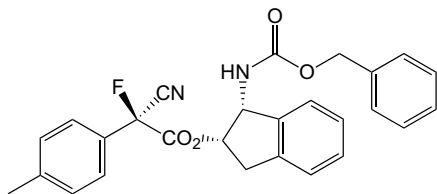
$[\alpha]_D^{25} = -22$ (c 2.0, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: *R*

Tomoya Fujiwara, Masaki Sasaki, Kenji Omata, Chizuko Kabuto, Kuninobu Kabuto* and Yoshio Takeuchi

Tetrahedron: Asymmetry 15 (2004) 555



$C_{27}H_{23}FN_2O_4$

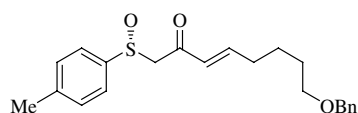
(1*R*,2*S*)-*N*-Carbobenzyloxy-*cis*-1-amino-2-indanyl (*S*)-2-cyano-2-fluoro-2-*p*-tolylacetate

Ee = 100%

$[\alpha]_D^{24} = +92.4$ (c 1.0, $CHCl_3$)

Sadagopan Raghavan* and T. Sreekanth

Tetrahedron: Asymmetry 15 (2004) 565



C₂₂H₂₆O₃S

8-Benzyloxy-1-(*R*_S)-(4-methylbenzylsulfinyl)-*E*-3-octen-2-one

De >95%

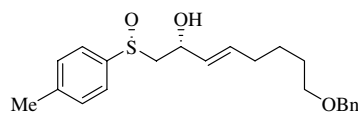
[α]_D²⁵ = +145.0 (c 1, acetone)

Source of chirality: asymmetric synthesis

Absolute configuration: (1*R*_S)

Sadagopan Raghavan* and T. Sreekanth

Tetrahedron: Asymmetry 15 (2004) 565



C₂₂H₂₈O₃S

8-Benzyloxy-1-(*R*_S)-(4-methylphenylsulfinyl)-(2*R*,3*E*)-3-octen-2-ol

De >95%

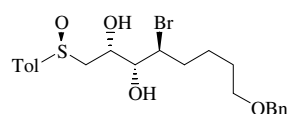
[α]_D²⁵ = +90.5 (c 1, acetone)

Source of chirality: asymmetric synthesis

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

Sadagopan Raghavan* and T. Sreekanth

Tetrahedron: Asymmetry 15 (2004) 565



C₂₂H₂₉O₄BrS

8-Benzyloxy-4-bromo-1-(*S*_S)-(4-methylphenylsulfinyl)-(2*R*,3*R*,4*S*)-octane-2,3-diol

De >95%

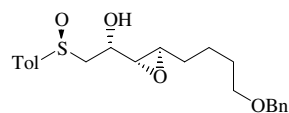
[α]_D²⁵ = -58.5 (c 1.0, acetone)

Source of chirality: asymmetric synthesis

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

Sadagopan Raghavan* and T. Sreekanth

Tetrahedron: Asymmetry 15 (2004) 565



C₂₂H₂₈O₄S

1-[(3*S*)-(4-Benzyloxybutyl)(2*S*)-oxiranyl]-2-(*S*_S)-(4-methylphenylsulfinyl)-(1*R*)-ethan-1-ol

De >95%

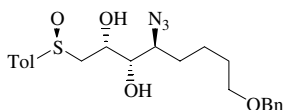
[α]_D²⁵ = -102.0 (c 0.8, acetone)

Source of chirality: asymmetric synthesis

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

Sadagopan Raghavan* and T. Sreekanth

Tetrahedron: Asymmetry 15 (2004) 565



$C_{22}H_{29}N_3O_4S$

4-Azido-8-benzyloxy-1-(*S*)--(4-methylphenylsulfinyl)-(*2R,3S,4S*)-octane-2,3-diol

De >95%

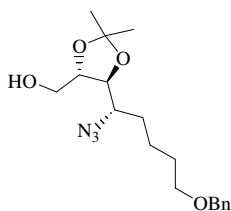
$[\alpha]_D^{25} = -90.5$ (c 0.8, acetone)

Source of chirality: asymmetric synthesis

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

Sadagopan Raghavan* and T. Sreekanth

Tetrahedron: Asymmetry 15 (2004) 565



$C_{18}H_{27}N_3O_4$

5-[1-Azido-5-benzyloxy-(*1S*)-pentyl]-2,2-dimethyl-(*4S,5S*)-1,3-dioxolan-4-ylmethanol

De >95%

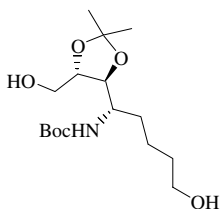
$[\alpha]_D^{25} = -30.5$ (c 0.6, acetone)

Source of chirality: asymmetric synthesis

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

Sadagopan Raghavan* and T. Sreekanth

Tetrahedron: Asymmetry 15 (2004) 565



$C_{16}H_{31}NO_6$

5-[1-*tert*-Butyloxycarbonylamido-5-[5-hydroxymethyl-2,2-dimethyl-(*4S,5S*)-1,3-dioxolan-4-yl]-1-pentanol

De >95%

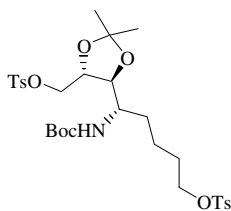
$[\alpha]_D^{25} = -6.9$ (c 0.6, acetone)

Source of chirality: asymmetric synthesis

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

Sadagopan Raghavan* and T. Sreekanth

Tetrahedron: Asymmetry 15 (2004) 565



$C_{30}H_{43}NO_{10}S_2$

4-[1-*tert*-Butyloxycarbonylamido-5-(4-methylphenylsulfonyloxy)-(1*S*)-pentyl]-2,2-dimethyl-5-(4-methylphenylsulfonyloxymethyl)-(4*S,5S*)-1,3-dioxolane

De >95%

$[\alpha]_D^{25} = -14.3$ (c 0.6, acetone)

Source of chirality: asymmetric synthesis

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