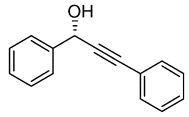
Ping-Yu Wu, Hsyueh-Liang Wu, Ying-Ying Shen, Biing-Jiun Uang *

Tetrahedron: Asymmetry *20 (2009) 1837*



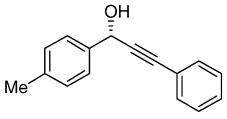
$C_{15}H_{12}O$

(1*S*)-1,3-Diphenyl-prop-2-yn-1-ol

86% ee
$[\alpha]_D^{27} = -2.4$ (*c* 1.2, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (1*S*)

Ping-Yu Wu, Hsyueh-Liang Wu, Ying-Ying Shen, Biing-Jiun Uang *

Tetrahedron: Asymmetry *20 (2009) 1837*



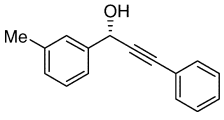
$C_{16}H_{14}O$

(1*S*)-3-Phenyl-1-*p*-tolyl-prop-2-yn-1-ol

86% ee
$[\alpha]_D^{27} = -5.2$ (*c* 1.2, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (1*S*)

Ping-Yu Wu, Hsyueh-Liang Wu, Ying-Ying Shen, Biing-Jiun Uang *

Tetrahedron: Asymmetry *20 (2009) 1837*



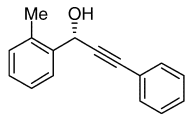
$C_{16}H_{14}O$

(1*S*)-3-Phenyl-1-*m*-tolyl-prop-2-yn-1-ol

85% ee
$[\alpha]_D^{27} = -5.8$ (*c* 1.3, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (1*S*)

Ping-Yu Wu, Hsyueh-Liang Wu, Ying-Ying Shen, Biing-Jiun Uang *

Tetrahedron: Asymmetry *20 (2009) 1837*



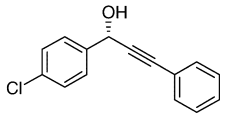
$C_{16}H_{14}O$

(1*S*)-3-Phenyl-1-*o*-tolyl-prop-2-yn-1-ol

86% ee
$[\alpha]_D^{27} = +12.2$ (*c* 1.2, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (1*S*)

Ping-Yu Wu, Hsyueh-Liang Wu, Ying-Ying Shen, Biing-Jiun Uang *

Tetrahedron: Asymmetry *20 (2009) 1837*



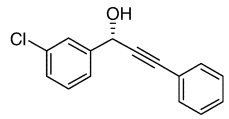
$C_{15}H_{11}ClO$

(1*S*)-1-(4-Chloro-phenyl)-3-phenyl-prop-2-yn-1-ol

86% ee
$[\alpha]_D^{27} = -7.9$ (*c* 1.4, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (1*S*)

Ping-Yu Wu, Hsyueh-Liang Wu, Ying-Ying Shen, Biing-Jiun Uang *

Tetrahedron: Asymmetry *20 (2009) 1837*



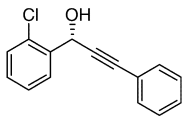
$C_{15}H_{11}ClO$

(1*S*)-1-(3-Chloro-phenyl)-3-phenyl-prop-2-yn-1-ol

86% ee
$[\alpha]_D^{27} = -14.2$ (*c* 1.5, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (1*S*)

Ping-Yu Wu, Hsyueh-Liang Wu, Ying-Ying Shen, Biing-Jiun Uang *

Tetrahedron: Asymmetry *20 (2009) 1837*



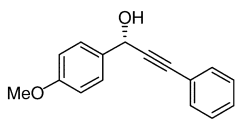
$C_{15}H_{11}ClO$

(1*S*)-1-(2-Chloro-phenyl)-3-phenyl-prop-2-yn-1-ol

83% ee
$[\alpha]_D^{27} = +46.2$ (*c* 1.4, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (1*S*)

Ping-Yu Wu, Hsyueh-Liang Wu, Ying-Ying Shen, Biing-Jiun Uang *

Tetrahedron: Asymmetry *20 (2009) 1837*



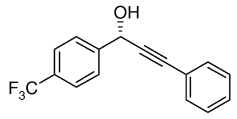
$C_{16}H_{14}O_2$

(1*S*)-1-(4-Methoxy-phenyl)-3-phenyl-prop-2-yn-1-ol

80% ee
$[\alpha]_D^{27} = -4.2$ (*c* 1.7, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (1*S*)

Ping-Yu Wu, Hsyueh-Liang Wu, Ying-Ying Shen, Biing-Jiun Uang *

Tetrahedron: Asymmetry *20 (2009) 1837*



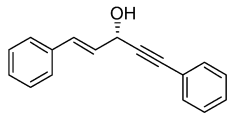
$C_{16}H_{11}F_3O$

(1*S*)-3-Phenyl-1-(4-trifluoromethyl-phenyl)-prop-2-yn-1-ol

87% ee
$[\alpha]_D^{27} = -6.9$ (*c* 1.4, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (1*S*)

Ping-Yu Wu, Hsyueh-Liang Wu, Ying-Ying Shen, Biing-Jiun Uang *

Tetrahedron: Asymmetry *20 (2009) 1837*



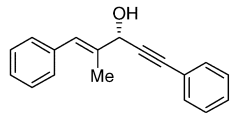
$C_{17}H_{14}O$

(3*S*)-1,5-Diphenyl-pent-1-en-4-yn-3-ol (**5i**)

61% ee
$[\alpha]_D^{27} = -7.3$ (*c* 0.5, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (3*S*)

Ping-Yu Wu, Hsyueh-Liang Wu, Ying-Ying Shen, Biing-Jiun Uang *

Tetrahedron: Asymmetry *20 (2009) 1837*



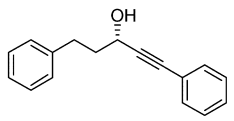
$C_{18}H_{16}O$

(3*S*)-2-Methyl-1,5-diphenyl-pent-1-en-4-yn-3-ol

71% ee
$[\alpha]_D^{27} = +31.6$ (*c* 1.0, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (3*S*)

Ping-Yu Wu, Hsyueh-Liang Wu, Ying-Ying Shen, Biing-Jiun Uang *

Tetrahedron: Asymmetry *20 (2009) 1837*



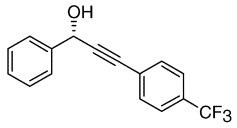
$C_{17}H_{16}O$

(3*S*)-1,5-Diphenyl-pent-1-yn-3-ol

49% ee
$[\alpha]_D^{27} = +28.4$ (*c* 1.1, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (3*S*)

Ping-Yu Wu, Hsyueh-Liang Wu, Ying-Ying Shen, Biing-Jiun Uang *

Tetrahedron: Asymmetry *20 (2009) 1837*



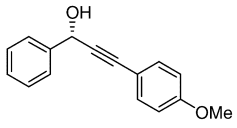
$C_{16}H_{11}F_3O$

(1*S*)-1-Phenyl-3-(4-trifluoromethyl-phenyl)-prop-2-yn-1-ol

84% ee
$[\alpha]_D^{27} = +1.3$ (*c* 1.1, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (1*S*)

Ping-Yu Wu, Hsyueh-Liang Wu, Ying-Ying Shen, Biing-Jiun Uang *

Tetrahedron: Asymmetry *20 (2009) 1837*



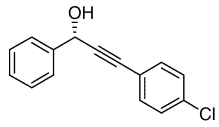
$C_{16}H_{14}O_2$

(1*S*)-3-(4-Methoxy-phenyl)-1-phenyl-prop-2-yn-1-ol

76% ee
$[\alpha]_D^{26} = +1.9$ (*c* 1.1, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (1*S*)

Ping-Yu Wu, Hsyueh-Liang Wu, Ying-Ying Shen, Biing-Jiun Uang *

Tetrahedron: Asymmetry *20 (2009) 1837*



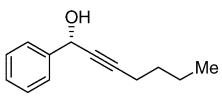
$C_{15}H_{11}ClO$

(1*S*)-3-(4-Chloro-phenyl)-1-phenyl-prop-2-yn-1-ol

66% ee
$[\alpha]_D^{26} = +2.6$ (*c* 1.0, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (1*S*)

Ping-Yu Wu, Hsyueh-Liang Wu, Ying-Ying Shen, Biing-Jiun Uang *

Tetrahedron: Asymmetry *20 (2009) 1837*



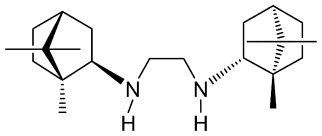
$C_{13}H_{16}O$

(1*S*)-1-Phenyl-hept-2-yn-1-ol

75% ee
$[\alpha]_D^{25} = -18.1$ (*c* 1.3, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (1*S*)

Nalluri Sanjeevakumar, Mariappan Periasamy *

Tetrahedron: Asymmetry *20 (2009) 1842*



$C_{22}H_{40}N_2$

N,N′-Bis(isobornyl)ethylenediamine

$[\alpha]_D^{25} = -107.6$ (*c* 0.42, C_2H_5OH, 99% ee)
Source of chirality: D-(+)-camphor
Absolute configuration: (1*R*,2*R*,4*R*)

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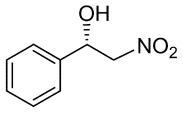
Tetrahedron: Asymmetry *20 (2009) 1842*



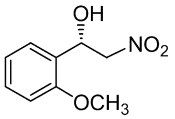
$C_8H_9NO_3$

(*S*)-1-Phenyl-2-nitroethanol

$[\alpha]_D^{25} = +32.6$ (*c* 0.42, CH_2Cl_2, 84% ee) (% ee by HPLC analysis)
Source of chirality: asymmetric synthesis using copper tetradentate chiral *N,N′*-bis(isobornyl)ethylenediamine complex
Absolute configuration: (*S*)

Nalluri Sanjeevakumar, Mariappan Periasamy *

Tetrahedron: Asymmetry *20 (2009) 1842*



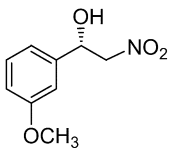
$C_9H_{11}NO_4$

(*S*)-1-(2-Methoxyphenyl)-2-nitroethanol

$[\alpha]_D^{25} = +35.5$ (*c* 0.4, CH_2Cl_2, 90% ee) (% ee by HPLC analysis)
Source of chirality: asymmetric synthesis using copper tetradentate chiral *N,N′*-bis(isobornyl)ethylenediamine complex
Absolute configuration: (*S*)

Nalluri Sanjeevakumar, Mariappan Periasamy *

Tetrahedron: Asymmetry *20 (2009) 1842*



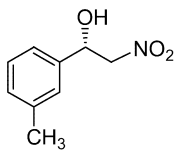
$C_9H_{11}NO_4$

(*S*)-1-(3-Methoxyphenyl)-2-nitroethanol

$[\alpha]_D^{25} = +30.8$ (*c* 0.44, CH_2Cl_2, 88% ee) (% ee by HPLC analysis)
Source of chirality: asymmetric synthesis using copper tetradentate chiral *N,N′*-bis(isobornyl)ethylenediamine complex
Absolute configuration: (*S*)

Nalluri Sanjeevakumar, Mariappan Periasamy *

Tetrahedron: Asymmetry *20 (2009) 1842*



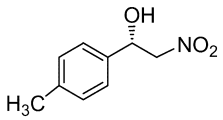
$C_9H_{11}NO_3$

(*S*)-1-(3-Methylphenyl)-2-nitroethanol

$[\alpha]_D^{25} = +31.1$ (*c* 0.46, CH_2Cl_2, 88% ee) (% ee by HPLC analysis)
Source of chirality: asymmetric synthesis using copper tetradentate chiral *N*,*N*′-bis(isobornyl)ethylenediamine complex
Absolute configuration: (*S*)

Nalluri Sanjeevakumar, Mariappan Periasamy *

Tetrahedron: Asymmetry *20 (2009) 1842*



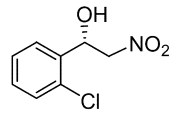
$C_9H_{11}NO_3$

(*S*)-1-(4-Methylphenyl)-2-nitroethanol

$[\alpha]_D^{25} = +12.9$ (*c* 0.50, CH_2Cl_2, 78% ee) (% ee by HPLC analysis)
Source of chirality: asymmetric synthesis using copper tetradentate chiral *N*,*N*′-bis(isobornyl)ethylenediamine complex
Absolute configuration: (*S*)

Nalluri Sanjeevakumar, Mariappan Periasamy *

Tetrahedron: Asymmetry *20 (2009) 1842*



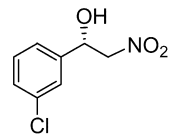
$C_8H_9ClNO_3$

(*S*)-1-(2-Chlorophenyl)-2-nitroethanol

$[\alpha]_D^{25} = +50.1$ (*c* 0.40, CH_2Cl_2, 86% ee) (% ee by HPLC analysis)
Source of chirality: asymmetric synthesis using copper tetradentate chiral *N*,*N*′-bis(isobornyl)ethylenediamine complex
Absolute configuration: (*S*)

Nalluri Sanjeevakumar, Mariappan Periasamy *

Tetrahedron: Asymmetry *20 (2009) 1842*



$C_8H_9ClNO_3$

1-(3-Chlorophenyl)-2-nitroethanol

$[\alpha]_D^{25} = +16.3$ (*c* 0.34, $CHCl_3$, 78% ee) (% ee by HPLC analysis)
Source of chirality: asymmetric synthesis using copper tetradentate chiral *N*,*N*′-bis(isobornyl)ethylenediamine complex

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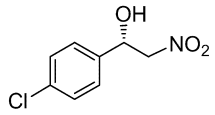

$C_8H_9ClNO_3$

(*S*)-1-(4-Chlorophenyl)-2-nitroethanol

$[\alpha]_D^{25} = +27.6$ (*c* 0.42, CH_2Cl_2, 68% ee) (% ee by HPLC analysis)
Source of chirality: asymmetric synthesis using copper tetradentate chiral *N*,*N*′-bis(isobornyl)ethylenediamine complex
Absolute configuration: (*S*)

Nalluri Sanjeevakumar, Mariappan Periasamy *

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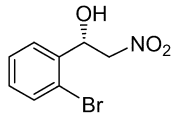

$C_8H_9BrNO_3$

1-(2-Bromophenyl)-2-nitroethanol

$[\alpha]_D^{25} = +23.6$ (*c* 0.72, $CHCl_3$, 70% ee) (% ee was by HPLC analysis)
Source of chirality: asymmetric synthesis using copper tetradentate chiral *N*,*N*′-bis(isobornyl)ethylenediamine complex

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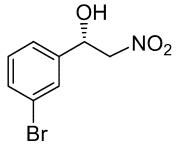

$C_8H_9BrNO_3$

1-(3-Bromophenyl)-2-nitroethanol

$[\alpha]_D^{25} = +15.2$ (*c* 0.46, CH_2Cl_2, 64% ee) (% ee by HPLC analysis)
Source of chirality: asymmetric synthesis using copper tetradentate chiral *N*,*N*′-bis(isobornyl)ethylenediamine complex

Nalluri Sanjeevakumar, Mariappan Periasamy *

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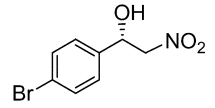

$C_8H_9BrNO_3$

(*S*)-1-(4-Bromophenyl)-2-nitroethanol

$[\alpha]_D^{23} = +66.5$ (*c* 0.50, $CHCl_3$, 86% ee) (% ee by HPLC analysis)
Source of chirality: asymmetric synthesis using copper tetradentate chiral *N*,*N*′-bis(isobornyl)ethylenediamine complex
Absolute configuration: (*S*)

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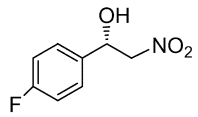
Tetrahedron: Asymmetry *20 (2009) 1842*



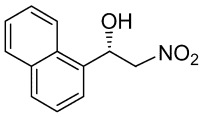
$C_8H_9FNO_3$

(*S*)-1-(4-Fluorophenyl)-2-nitroethanol

$[\alpha]_D^{25} = +31.0$ (*c* 0.56, EtOH, 86% ee) (% ee by HPLC analysis)
Source of chirality: asymmetric synthesis using copper tetradentate chiral *N*,*N*′-bis(isobornyl)ethylenediamine complex
Absolute configuration: (*S*)

Nalluri Sanjeevakumar, Mariappan Periasamy *

Tetrahedron: Asymmetry *20 (2009) 1842*



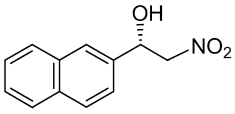
$C_{12}H_{11}NO_3$

(*S*)-1-(1-Naphthyl)-2-nitroethanol

$[\alpha]_D^{21} = +13.8$ (*c* 0.42, CH_2Cl_2, 72% ee) (% ee by HPLC analysis)
Source of chirality: asymmetric synthesis using copper tetradentate chiral *N*,*N*′-bis(isobornyl)ethylenediamine complex
Absolute configuration: (*S*)

Nalluri Sanjeevakumar, Mariappan Periasamy *

Tetrahedron: Asymmetry *20 (2009) 1842*



$C_{12}H_{11}NO_3$

(*S*)-1-(2-Naphthyl)-2-nitroethanol

$[\alpha]_D^{25} = +30.0$ (*c* 0.46, CH_2Cl_2, 82% ee) (% ee by HPLC analysis)
Source of chirality: asymmetric synthesis using copper tetradentate chiral *N*,*N*′-bis(isobornyl)ethylenediamine complex
Absolute configuration: (*S*)

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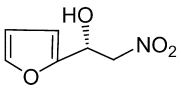
Tetrahedron: Asymmetry *20 (2009) 1842*



$C_6H_7NO_4$

(*S*)-1-Furfuryl-2-nitroethanol

$[\alpha]_D^{25} = +33.5$ (*c* 0.42, CH_2Cl_2, 88% ee) (% ee by HPLC analysis)
Source of chirality: asymmetric synthesis using copper tetradentate chiral *N*,*N*′-bis(isobornyl)ethylenediamine complex
Absolute configuration: (*S*)

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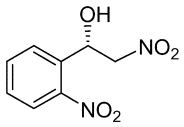
Tetrahedron: Asymmetry *20 (2009) 1842*



($C_8H_8N_2O_5$

(*S*)-1-(2-Nitrophenyl)-2-nitroethanol

$[\alpha]_D^{25} = -210.9$ (*c* 0.64, CH_2Cl_2, 84% ee) (% ee was by HPLC analysis)
Source of chirality: asymmetric synthesis using copper tetradentate chiral *N*,*N*′-bis(isobornyl)ethylenediamine complex
Absolute configuration: (*S*)

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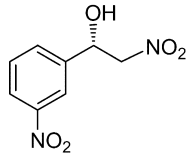
Tetrahedron: Asymmetry *20 (2009) 1842*



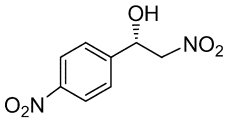
$C_8H_8N_2O_5$

(*S*)-1-(3-Nitrophenyl)-2-nitroethanol

$[\alpha]_D^{25} = +28.1$ (*c* 0.46, CH_2Cl_2, 78% ee) (% ee by HPLC analysis)
Source of chirality: asymmetric synthesis using copper tetradentate chiral *N*,*N*′-bis(isobornyl)ethylenediamine complex
Absolute configuration: (*S*)

Nalluri Sanjeevakumar, Mariappan Periasamy *

Tetrahedron: Asymmetry *20 (2009) 1842*



$C_8H_8N_2O_5$

(*S*)-1-(4-Nitrophenyl)-2-nitroethanol

$[\alpha]_D^{25} = +26.1$ (*c* 0.46, CH_2Cl_2, 74% ee) (% ee by HPLC analysis)
Source of chirality: asymmetric synthesis using copper tetradentate chiral *N*,*N*′-bis(isobornyl)ethylenediamine complex
Absolute configuration: (*S*)

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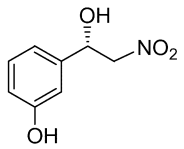
Tetrahedron: Asymmetry *20 (2009) 1842*



$C_8H_9NO_4$

1-(3-Hydroxyphenyl)-2-nitroethanol

$[\alpha]_D^{25} = +8.1$ (*c* 0.55, EtOH, 80% ee) (% ee by HPLC analysis)
Source of chirality: asymmetric synthesis using copper tetradentate chiral *N*,*N*′-bis(isobornyl)ethylenediamine complex

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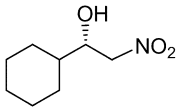
Tetrahedron: Asymmetry *20 (2009) 1842*



$C_8H_{15}NO_3$

(*S*)-2-Nitro-1-cyclohexylethanol

$[\alpha]_D^{25} = +15.5$ (*c* 0.60, CH_2Cl_2, 88% ee) (% ee HPLC analysis)
Source of chirality: asymmetric synthesis using copper tetradentate chiral *N*,*N*′-bis(isobornyl)ethylenediamine complex
Absolute configuration: (*S*)

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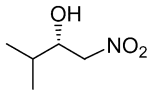
Tetrahedron: Asymmetry *20 (2009) 1842*



$C_5H_{11}NO_3$

(*S*)-3-Methyl-1-nitrobutan-2-ol

$[\alpha]_D^{25} = +19.8$ (*c* 0.50, $CHCl_3$, 86% ee) (% ee by HPLC analysis)
Source of chirality: asymmetric synthesis using copper tetradentate chiral *N*,*N*′-bis(isobornyl)ethylenediamine complex
Absolute configuration: (*S*)

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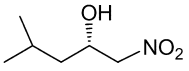
Tetrahedron: Asymmetry *20 (2009) 1842*



$C_6H_{13}NO_3$

(*S*)-4-Methyl-1-nitropentan-2-ol

$[\alpha]_D^{25} = -2.2$ (*c* 0.42, CH_2Cl_2, 88% ee) (% e by HPLC analysis)
Source of chirality: asymmetric synthesis using copper tetradentate chiral *N*,*N*′-bis(isobornyl)ethylenediamine complex
Absolute configuration: (*S*)

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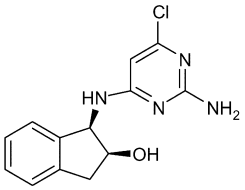
Tetrahedron: Asymmetry *20 (2009) 1848*



$C_{13}H_{13}ClN_4O$

(1*R*,2*S*)-1-(2-Amino-6-chloro-pyrimidin-4-ylamino)-indan-2-ol

$[\alpha]_D^{23} = -37.5$ (*c* 0.530, MeOH)
Chirality source: (1*R*,2*S*)-(+)-*cis*-1-amino-2-indanol
Absolute configuration: (1*R*,2*S*)

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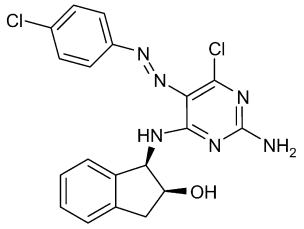

$[\alpha]_D^{23} = +42.3$ (*c* 0.180, MeOH)
Chirality source: (1*R*,2*S*)-(+)-*cis*-1-amino-2-indanol
Absolute configuration: (1*R*,2*S*)

$C_{19}H_{16}Cl_2N_6O$

(1*R*,2*S*)1-[2-Amino-6-chloro-5-(4-chloro-phenylazo)-pyrimidin-4-ylamino]-indan-2-ol

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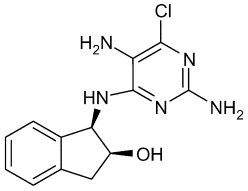

$[\alpha]_D^{23} = -1.6$ (*c* 0.257, MeOH)
Chirality source: (1*R*,2*S*)-(+)-*cis*-1-amino-2-indanol
Absolute configuration: (1*R*,2*S*)

$C_{13}H_{14}ClN_5O$

(1*R*,2*S*)-1-(2,5-Diamino-6-chloro-pyrimidin-4-ylamino]-indan-2-ol

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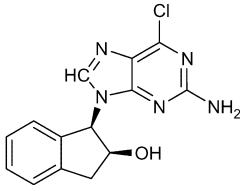

$[\alpha]_{365}^{23} = +38.1$ (*c* 0.01, MeOH)
Chirality source: (1*R*,2*S*)-(+)-*cis*-1-amino-2-indanol
Absolute configuration: (1*R*,2*S*)

$C_{14}H_{12}ClN_5O$

(1*R*,2*S*)-1-(2-Amino-6-chloro-9*H*-purin-9-yl)-2,3-dihydro-1*H*-inden-2-ol

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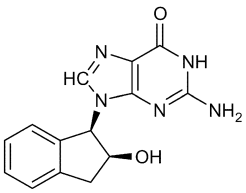
Tetrahedron: Asymmetry *20 (2009) 1848*



$[\alpha]_D^{23} = +20.5$ (*c* 0.203, MeOH)
Chirality source: (1*R*,2*S*)-(+)-*cis*-1-amino-2-indanol
Absolute configuration: (1*R*,2*S*)

$C_{14}H_{13}N_5O_2$

2-Amino-9-[(1*R*,2*S*)-2-hydroxy-2,3-dihydro-1*H*-inden-1-yl]-1*H*-purin-6(9*H*)-one

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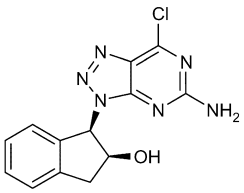

$[\alpha]_D^{23} = -1.5$ (*c* 0.501, MeOH)
Chirality source: (1*R*,2*S*)-(+)-*cis*-1-amino-2-indanol
Absolute configuration: (1*R*,2*S*)

$C_{13}H_{11}ClN_6O$

(1*R*,2*S*)-1-(5-Amino-7-chloro-3*H*-[1,2,3]triazolo[4,5-*d*]pyrimidin-3-yl)-2,3-dihydro-1*H*-inden-2-ol

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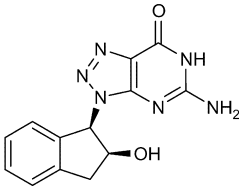
Tetrahedron: Asymmetry *20 (2009) 1848*



$[\alpha]_D^{23} = -12.6$ (*c* 0.150, MeOH)
Chirality source: (1*R*,2*S*)-(+)-*cis*-1-amino-2-indanol
Absolute configuration: (1*R*,2*S*)

$C_{13}H_{12}N_6O_2$

5-Amino-3-[(1*R*,2*S*)-2-hydroxy-2,3-dihydro-1*H*-inden-1-yl]-3*H*-[1,2,3]triazolo[4,5-*d*]pyrimidin-7(6*H*)-one

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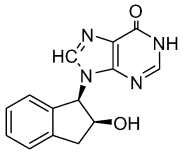
Tetrahedron: Asymmetry *20 (2009) 1848*



$[\alpha]_D^{23} = -28.2$ (*c* 0.137, MeOH)
Chirality source: (1*R*,2*S*)-(+)-*cis*-1-amino-2-indanol
Absolute configuration: (1*R*,2*S*)

$C_{14}H_{12}N_4O_2$

9-[(1*R*,2*S*)-2-Hydroxy-indan-1-yl]-1,9-dihydro-purin-6-one

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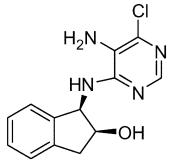
Tetrahedron: Asymmetry *20 (2009) 1848*



$[\alpha]_D^{23} = +76.6$ (*c* 0.419, MeOH)
Chirality source: (1*R*,2*S*)-(+)-*cis*-1-amino-2-indanol
Absolute configuration: (1*R*,2*S*)

$C_{13}H_{13}ClN_4O$

(1*R*,2*S*)-1-(5-Amino-6-chloro-pyrimidin-4-ylamino)-indan-2-ol

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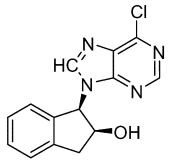
Tetrahedron: Asymmetry *20 (2009) 1848*



$C_{14}H_{11}ClN_4O$

(1*R*,2*S*)-1-(6-Chloro-purin-9-yl)-indan-2-ol

$[\alpha]_D^{23} = +110.2$ (*c* 0.108, MeOH)
Chirality source: (1*R*,2*S*)-(+)-*cis*-1-amino-2-indanol
Absolute configuration: (1*R*,2*S*)

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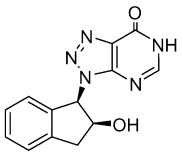
Tetrahedron: Asymmetry *20 (2009) 1848*



$C_{13}H_{11}N_5O_2$

3-[(1*R*,2*S*)-2-Hydroxy-indan-1-yl]-3,6-dihydro-[1.2.3]triazolo[4,5-*d*]pyrimidin-7-one

$[\alpha]_D^{23} = -9.0$ (*c* 0.110, MeOH)
Chirality source: (1*R*,2*S*)-(+)-*cis*-1-amino-2-indanol
Absolute configuration: (1*R*,2*S*)

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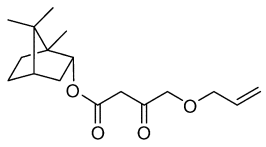

$C_{17}H_{26}O_4$

4-Allyloxy-3-oxo-butyric acid (1*S*,2*R*)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester

$[\alpha]_D^{26} = -26.4$ (*c* 0.39, CH_2Cl_2)
Source of chirality: [(1*S*)-*endo*]-(−)-Borneol
Absolute configuration: 1*S*,2*R*

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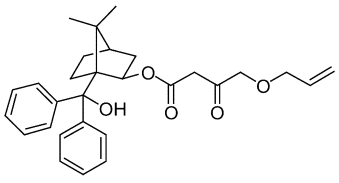
Tetrahedron: Asymmetry *20 (2009) 1854*



$C_{29}H_{34}O_5$

4-Allyloxy-3-oxo-butyric acid (1*R*,2*R*)-1-(hydroxy-diphenyl-methyl)-7,7-dimethyl-bicyclo[2.2.1]hept-2-yl ester

$[\alpha]_D^{26} = +63.6$ (*c* 1.4, CH_2Cl_2)
Source of chirality: (1*S*,2*R*)-2-hydroxy-7,7-dimethylbicyclo[2.2.1]heptane-1-carboxylic acid
Absolute configuration: 1*R*,2*R*

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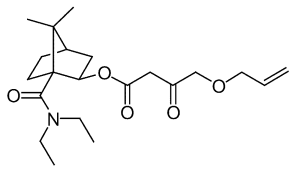
Tetrahedron: Asymmetry *20 (2009) 1854*



$[\alpha]_D^{26} = -20.3$ (*c* 0.37, CH_2Cl_2)
Source of chirality: (1*S*,2*R*)-2-hydroxy-7,7-dimethylbicyclo[2.2.1]heptane-1-carboxylic acid
Absolute configuration: 1*R*,2*R*

$C_{21}H_{33}NO_5$

4-Allyloxy-3-oxo-butyric acid (1*R*,2*R*)-1-diethylcarbamoyl-7,7-dimethyl-bicyclo[2.2.1] hept-2-yl ester

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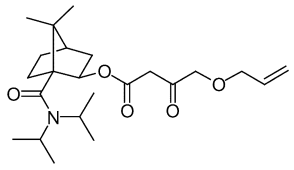
Tetrahedron: Asymmetry *20 (2009) 1854*



$[\alpha]_D^{26} = -35.0$ (*c* 0.5, CH_2Cl_2)
Source of chirality: (1*S*,2*R*)-2-hydroxy-7,7-dimethylbicyclo[2.2.1]heptane-1-carboxylic acid
Absolute configuration: 1*R*,2*R*

$C_{23}H_{37}NO_5$

4-Allyloxy-3-oxo-butyric acid (1*R*,2*R*)-1-diisopropylcarbamoyl-7,7-dimethyl-bicyclo[2.2.1]hept-2-yl ester

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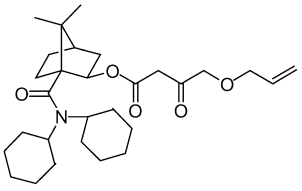
Tetrahedron: Asymmetry *20 (2009) 1854*



$[\alpha]_D^{26} = -19.8$ (*c* 0.3, CH_2Cl_2)
Source of chirality: (1*S*,2*R*)-2-hydroxy-7,7-dimethylbicyclo[2.2.1]heptane-1-carboxylic acid
Absolute configuration: 1*R*,2*R*

$C_{29}H_{45}NO_5$

4-Allyloxy-3-oxo-butyric acid (1*R*,2*R*)- 1-dicyclohexylcarbamoyl-7,7-dimethyl-bicyclo[2.2.1]hept-2-yl ester

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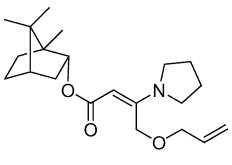
Tetrahedron: Asymmetry *20 (2009) 1854*



$[\alpha]_D^{26} = -34.7$ (*c* 0.4, CH_2Cl_2)
Source of chirality: [(1*S*)-*endo*]-(−)-Borneol
Absolute configuration: 1*S*,2*R*

$C_{21}H_{33}NO_3$

4-Allyloxy-3-pyrrolidin-1-yl-but-2-enoic acid (1*S*,2*R*)-1,7,7-trimethyl-bicyclo[2.2.1]hept 2-yl ester

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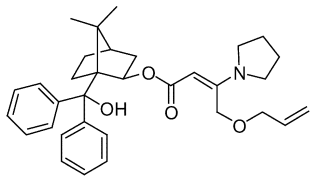
Tetrahedron: Asymmetry *20 (2009) 1854*



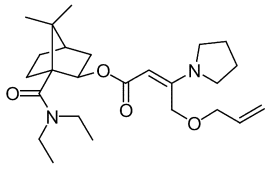
$[\alpha]_D^{26} = -48.2$ (*c* 0.14, CH_2Cl_2)
Source of chirality: (1*S*,2*R*)-2-hydroxy-7,7-dimethylbicyclo[2.2.1]heptane-1-carboxylic acid
Absolute configuration: 1*R*,2*R*

$C_{21}H_{33}NO_3$

4-Allyloxy-3-pyrrolidin-1-yl-but-2-enoic acid (1*R*,2*R*)-1-(hydroxy-diphenyl-methyl)-7,7-trimethyl-bicyclo[2.2.1]hept 2-yl ester

Yu-Jang Li *, Guo-Ming Ho, Pin-Zu Chen

Tetrahedron: Asymmetry *20 (2009) 1854*



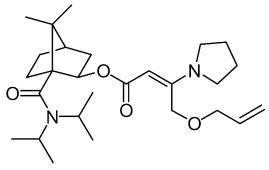
$[\alpha]_D^{26} = -48.0$ (*c* 0.8, CH_2Cl_2)
Source of chirality: (1*S*,2*R*)-2-hydroxy-7,7-dimethylbicyclo[2.2.1]heptane-1-carboxylic acid
Absolute configuration: 1*R*,2*R*

$C_{25}H_{40}N_2O_4$

4-Allyloxy-3-pyrrolidin-1-yl-but-2-enoic acid (1*R*,2*R*)-1-diethylcarbamoyl-7,7-dimethyl-bicyclo[2.2.1]hept-2-yl ester

Yu-Jang Li *, Guo-Ming Ho, Pin-Zu Chen

Tetrahedron: Asymmetry *20 (2009) 1854*



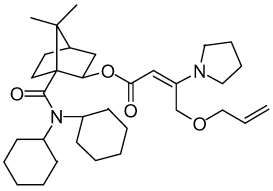
$[\alpha]_D^{26} = -15.9$ (*c* 0.15, CH_2Cl_2)
Source of chirality: (1*S*,2*R*)-2-hydroxy-7,7-dimethylbicyclo[2.2.1]heptane-1-carboxylic acid
Absolute configuration: 1*R*,2*R*

$C_{27}H_{44}N_2O_4$

4-Allyloxy-3-pyrrolidin-1-yl-but-2-enoic acid (1*R*,2*R*)-1-diisopropylcarbamoyl-7,7-di-methyl-bicyclo[2.2.1]hept-2-yl ester

Yu-Jang Li *, Guo-Ming Ho, Pin-Zu Chen

Tetrahedron: Asymmetry *20 (2009) 1854*



$[\alpha]_D^{26} = -40.9$ (*c* 0.15, CH_2Cl_2)
Source of chirality: (1*S*,2*R*)-2-hydroxy-7,7-dimethylbicyclo[2.2.1]heptane-1-carboxylic acid
Absolute configuration: 1*R*,2*R*

$C_{26}H_{43}NO_5$

4-Allyloxy-3-pyrrolidin-1-yl-but-2-enoic acid (1*R*,2*R*)-1-dicyclohexylcarbamoyl-7,7-di-methyl-bicyclo[2.2.1]hept-2-yl ester

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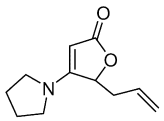
Tetrahedron: Asymmetry *20 (2009) 1854*



$C_{11}H_{15}NO_2$

(5*S*) 5-Allyl-4-pyrrolidin-1-yl-5H-furan-2-one

Ee = 86%
$[\alpha]_D^{26} = +26.9$ (*c* 0.39, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

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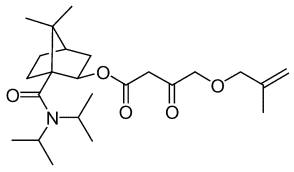

$C_{24}H_{39}NO_5$

4-(1-Methyl-allyloxy)-3-oxo-butyric acid (1*R*,2*R*)-1-diisopropylcarbamoyl-7,7-dimethyl-bicyclo[2.2.1]hept-2-yl ester

$[\alpha]_D^{26} = -37.9$ (*c* 0.21, CH_2Cl_2)
Source of chirality: (1*S*,2*R*)-2-hydroxy-7,7-dimethylbicyclo[2.2.1]heptane-1-carboxylic acid
Absolute configuration: 1*R*,2*R*

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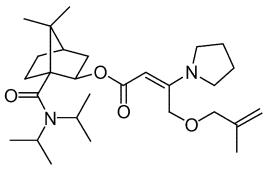

$C_{28}H_{46}N_2O_4$

4-(1-Methyl-allyloxy)-3-pyrrolidin-1-yl-but-2-enoic acid (1*R*,2*R*)-1-diisopropylcarbamo-yl-7,7-dimethyl-bicyclo[2.2.1]hept-2-yl ester

$[\alpha]_D^{26} = -44.8$ (*c* 0.2, CH_2Cl_2)
Source of chirality: (1*S*,2*R*)-2-hydroxy-7,7-dimethylbicyclo[2.2.1]heptane-1-carboxylic acid
Absolute configuration: 1*R*,2*R*

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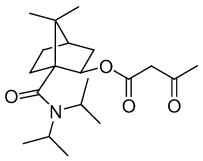

$C_{20}H_{33}NO_4$

3-Oxo-butyric acid (1*R*,2*R*)-1-diisopropylcarbamoyl-7,7-dimethyl-bicyclo[2.2.1]hept-2-yl ester

$[\alpha]_D^{26} = -16.9$ (*c* 0.19, CH_2Cl_2)
Source of chirality: (1*S*,2*R*)-2-hydroxy-7,7-dimethylbicyclo[2.2.1]heptane-1-carboxylic acid
Absolute configuration: 1*R*,2*R*

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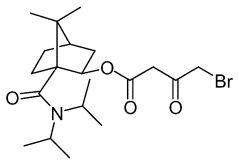

$[\alpha]_D^{26} = -20.9$ (*c* 0.2, CH_2Cl_2)
Source of chirality: (1*S*,2*R*)-2-hydroxy-7,7-dimethylbicyclo[2.2.1]heptane-1-carboxylic acid
Absolute configuration: 1*R*,2*R*

$C_{20}H_{32}BrNO_4$

4-Bromo-3-oxo-butyric acid (1*R*,2*R*)-1-diisopropylcarbamoyl-7,7-dimethyl-bicyclo[2.2.1]hept-2-yl ester

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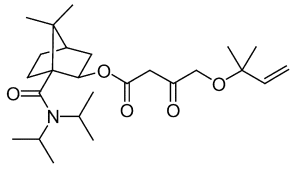

$[\alpha]_D^{26} = -29.0$ (*c* 0.47, CH_2Cl_2)
Source of chirality: (1*S*,2*R*)-2-hydroxy-7,7-dimethylbicyclo[2.2.1]heptane-1-carboxylic acid
Absolute configuration: 1*R*,2*R*

$C_{25}H_{41}NO_5$

4-(1,1-Dimethyl-allyloxy)-3-oxo-butyric acid (1*R*,2*R*)-1-diisopropylcarbamoyl-7,7-dimethyl-bicyclo[2.2.1]hept-2-yl ester

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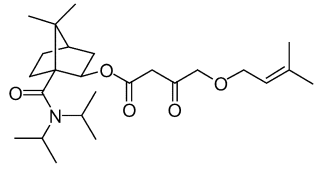
Tetrahedron: Asymmetry *20 (2009) 1854*



$[\alpha]_D^{26} = -26.5$ (*c* 0.6, CH_2Cl_2)
Source of chirality: (1*S*,2*R*)-2-hydroxy-7,7-dimethylbicyclo[2.2.1]heptane-1-carboxylic acid
Absolute configuration: 1*R*,2*R*

$C_{25}H_{41}NO_5$

4-(3-Methyl-but-2-enyloxy)-3-oxo-butyric acid (1*R*,2*R*)-1-diisopropylcarbamoyl-7,7-dimethyl-bicyclo[2.2.1]hept-2-yl ester

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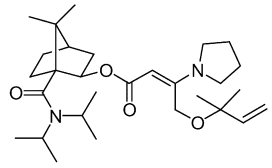
Tetrahedron: Asymmetry *20 (2009) 1854*



$[\alpha]_D^{26} = -23.7$ (*c* 0.2, CH_2Cl_2)
Source of chirality: (1*S*,2*R*)-2-hydroxy-7,7-dimethylbicyclo[2.2.1]heptane-1-carboxylic acid
Absolute configuration: 1*R*,2*R*

$C_{29}H_{48}N_2O_4$

4-(1,1-Dimethyl-allyloxy)-3-pyrrolidin-1-yl-but-2-enoic acid (1*R*,2*R*)-1-diisopropylcarbamoyl-7,7-dimethyl-bicyclo[2.2.1]hept-2-yl ester

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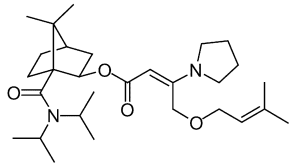
Tetrahedron: Asymmetry *20 (2009) 1854*



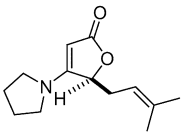
$[\alpha]_D^{26} = -32.1$ (*c* 0.18, CH_2Cl_2)
Source of chirality: (1*S*,2*R*)-2-hydroxy-7,7-dimethylbicyclo[2.2.1]heptane-1-carboxylic acid
Absolute configuration: 1*R*,2*R*

$C_{29}H_{48}N_2O_4$

4-(3-Methyl-but-2-enyloxy)-3-pyrrolidin-1-yl-but-2-enoic acid (1*R*,2*R*)-1-diisopropylcarbamoyl-7,7-di-methyl-bicyclo[2.2.1]hept-2-yl ester

Yu-Jang Li *, Guo-Ming Ho, Pin-Zu Chen

Tetrahedron: Asymmetry *20 (2009) 1854*



Ee = 95%
$[\alpha]_D^{26} = +26.1$ (*c* 0.45, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

$C_{13}H_{19}NO_2$

(5*S*)-5-(3-Methyl-but-2-enyl)-4-pyrrolidin-1-yl-5H-furan-2-one

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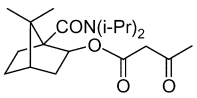
Tetrahedron: Asymmetry *20 (2009) 1854*



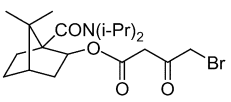
$[\alpha]_D^{26} = +16.8$ (*c* 0.19, CH_2Cl_2)
Source of chirality: (1*R*,2*S*)-2-hydroxy-7,7-dimethylbicyclo[2.2.1]heptane-1-carboxylic acid
Absolute configuration: 1*S*,2*S*

$C_{20}H_{33}NO_4$

3-Oxo-butyric acid (1*S*,2*S*)-1-diisopropylcarbamoyl-7,7-dimethyl-bicyclo[2.2.1]hept-2-yl ester

Yu-Jang Li *, Guo-Ming Ho, Pin-Zu Chen

Tetrahedron: Asymmetry *20 (2009) 1854*



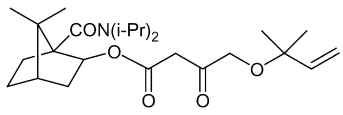
$[\alpha]_D^{26} = +21.0$ (*c* 0.39, CH_2Cl_2)
Source of chirality: (1*R*,2*S*)-2-hydroxy-7,7-dimethylbicyclo[2.2.1]heptane-1-carboxylic acid
Absolute configuration: 1*S*,2*S*

$C_{20}H_{32}BrNO_4$

4-Bromo-3-oxo-butyric acid (1*S*,2*S*)-1-diisopropylcarbamoyl-7,7-dimethyl-bicyclo[2.2.1]hept-2-yl ester

Yu-Jang Li *, Guo-Ming Ho, Pin-Zu Chen

Tetrahedron: Asymmetry *20 (2009) 1854*



$[\alpha]_D^{26} = +28.9$ (*c* 0.32, CH_2Cl_2)
Source of chirality: (1*R*,2*S*)-2-hydroxy-7,7-dimethylbicyclo[2.2.1]heptane-1-carboxylic acid
Absolute configuration: 1*S*,2*S*

$C_{25}H_{41}NO_5$

4-(1,1-Dimethyl-allyloxy)-3-oxo-butyric acid (1*S*,2*S*)-1-diisopropylcarbamoyl-7,7-dimethyl-bicyclo[2.2.1]hept-2-yl ester

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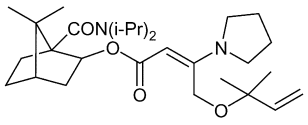
Tetrahedron: Asymmetry *20 (2009) 1854*



$[\alpha]_D^{26} = +23.7$ (*c* 0.22, CH_2Cl_2)
Source of chirality: (1*R*,2*S*)-2-hydroxy-7,7-dimethylbicyclo[2.2.1]heptane-1-carboxylic acid
Absolute configuration: 1*S*,2*S*

$C_{29}H_{48}N_2O_4$

4-(1,1-Dimethyl-allyloxy)-3-pyrrolidin-1-yl-but-2-enoic acid (1*S*,2*S*)-1-diisopropylcarbamoyl-7,7-dimethyl-bicyclo[2.2.1]hept-2-yl ester

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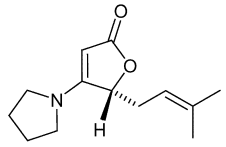
Tetrahedron: Asymmetry *20 (2009) 1854*



Ee = 93%
$[\alpha]_D^{26} = -25.8$ (*c* 0.42, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

$C_{13}H_{19}NO_2$

(5*R*)-5-(3-Methyl-but-2-enyl)-4-pyrrolidin-1-yl-5H-furan-2-one

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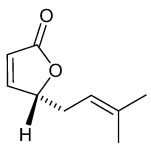
Tetrahedron: Asymmetry *20 (2009) 1854*



Ee = 93%
$[\alpha]_D^{26} = -125.2$ (*c* 1.15, MeOH)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

$C_9H_{12}O_2$

(5*R*)-5-(3-Methyl-but-2-enyl)-5H-furan-2-one

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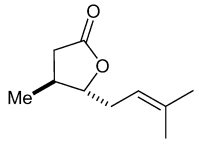
Tetrahedron: Asymmetry *20 (2009) 1854*



$C_{10}H_{16}O_2$

(5*R*)-Dihydro-4-methyl-5-(3-Methyl-but-2-enyl)furan-2(3H)-one

Ee = 93%
$[\alpha]_D^{26} = +46.5$ (*c* 1.02, MeOH)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

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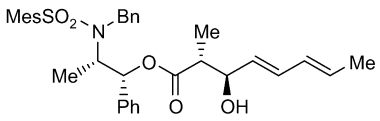
Tetrahedron: Asymmetry *20 (2009) 1864*



$C_{34}H_{41}NO_5S$

(1′*R*,2′*S*)-2-[*N*-Benzyl-*N*-(2″,4″,6″-trimethylbenzenesulfonyl)]amino-1-phenyl-1-propyl (2*R*,3*R*,4*E*,6*E*)-3-hydroxy-2-methylocta-4,6-dienoate

Diastereomer ratio: (2*R*,3*R*):(2*S*,3*S*) >98:2
$[\alpha]_D^{20} = +39.2$ (*c* 1.05, $CHCl_3$)
Source of chirality: *anti*-selective aldol reaction
Absolute configuration: (1′*R*,2′*S*,2*R*,3*R*)

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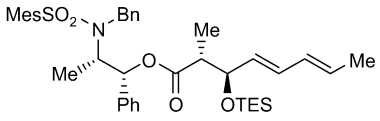
Tetrahedron: Asymmetry *20 (2009) 1864*



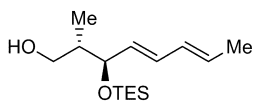
$C_{40}H_{55}NO_5SSi$

(1′*R*,2′*S*)-2-[*N*-Benzyl-*N*-(2″,4″,6″-trimethylbenzenesulfonyl)]amino-1-phenyl-1-propyl (2*R*,3*R*,4*E*,6*E*)-3-(triethylsilyl)oxy-2-methylocta-4,6-dienoate

Diastereomer ratio: (2*R*,3*R*):(2*S*,3*S*) >98:2
$[\alpha]_D^{20} = +45.4$ (*c* 5.50, $CHCl_3$)
Source of chirality: *anti*-selective aldol reaction
Absolute configuration: (1′*R*,2′*S*,2*R*,3*R*)

Liang Sun, Jinlong Wu, Wei-Min Dai *

Tetrahedron: Asymmetry *20 (2009) 1864*



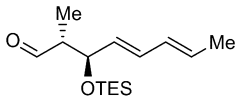
$C_{15}H_{30}O_2Si$

(2*S*,3*R*,4*E*,6*E*)-2-Methyl-3-((triethylsilyl)oxy)octa-4,6-dien-1-ol

Diastereomer ratio: (2*S*,3*R*):(2*R*,3*S*) >98:2
$[\alpha]_D^{20} = -5.0$ (*c* 1.50, $CHCl_3$)
Source of chirality: *anti*-selective aldol reaction
Absolute configuration: (2*S*,3*R*)

Liang Sun, Jinlong Wu, Wei-Min Dai *

Tetrahedron: Asymmetry *20 (2009) 1864*



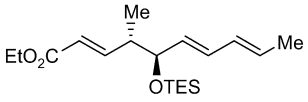
$C_{15}H_{28}O_2Si$

(2*R*,3*R*,4*E*,6*E*)-2-Methyl-3-((triethylsilyl)oxy)octa-4,6-dienal

Diastereomer ratio: (2*R*,3*R*):(2*S*,3*S*) >98:2
$[\alpha]_D^{20} = 21.0$ (*c* 1.25, $CHCl_3$)
Source of chirality: *anti*-selective aldol reaction
Absolute configuration: (2*R*,3*R*)

Liang Sun, Jinlong Wu, Wei-Min Dai *

Tetrahedron: Asymmetry *20 (2009) 1864*



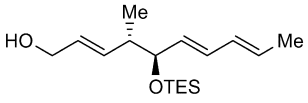
$C_{19}H_{34}O_3Si$

(2*E*,4*S*,5*R*,6*E*,8*E*)-Ethyl 4-methyl-5-((triethylsilyl)oxy)deca-2,6,8-trienoate

Diastereomer ratio: (4*S*,5*R*):(4*R*,5*S*) >98:2
$[\alpha]_D^{20} = -4.3$ (*c* 1.30, $CHCl_3$)
Source of chirality: *anti*-selective aldol reaction
Absolute configuration: (4*S*,5*R*)

Liang Sun, Jinlong Wu, Wei-Min Dai *

Tetrahedron: Asymmetry *20 (2009) 1864*



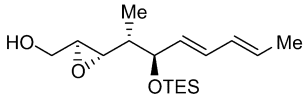
$C_{17}H_{32}O_2Si$

(2*E*,4*S*,5*R*,6*E*,8*E*)-4-Methyl-5-((triethylsilyl)oxy)deca-2,6,8-trien-1-ol

Diastereomer ratio: (4*S*,5*R*):(4*R*,5*S*) >98:2
$[\alpha]_D^{20} = +8.7$ (*c* 1.00, $CHCl_3$)
Source of chirality: *anti*-selective aldol reaction
Absolute configuration: (4*S*,5*R*)

Liang Sun, Jinlong Wu, Wei-Min Dai *

Tetrahedron: Asymmetry *20 (2009) 1864*



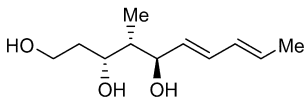
$C_{17}H_{32}O_3Si$

(2*S*,3*S*,4*S*,5*R*,6*E*,8*E*)-2,3-Epoxy-4-methyl-5-((triethylsilyl)oxy)deca-6,8-dien-1-ol

Diastereomer ratio: (2*S*,3*S*,4*S*,5*R*):(2*R*,3*R*,4*S*,5*R*) >99:1
$[\alpha]_D^{20} = -19.0$ (*c* 0.70, $CHCl_3$)
Source of chirality: Sharpless asymmetric allylic epoxidation
Absolute configuration: (2*S*,3*S*,4*S*,5*R*)

Liang Sun, Jinlong Wu, Wei-Min Dai *

Tetrahedron: Asymmetry *20 (2009) 1864*



$C_{11}H_{20}O_3$

(3*R*,4*R*,5*R*,6*E*,8*E*)-4-Methyldeca-6,8-diene-1,3,5-triol

Diastereomer ratio: (3*R*,4*R*,5*R*):(3*S*,4*R*,5*R*) >99:1
[contaminated with 9% of the 1,2,5-triol]
$[\alpha]_D^{20} = +5.5$ (*c* 0.70, $CHCl_3$)
Source of chirality: Sharpless asymmetric allylic epoxidation
Absolute configuration: (3*R*,4*R*,5*R*)

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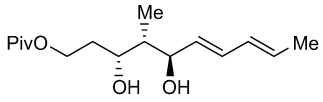
Tetrahedron: Asymmetry *20 (2009) 1864*



$C_{16}H_{28}O_4$

(3*R*,4*R*,5*R*,6*E*,8*E*)-3,5-Dihydroxy-4-methyldeca-6,8-dien-1-yl trimetylacetate

Diastereomer ratio: (3*R*,4*R*,5*R*):(3*S*,4*R*,5*R*) >99:1
$[\alpha]_D^{20} = +27.4$ (*c* 0.45, $CHCl_3$)
Source of chirality: Sharpless asymmetric allylic epoxidation
Absolute configuration: (3*R*,4*R*,5*R*)

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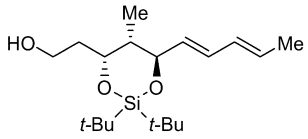
Tetrahedron: Asymmetry *20 (2009) 1864*



$C_{19}H_{36}O_3Si$

2-{(4′*R*,5′*S*,6′*R*)-2′,2′-Di-*tert*-butyl-5′-methyl-6′-[(1″*E*,3″*E*)-penta-1″,3″-dienyl]-1′,3′-dioxa-2′-silacyclohex-4′-yl}ethanol

Diastereomer ratio: (4′*R*,5′*S*,6′*R*):(4′*S*,5′*S*,6′*R*) >99:1
$[\alpha]_D^{20} = +101.3$ (*c* 0.40, $CHCl_3$)
Source of chirality: Sharpless asymmetric allylic epoxidation
Absolute configuration: (4′*R*,5′*S*,6′*R*)

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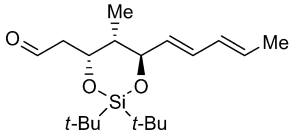
Tetrahedron: Asymmetry *20 (2009) 1864*



$C_{19}H_{34}O_3Si$

2-{(4′*R*,5′*S*,6′*R*)-2′,2′-Di-*tert*-butyl-5′-methyl-6′-[(1″*E*,3″*E*)-penta-1″,3″-dienyl]-1′,3′-dioxa-2′-silacyclohex-4′-yl}acetaldehyde

Diastereomer ratio: (4′*R*,5′*S*,6′*R*):(4′*S*,5′*S*,6′*R*) >99:1
$[\alpha]_D^{20} = +95.0$ (*c* 0.35, $CHCl_3$)
Source of chirality: Sharpless asymmetric allylic epoxidation
Absolute configuration: (4′*R*,5′*S*,6′*R*)

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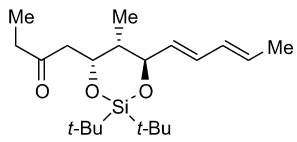
Tetrahedron: Asymmetry *20 (2009) 1864*



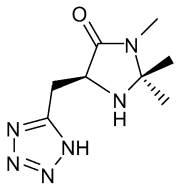
Diastereomer ratio: (4′*R*,5′*S*,6′*R*):(4′*S*,5′*S*,6′*R*) >99:1
$[\alpha]_D^{20} = +97.0$ (*c* 0.35, $CHCl_3$)
Source of chirality: Sharpless asymmetric allylic epoxidation
Absolute configuration: (4′*R*,5′*S*,6′*R*)

$C_{21}H_{38}O_3Si$

2-{(4′*R*,5′*S*,6′*R*)-2′,2′-Di-*tert*-butyl-5′-methyl-6′-[(1″*E*,3″*E*)-penta-1″,3″-dienyl]-1′,3′-dioxa-2′-silacyclohex-4′-yl}butan-2-one

Antti Hartikka, Leila Hojabri, Partha Pratim Bose, Per I. Arvidsson *

Tetrahedron: Asymmetry *20 (2009) 1871*



$[\alpha]_D^{23} = -72.2$ (*c* 1.0, MeOH)
Absolute configuration: (5*S*)
Source of chirality: L-asparagine

$C_8H_{14}N_6O$

(5*S*)-5-((1*H*-Tetrazole-5-yl)methyl)-2,2,3-trimethyl-imidazolidin-4-one

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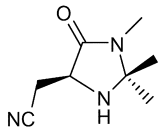
Tetrahedron: Asymmetry *20 (2009) 1871*



$[\alpha]_D^{23} = +112.1$ (*c* 1.8, MeOH)
Absolute configuration: (5*S*)
Source of chirality: L-asparagine

$C_8H_{13}N_3O$

(5*S*)-5-(Acetonitrile-5-yl)-2,2,3-trimethyl-imidazolidin-4-one

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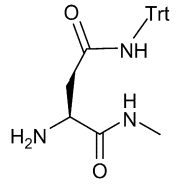
Tetrahedron: Asymmetry *20 (2009) 1871*



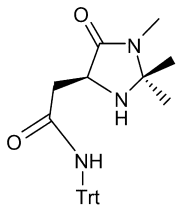
$[\alpha]_D^{23} = -1.1$ (*c* 1.0, MeOH)
Absolute configuration: (2*S*)
Source of chirality: L-asparagine

$C_{24}H_{25}N_3O_2$

Methyl-(2*S*)-2-amino-N^1-methyl-N^4-tritylsuccinamide

Antti Hartikka, Leila Hojabri, Partha Pratim Bose, Per I. Arvidsson *

Tetrahedron: Asymmetry *20 (2009) 1871*



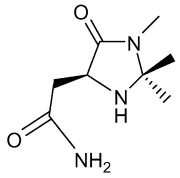
$C_{27}H_{29}N_3O_2$

(5*S*)-5-(*N*-Trimethylacetamide-5-yl)-2,2,3-trimethyl-imidazolidin-4-one

$[\alpha]_D^{23} = -25.6$ (*c* 1.0, MeOH)
Absolute configuration: (5*S*)
Source of chirality: L-asparagine

Antti Hartikka, Leila Hojabri, Partha Pratim Bose, Per I. Arvidsson *

Tetrahedron: Asymmetry *20 (2009) 1871*



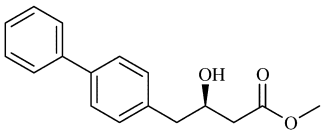
$C_8H_{15}N_3O_2$

(5*S*)-5-(Acetamide-5-yl)-2,2,3-trimethyl-imidazolidin-4-one

$[\alpha]_D^{23} = +11.6$ (*c* 2.85, MeOH)
Absolute configuration: (5*S*)
Source of chirality: L-asparagine

Takashi Sugimura *, Tomohiro Matsuda, Tsutomu Osawa

Tetrahedron: Asymmetry *20 (2009) 1877*



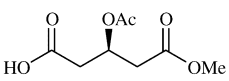
$C_{17}H_{18}O_3$

(3*R*)-Methyl 4-(4-phenyl)phenyl-3-hydroxybutanoate

Ee = 96%
$[\alpha]_D^{20} = +18.1$ (*c* 0.4, methanol)
Source of chirality: enantioselective hydrogenation
Absolute configuration: (3*R*)

Takashi Sugimura *, Tomohiro Matsuda, Tsutomu Osawa

Tetrahedron: Asymmetry *20 (2009) 1877*



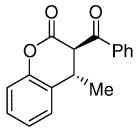
$C_8H_{12}O_6$

(3*R*)-Methyl hydrogen 3-acetoxypentanedionate

Ee = 96%
$[\alpha]_D^{20} = +7.8$ (*c* 0.3, CH_2Cl_2)
Source of chirality: chemical conversion
Absolute configuration: (3*R*)

Xiaoping Tang, Alexander J. Blake, William Lewis, Simon Woodward *

Tetrahedron: Asymmetry *20 (2009) 1881*



$C_{17}H_{14}O_3$

(3*R*,4*S*)-3-Benzoyl-4-ethylchroman-2-one

Ee = 88%
$[\alpha]_D^{25} = -35.7$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (3*R*,4*S*)

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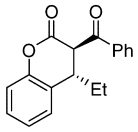
Tetrahedron: Asymmetry *20 (2009) 1881*



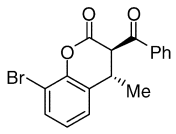
$C_{18}H_{16}O_3$

(3*R*,4*S*)-3-Benzoyl-4-ethylchroman-2-one

Ee = 96%
$[\alpha]_D^{25} = +83.8$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (3*R*,4*S*)

Xiaoping Tang, Alexander J. Blake, William Lewis, Simon Woodward *

Tetrahedron: Asymmetry *20 (2009) 1881*



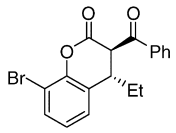
$C_{17}H_{13}BrO_3$

(3*R*,4*S*)-3-Benzoyl-8-bromo-4-methylchroman-2-one

Ee = 88%
$[\alpha]_D^{25} = -9.3$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (3*R*,4*S*)

Xiaoping Tang, Alexander J. Blake, William Lewis, Simon Woodward *

Tetrahedron: Asymmetry *20 (2009) 1881*



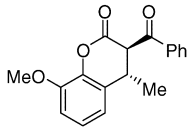
$C_{18}H_{15}BrO_3$

(3*R*,4*S*)-3-Benzoyl-8-bromo-4-ethylchroman-2-one

Ee = 96%
$[\alpha]_D^{25} = +90.7$ (*c* 0.5, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (3*R*,4*S*)

Xiaoping Tang, Alexander J. Blake, William Lewis, Simon Woodward *

Tetrahedron: Asymmetry *20 (2009) 1881*



$C_{18}H_{16}O_4$

(3*R*,4*S*)-3-Benzoyl-8-methoxy-4-methylchroman-2-one

Ee = 87%
$[\alpha]_D^{25} = -27.0$ (*c* 1.00, $CHCl_3$)
Source of chirality: Asymmetric catalysis
Absolute configuration: (3*R*,4*S*)

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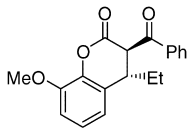
Tetrahedron: Asymmetry *20 (2009) 1881*



$C_{18}H_{16}O_4$

(3*R*,4*S*)-3-Benzoyl-8-methoxy-4-methylchroman-2-one

Ee = 96%
$[\alpha]_D^{25} = +32.2$ (*c* 1.0, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (3*R*,4*S*)

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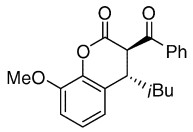
Tetrahedron: Asymmetry *20 (2009) 1881*



$C_{21}H_{22}O_4$

(3*R*,4*S*)-3-Benzoyl-4-isobutyl-8-methoxychroman-2-one

Ee = 75%
$[\alpha]_D^{25} = +7.3$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (3*R*,4*S*)

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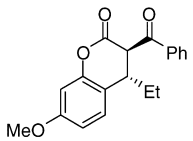
Tetrahedron: Asymmetry *20 (2009) 1881*



$C_{19}H_{18}O_4$

(3*R*,4*S*)-3-Benzoyl-4-ethyl-7-methoxychroman-2-one

Ee = 98%
$[\alpha]_D^{25} = +56.8$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (3*R*,4*S*)

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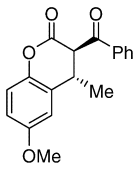
Tetrahedron: Asymmetry *20 (2009) 1881*



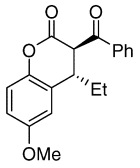
$C_{18}H_{16}O_4$

(3*R*,4*S*)-3-Benzoyl-6-methoxy-4-methylchroman-2-one

Ee = 37%
$[\alpha]_D^{25} = -13.1$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (3*R*,4*S*)

Xiaoping Tang, Alexander J. Blake, William Lewis, Simon Woodward *

Tetrahedron: Asymmetry *20 (2009) 1881*



$C_{19}H_{18}O_4$

(3*R*,4*S*)-3-Benzoyl-4-ethyl-6-methoxychroman-2-one

Ee = 48%
$[\alpha]_D^{25} = +1.0$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (3*R*,4*S*)

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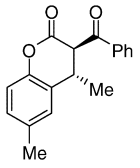
Tetrahedron: Asymmetry *20 (2009) 1881*



$C_{18}H_{16}O_3$

(3*R*,4*S*)-3-Benzoyl-4,6-dimethylchroman-2-one

Ee = 67%
$[\alpha]_D^{25} = -43.9$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (3*R*,4*S*)

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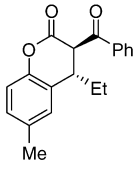
Tetrahedron: Asymmetry *20 (2009) 1881*



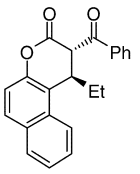
$C_{19}H_{18}O_3$

(3*R*,4*S*)-3-Benzoyl-4-ethyl-6-methylchroman-2-one

Ee = 85%
$[\alpha]_D^{25} = +46.4$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (3*R*,4*S*)

Xiaoping Tang, Alexander J. Blake, William Lewis, Simon Woodward *

Tetrahedron: Asymmetry *20 (2009) 1881*



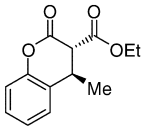
Ee = 90%
$[\alpha]_D^{25} = -38.1$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (1*R*,2*S*)

$C_{22}H_{18}O_3$

(1*R*,2*S*)-2-Benzoyl-1-ethyl-1,2-dihydro-benzo[*f*]chromen-3-one

Xiaoping Tang, Alexander J. Blake, William Lewis, Simon Woodward *

Tetrahedron: Asymmetry *20 (2009) 1881*



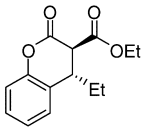
Ee = 53%
$[\alpha]_D^{25} = +13.8$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (3*S*,4*R*)

$C_{13}H_{14}O_4$

(3*S*,4*R*)-Ethyl-4-methyl-2-oxochroman-3-carboxylate

Xiaoping Tang, Alexander J. Blake, William Lewis, Simon Woodward *

Tetrahedron: Asymmetry *20 (2009) 1881*



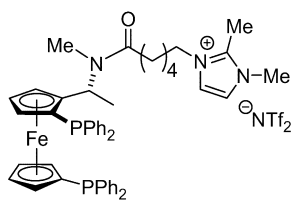
Ee = 90%
$[\alpha]_D^{25} = +19.4$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric catalysis
Absolute configuration: (3*R*,4*S*)

$C_{14}H_{16}O_4$

(3*R*,4*S*)-Ethyl-4-ethyl-2-oxochroman-3-carboxylate

Radovan Šebesta *, Filip Bilčík

Tetrahedron: Asymmetry *20 (2009) 1892*



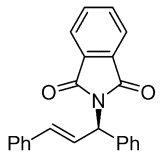
$[\alpha]_D = -212$ (*c* 0.51, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*,Sp)

$C_{47}H_{46}F_6FeN_4O_5P_2S_2$

(*R*,Sp)-3-[6-({1-[2,1′-Bis(diphenylphosphanyl)ferrocene-1-yl]ethyl}methylamino)-6-oxohexyl]-1,2-dimethyl-1*H*-imidazol-3-ium bis(trifluomethanesulfonyl)imide

Radovan Šebesta *, Filip Bilčík

Tetrahedron: Asymmetry *20 (2009) 1892*



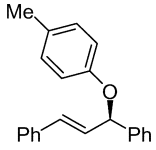
$[\alpha]_D = -20$ (*c* 1.7, $CHCl_3$, 92% ee)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

$C_{23}H_{17}NO_2$

(*R*)-(*E*)-2-(1,3-Diphenylprop-1-enyl)isoindolin-1,3-dione

Radovan Šebesta *, Filip Bilčík

Tetrahedron: Asymmetry *20 (2009) 1892*



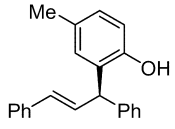
$[\alpha]_D = -24.6$ (*c* 1.0, $CHCl_3$, 48% ee)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

$C_{22}H_{20}O$

(*R*)-(*E*)-3-(4-Methylphenyloxy)-1,3-diphenylprop-1-ene

Radovan Šebesta *, Filip Bilčík

Tetrahedron: Asymmetry *20 (2009) 1892*



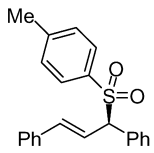
$[\alpha]_D = +1.4$ (*c* 1.1, $CHCl_3$, 34% ee)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

$C_{22}H_{20}O$

(*R*)-(*E*)-3-(2-Hydroxy-5-methylphenyl)-1,3-diphenylprop-1-ene

Radovan Šebesta *, Filip Bilčík

Tetrahedron: Asymmetry *20 (2009) 1892*



$[\alpha]_D = +2.6$ (*c* 1.0, $CHCl_3$, 29% ee)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

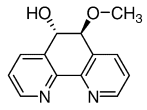
$C_{22}H_{20}O_2S$

(*R*)-(*E*)-3-(4-Methylphenyl)sulfonyl-1,3-diphenylprop-1-ene

Elke Schoffers *, Lars Kohler

Tetrahedron: Asymmetry *20 (2009) 1897*

Ee = 99%
$[\alpha]_D^{25} = +108.4$ (*c* 0.43, CH_3OH)
Source of chirality: lipase-catalyzed resolution
Absolute configuration: (5*S*,6*S*)



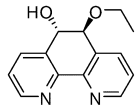
$C_{13}H_{12}N_2O_2$

(*S*,*S*)-5,6-Dihydro-6-methoxy-1,10-phenanthrolin-5-ol ((*S*,*S*)-5,6-dihydro-5-hydroxy-6-methoxy-1,10-phenanthroline)

Elke Schoffers *, Lars Kohler

Tetrahedron: Asymmetry *20 (2009) 1897*

Ee = 99%
$[\alpha]_D^{25} = +75.2$ (*c* 1, CH_3OH)
Source of chirality: lipase-catalyzed resolution
Absolute configuration: (5*S*,6*S*)



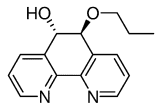
$C_{14}H_{14}N_2O_2$

(*S*,*S*)-5,6-Dihydro-6-ethoxy-1,10-phenanthrolin-5-ol ((*S*,*S*)-5,6-dihydro-6-ethoxy-5-hydroxy-1,10-phenanthroline)

Elke Schoffers *, Lars Kohler

Tetrahedron: Asymmetry *20 (2009) 1897*

Ee = 96%
$[\alpha]_D^{25} = +96.9$ (*c* 1, CH_3OH)
Source of chirality: lipase-catalyzed resolution
Absolute configuration: (5*S*,6*S*)



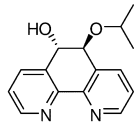
$C_{15}H_{16}N_2O_2$

(*S*,*S*)-5,6-Dihydro-6-propoxy-1,10-phenanthrolin-5-ol ((*S*,*S*)-5,6-dihydro-5-hydroxy-6-propoxy-1,10-phenanthroline)

Elke Schoffers *, Lars Kohler

Tetrahedron: Asymmetry *20 (2009) 1897*

Ee = 86%
$[\alpha]_D^{25} = +43.4$ (*c* 1, CH_3OH)
Source of chirality: lipase-catalyzed resolution
Absolute configuration: (5*S*,6*S*)



$C_{15}H_{16}N_2O_2$

(*S*,*S*)-5,6-Dihydro-6-isopropoxy-1,10-phenanthrolin-5-ol ((*S*,*S*)-5,6-dihydro-5-hydroxy-6-isopropoxy-1,10-phenanthroline)

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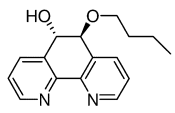
Tetrahedron: Asymmetry *20 (2009) 1897*



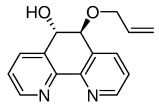
Ee = 96%
$[\alpha]_D^{25} = +100.9$ (*c* 1, CH_3OH)
Source of chirality: lipase-catalyzed resolution
Absolute configuration: (5*S*,6*S*)

$C_{16}H_{18}N_2O_2$

(*S*,*S*)-5,6-Dihydro-6-butoxy-1,10-phenanthrolin-5-ol, ((*S*,*S*)-5,6-dihydro-6-butoxy-5-hydroxy-1,10-phenanthroline)

Elke Schoffers *, Lars Kohler

Tetrahedron: Asymmetry *20 (2009) 1897*



Ee = 96%
$[\alpha]_D^{25} = +103.3$ (*c* 1, CH_3OH)
Source of chirality: lipase-catalyzed resolution
Absolute configuration: (5*S*,6*S*)

$C_{15}H_{14}N_2O_2$

(*S*,*S*)-5,6-Dihydro-6-allyloxy-1,10-phenanthrolin-5-ol ((*S*,*S*)-5,6-dihydro-6-allyloxy-5-hydroxy-1,10-phenanthroline)

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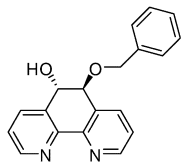
Tetrahedron: Asymmetry *20 (2009) 1897*



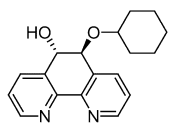
Ee = 90%
$[\alpha]_D^{25} = +95.9$ (*c* 1, CH_3OH)
Source of chirality: lipase-catalyzed resolution
Absolute configuration: (5*S*,6*S*)

$C_{19}H_{16}N_2O_2$

(*S*,*S*)-5,6-Dihydro-6-benzyloxy-1,10-phenanthrolin-5-ol ((*S*,*S*)-5,6-dihydro-6-benzyloxy-5-hydroxy-1,10-phenanthroline)

Elke Schoffers *, Lars Kohler

Tetrahedron: Asymmetry *20 (2009) 1897*



Ee = 80%
$[\alpha]_D^{25} = +43.9$ (*c* 1, CH_3OH)
Source of chirality: lipase-catalyzed resolution
Absolute configuration: (5*S*,6*S*)

$C_{18}H_{20}N_2O_2$

(*S*,*S*)-5,6-Dihydro-6-cyclohexyloxy-1,10-phenanthrolin-5-ol ((*S*,*S*)-5,6-dihydro-6-cyclohexyloxy-5-hydroxy-1,10-phenanthroline)

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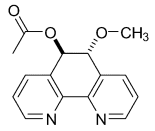
Tetrahedron: Asymmetry *20 (2009) 1897*



Ee = 96%
$[\alpha]_D^{25} = -303.4$ (*c* 0.4, CH_3OH)
Source of chirality: lipase-catalyzed resolution
Absolute configuration: (5*R*,6*R*)

$C_{15}H_{14}N_2O_3$

(*R*,*R*)-5,6-Dihydro-6-methoxy-1,10-phenanthrolin-5-yl acetate ((*R*,*R*)-5,6-dihydro-5-acetoxy-6-methoxy-1,10-phenanthroline)

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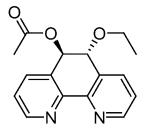
Tetrahedron: Asymmetry *20 (2009) 1897*



Ee = 98%
$[\alpha]_D^{25} = -293.6$ (*c* 1, CH_3OH)
Source of chirality: lipase-catalyzed resolution
Absolute configuration: (5*R*,6*R*)

$C_{16}H_{16}N_2O_3$

(*R*,*R*)-5,6-Dihydro-6-ethoxy-1,10-phenanthrolin-5-yl acetate ((*R*,*R*)-5,6-dihydro-5-acetoxy-6-ethoxy-1,10-phenanthroline)

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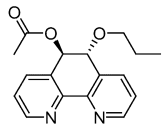
Tetrahedron: Asymmetry *20 (2009) 1897*



Ee = 98%
$[\alpha]_D^{25} = -292.1$ (*c* 1, CH_3OH)
Source of chirality: lipase-catalyzed resolution
Absolute configuration: (5*R*,6*R*)

$C_{17}H_{18}N_2O_3$

(*R*,*R*)-5,6-Dihydro-6-propoxy-1,10-phenanthrolin-5-yl acetate ((*R*,*R*)-5,6-dihydro-5-acetoxy-6-propoxy-1,10-phenanthroline)

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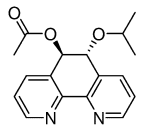
Tetrahedron: Asymmetry *20 (2009) 1897*



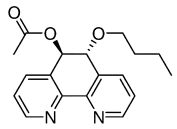
Ee = 94%
$[\alpha]_D^{25} = -185.8$ (*c* 1, CH_3OH)
Source of chirality: lipase-catalyzed resolution
Absolute configuration: (5*R*,6*R*)

$C_{17}H_{18}N_2O_3$

(*R*,*R*)-5,6-Dihydro-6-isopropoxy-1,10-phenanthrolin-5-yl acetate ((*R*,*R*)-5,6-dihydro-5-acetoxy-6-isopropoxy-1,10-phenanthroline)

Elke Schoffers *, Lars Kohler

Tetrahedron: Asymmetry *20 (2009) 1897*



Ee = 98%
$[\alpha]_D^{25} = -240.5$ (*c* 1, CH_3OH)
Source of chirality: lipase-catalyzed resolution
Absolute configuration: (5*R*,6*R*)

$C_{18}H_{20}N_2O_3$

(*R*,*R*)-5,6-Dihydro-6-butoxy-1,10-phenanthrolin-5-yl acetate ((*R*,*R*)-5,6-dihydro-5-acetoxy-6-butoxy-1,10-phenanthroline)

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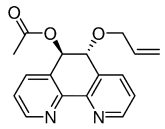
Tetrahedron: Asymmetry *20 (2009) 1897*



Ee = 98%
$[\alpha]_D^{25} = -290.8$ (*c* 1, CH_3OH)
Source of chirality: lipase-catalyzed resolution
Absolute configuration: (5*R*,6*R*)

$C_{17}H_{16}N_2O_3$

(*R*,*R*)-5,6-Dihydro-6-allyloxy-1,10-phenanthrolin-5-yl acetate ((*R*,*R*)-5,6-dihydro-5-acetoxy-6-allyloxy-1,10-phenanthroline)

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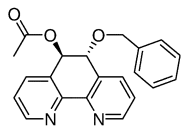
Tetrahedron: Asymmetry *20 (2009) 1897*



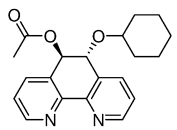
Ee = 96%
$[\alpha]_D^{25} = -280.8$ (*c* 1, CH_3OH)
Source of chirality: lipase-catalyzed resolution
Absolute configuration: (5*R*,6*R*)

$C_{21}H_{18}N_2O_3$

(*R*,*R*)-5,6-Dihydro-6-benzyloxy-1,10-phenanthrolin-5-yl acetate ((*R*,*R*)-5,6-dihydro-5-acetoxy-6-benzyloxy-1,10-phenanthroline)

Elke Schoffers *, Lars Kohler

Tetrahedron: Asymmetry *20 (2009) 1897*

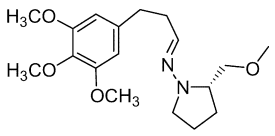


Ee = 91%
$[\alpha]_D^{25} = -156.5$ (*c* 1, CH_3OH)
Source of chirality: lipase-catalyzed resolution
Absolute configuration: (5*R*,6*R*)

$C_{20}H_{22}N_2O_3$

(*R*,*R*)-5,6-Dihydro-6-cyclohexyloxy-1,10-phenanthrolin-5-yl acetate ((*R*,*R*)-5,6-dihydro-5-acetoxy-6-cyclohexyloxy-1,10-phenanthroline)

David Dumoulin, Stéphane Lebrun, Axel Couture *, Eric Deniau, Pierre Grandclaudon | *Tetrahedron:* Asymmetry *20 (2009) 1903*

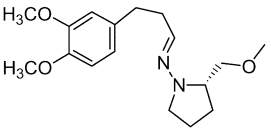


Ee >96%
$[\alpha]_D^{25} = -73.5$ (*c* 1.07, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (2*S*)

$C_{18}H_{28}N_2O_4$

[(*S*)-2-Methoxymethylpyrrolidin-1-yl]-*N*-[3-(3,4,5-trimethoxyphenyl)propylidene]amine

David Dumoulin, Stéphane Lebrun, Axel Couture *, Eric Deniau, Pierre Grandclaudon | *Tetrahedron:* Asymmetry *20 (2009) 1903*

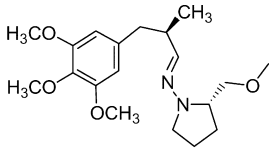


Ee >96%
$[\alpha]_D^{25} = -69.8$ (*c* 1.01, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (2*S*)

$C_{17}H_{26}N_2O_3$

N-[3-(3,4-Dimethoxyphenyl)propylidene]-[(*S*)-2-methoxymethylpyrrolidin-1-yl]amine

David Dumoulin, Stéphane Lebrun, Axel Couture *, Eric Deniau, Pierre Grandclaudon | *Tetrahedron:* Asymmetry *20 (2009) 1903*

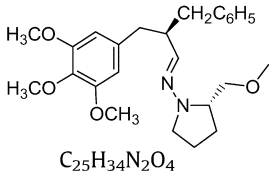


Ee >96%
$[\alpha]_D^{25} = -122.3$ (*c* 1.09, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (2*S*,2*R*)

$C_{19}H_{30}N_2O_4$

[(*S*)-2-Methoxymethylpyrrolidin-1-yl]-*N*-[(*R*)-2-methyl-3-(3,4,5-trimethoxyphenyl)propylidene]amine

David Dumoulin, Stéphane Lebrun, Axel Couture *, Eric Deniau, Pierre Grandclaudon | *Tetrahedron:* Asymmetry *20 (2009) 1903*



Ee >96%
$[\alpha]_D^{25} = -52.9$ (*c* 0.83, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (2*R*,2*S*)

$C_{25}H_{34}N_2O_4$

N-[(*R*)-2-Benzyl-3-(3,4,5-trimethoxyphenyl)propylidene]-[(*S*)-2-methoxymethylpyrrolidin-1-yl]amine

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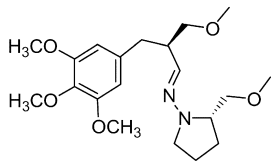

$C_{20}H_{32}N_2O_5$

Ee >96%
$[\alpha]_D^{25} = -95.9$ (c 0.99, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (2*S*,2*R*)

[(*S*)-2-Methoxymethylpyrrolidin-1-yl]-*N*-[(*R*)-2-methoxymethyl-3-(3,4,5-trimethoxyphenyl)propylidene]amine

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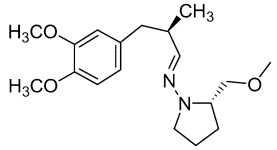

$C_{18}H_{28}N_2O_3$

Ee >96%
$[\alpha]_D^{25} = -124.0$ (c 0.72, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (2*R*,2*S*)

N-[(*R*)-3-(3,4-Dimethoxyphenyl)-2-methylpropylidene]-[(*S*)-2-methoxymethylpyrrolidin-1-yl]amine

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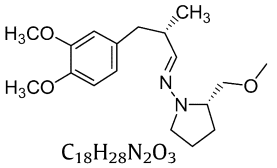

$C_{18}H_{28}N_2O_3$

Ee >96%
$[\alpha]_D^{25} = -37.0$ (c 1.22, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (2*S*,2*S*)

N-[(*S*)-3-(3,4-Dimethoxyphenyl)-2-methylpropylidene]-[(*S*)-2-methoxymethylpyrrolidin-1-yl]amine

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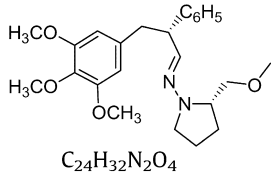

$C_{24}H_{32}N_2O_4$

Ee >96%
$[\alpha]_D^{25} = -86.6$ (c 1.10, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (2*S*,2*S*)

[(*S*)-2-Methoxymethylpyrrolidin-1-yl]-*N*-[(*S*)-2-phenyl-3-(3,4,5-trimethoxyphenyl)propylidene]amine

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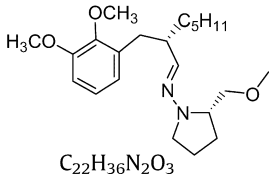

$C_{22}H_{36}N_2O_3$

Ee >96%
$[\alpha]_D^{25} = -29.8$ (c 1.09, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (2*S*,2*S*)

N-[(*S*)-2-(2,3-Dimethoxybenzyl)heptylidene]-[(*S*)-2-methoxymethylpyrrolidin-1-yl]amine

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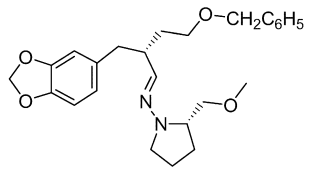

$C_{25}H_{32}N_2O_4$

Ee >96%
$[\alpha]_D^{25} = -43.2$ (c 0.87, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (4*R*,2*S*)

N-[(*R*)-2-Benzo[1,3]dioxol-5-ylmethyl-4-benzyloxybutylidene]-[(*S*)-2-methoxymethylpyrrolidin-1-yl]amine

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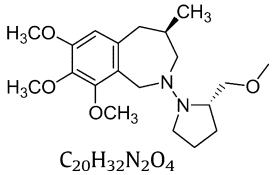

$C_{20}H_{32}N_2O_4$

Ee >96%
$[\alpha]_D^{25} = -46.8$ (c 0.71, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (2*S*,4*R*)

(*R*)-7,8,9-Trimethoxy-2-[(*S*)-2-methoxymethylpyrrolidin-1-yl]-4-methyl-2,3,4,5-tetrahydro-1*H*-benzo[*c*]azepine

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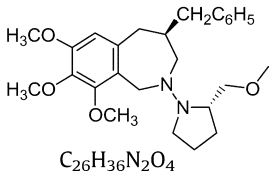

$C_{26}H_{36}N_2O_4$

Ee >96%
$[\alpha]_D^{25} = -37.8$ (c 0.72, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (4*R*,2*S*)

(*R*)-4-Benzyl-7,8,9-trimethoxy-2-[(*S*)-2-methoxymethylpyrrolidin-1-yl]-2,3,4,5-tetrahydro-1*H*-benzo[*c*]azepine

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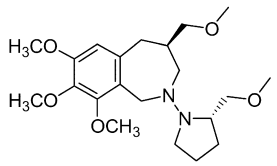

$C_{21}H_{34}N_2O_5$

Ee >96%
$[\alpha]_D^{25} = -44.0$ (c 0.61, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (4*R*,2*S*)

(*R*)-7,8,9-Trimethoxy-4-methoxymethyl-2-[(*S*)-2-methoxymethylpyrrolidin-1-yl]-2,3,4,5-tetrahydro-1*H*-benzo[*c*]azepine

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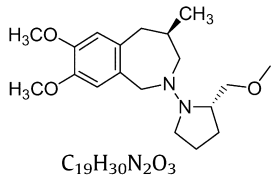

$C_{19}H_{30}N_2O_3$

Ee >96%
$[\alpha]_D^{25} = -38.8$ (c 0.51, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (2*S*,4*R*

(*R*)-7,8-Dimethoxy-2-[(*S*)-2-methoxymethylpyrrolidin-1-yl]-4-methyl-2,3,4,5-tetrahydro-1*H*-benzo[*c*]azepine

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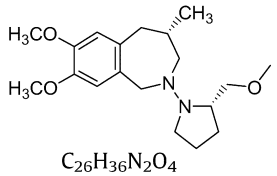

$C_{26}H_{36}N_2O_4$

Ee >96%
$[\alpha]_D^{25} = -32.6$ (c 0.58, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (4*S*,2*S*)

(*S*)-7,8-Dimethoxy-2-[(*S*)-2-methoxymethylpyrrolidin-1-yl]-4-methyl-2,3,4,5-tetrahydro-1*H*-benzo[*c*]azepine

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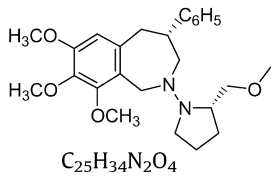

$C_{25}H_{34}N_2O_4$

Ee >96%
$[\alpha]_D^{25} = -58.3$ (c 1.75, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (2*S*,4*R*)

(*R*)-7,8,9-Trimethoxy-2-[(*S*)-2-methoxymethylpyrrolidin-1-yl]-4-phenyl-2,3,4,5-tetrahydro-1*H*-benzo[*c*]azepine

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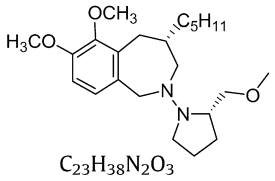

$C_{23}H_{38}N_2O_3$

Ee >96%
$[\alpha]_D^{25} = -48.2$ (c 1.0, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (2*S*,4*S*)

(*S*)-6,7-Dimethoxy-2-[(*S*)-2-methoxymethylpyrrolidin-1-yl]-4-pentyl-2,3,4,5-tetrahydro-1*H*-benzo[*c*]azepine

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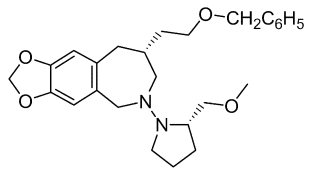

$C_{26}H_{34}N_2O_4$

Ee >96%
$[\alpha]_D^{25} = -46.6$ (c 0.67, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (8*R*,2*S*)

(*R*)-8-(2-Benzyloxyethyl)-6-[(*S*)-2-methoxymethylpyrrolidin-1-yl]-6,7,8,9-tetrahydro-5*H*-1,3-dioxa-6-azacyclohepta[*f*]indene

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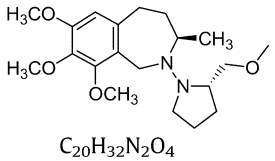

$C_{20}H_{32}N_2O_4$

Ee >96%
$[\alpha]_D^{25} = -43.8$ (c 1.25, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (2*S*,3*R*)

(*R*)-7,8,9-Trimethoxy-2-[(*S*)-2-methoxymethylpyrrolidin-1-yl]-3-methyl-2,3,4,5-tetrahydro-1*H*-benzo[*c*]azepine

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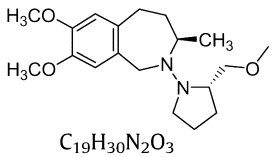

$C_{19}H_{30}N_2O_3$

Ee >96%
$[\alpha]_D^{25} = -50.3$ (c 0.31, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (2*S*,3*R*)

(*R*)-7,8-Dimethoxy-2-[(*S*)-2-methoxymethylpyrrolidin-1-yl]-3-methyl-2,3,4,5-tetrahydro-1*H*-benzo[*c*]azepine

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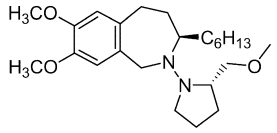

Ee >96%
$[\alpha]_D^{25} = -46.3$ (*c* 0.49, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (3*R*,2*S*)

$C_{24}H_{40}N_2O_3$

(*R*)-3-Hexyl-7,8-dimethoxy-2-[(*S*)-2-methoxymethylpyrrolidin-1-yl]-2,3,4,5-tetrahydro-1*H*-benzo[*c*]azepine

David Dumoulin, Stéphane Lebrun, Axel Couture *, Eric Deniau, Pierre Grandclaudon

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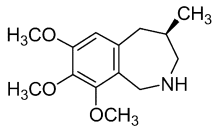

Ee >96%
$[\alpha]_D^{25} = -39.4$ (*c* 0.72, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (4*R*)

$C_{14}H_{21}NO_3$

(*R*)-7,8,9-Trimethoxy-4-methyl-2,3,4,5-tetrahydro-1*H*-benzo[*c*]azepine

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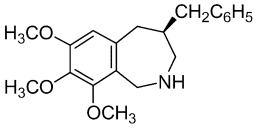

Ee >96%
$[\alpha]_D^{25} = -72.8$ (*c* 0.39, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (4*R*)

$C_{20}H_{25}NO_3$

(*R*)-4-Benzyl-7,8,9-trimethoxy-2,3,4,5-tetrahydro-1*H*-benzo[*c*]azepine

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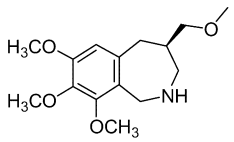

Ee >96%
$[\alpha]_D^{25} = -44.2$ (*c* 0.41, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (4*R*)

$C_{15}H_{23}NO_4$

(*R*)-7,8,9-Trimethoxy-4-methoxymethyl-2,3,4,5-tetrahydro-1*H*-benzo[*c*]azepine

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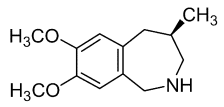

$C_{13}H_{19}NO_2$

(*R*)-7,8-Dimethoxy-4-methyl-2,3,4,5-tetrahydro-1*H*-benzo[*c*]azepine

Ee >96%
$[\alpha]_D^{25} = -56.5$ (*c* 0.63, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (4*R*)

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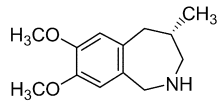

$C_{13}H_{19}NO_2$

(*S*)-7,8-Dimethoxy-4-methyl-2,3,4,5-tetrahydro-1*H*-2-benzo[*c*]azepine

Ee >96%
$[\alpha]_D^{25} = +53.6$ (*c* 0.52, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (4*S*)

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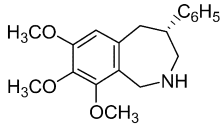

$C_{19}H_{23}NO_3$

(*R*)-6,7-Dimethoxy-4-phenyl-2,3,4,5-tetrahydro-1*H*-benzo[*c*]azepine

Ee >96%
$[\alpha]_D^{25} = +24.3$ (*c* 0.38, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (4*R*)

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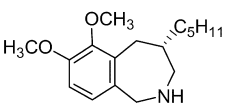

$C_{17}H_{27}NO_2$

(*S*)-6,7-Dimethoxy-4-pentyl-2,3,4,5-tetrahydro-1*H*-benzo[*c*]azepine

Ee >96%
$[\alpha]_D^{25} = -6.8$ (*c* 0.47, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (4*S*)

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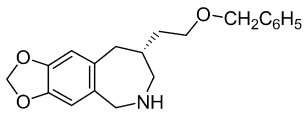

Ee >96%
$[\alpha]_D^{25} = -12.6$ (*c* 0.61, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (4*R*)

$C_{20}H_{23}NO_3$

(*R*)-8-(2-Benzyloxyethyl)-6,7,8,9-tetrahydro-5*H*-1,3-dioxa-6-azacyclohepta[*f*]indene

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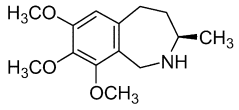
David Dumoulin, Stéphane Lebrun, Axel Couture *, Eric Deniau, Pierre Grandclaudon

Tetrahedron: Asymmetry *20 (2009) 1903*



Ee >96%
$[\alpha]_D^{25} = -81.1$ (*c* 0.54, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (3*R*)

$C_{14}H_{21}NO_3$

(*R*)-7,8,9-Trimethoxy-3-methyl-2,3,4,5-tetrahydro-1*H*-benzo[*c*]azepine

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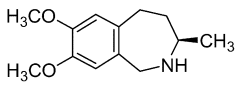
David Dumoulin, Stéphane Lebrun, Axel Couture *, Eric Deniau, Pierre Grandclaudon

Tetrahedron: Asymmetry *20 (2009) 1903*



Ee >96%
$[\alpha]_D^{25} = -69.7$ (*c* 0.41, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (3*R*)

$C_{13}H_{19}NO_2$

(*R*)-7,8-Dimethoxy-3-methyl-2,3,4,5-tetrahydro-1*H*-benzo[*c*]azepine

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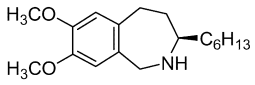
David Dumoulin, Stéphane Lebrun, Axel Couture *, Eric Deniau, Pierre Grandclaudon

Tetrahedron: Asymmetry *20 (2009) 1903*



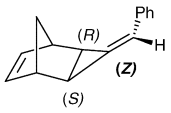
Ee >96%
$[\alpha]_D^{25} = -29.6$ (*c* 0.73, $CHCl_3$)
Source of chirality: (*S*)-proline
Absolute configuration: (3*R*)

$C_{18}H_{29}NO_2$

(3*R*)-7,8-Dimethoxy-3-hexyl-2,3,4,5-tetrahydro-1*H*-2-benzazepine

David Gatineau, Delphine Moraleda, Jean-Valère Naubron, Thomas Bürgi, Laurent Giordano *, Gérard Buono *

Tetrahedron: Asymmetry *20 (2009) 1912*



$C_{15}H_{14}$

(2*R*,4*S*)-(−)-(*Z*)-3-Benzylidenetricyclo[3.2.1.0^{2,4}]oct-6-ene

Ee = 97% (by chiral HPLC)
$[\alpha]_D^{20} = -136.7$ (*c* 0.21, $CHCl_3$)
Source of chirality: semi-preparative chiral HPLC separation
Absolute configuration: (2*R*,4*S*)

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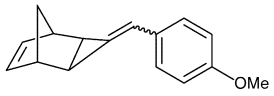
Tetrahedron: Asymmetry *20 (2009) 1912*



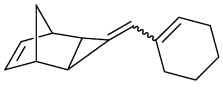
$C_{16}H_{16}O$

(−)-3-*p*-Methoxybenzylidenetricyclo[3.2.1.0^{2,4}]oct-6-ene

Ee = 60% (by chiral HPLC)
$[\alpha]_D^{20} = -83.6$ (*c* 0.5, $CHCl_3$)
Source of chirality: chiral catalyst
Absolute configuration: unknown

David Gatineau, Delphine Moraleda, Jean-Valère Naubron, Thomas Bürgi, Laurent Giordano *, Gérard Buono *

Tetrahedron: Asymmetry *20 (2009) 1912*



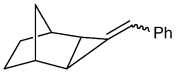
$C_{15}H_{18}$

(−)-3-Cyclohex-1-enylmethylene-tricyclo[3.2.1.0^{2,4}]oct-6-ene

Ee = 95% (by chiral HPLC)
$[\alpha]_D^{20} = -34.3$ (*c* 0.3, $CHCl_3$)
Source of chirality: chiral catalyst
Absolute configuration: unknown

David Gatineau, Delphine Moraleda, Jean-Valère Naubron, Thomas Bürgi, Laurent Giordano *, Gérard Buono *

Tetrahedron: Asymmetry *20 (2009) 1912*



$C_{15}H_{16}$

(−)-3-Benzylidenetricyclo[3.2.1.0^{2,4}]octane

Ee = 46% (by chiral HPLC)
$[\alpha]_D^{20} = -63.3$ (*c* 0.175, $CDCl_3$)
Source of chirality: chiral catalyst
Absolute configuration: unknown

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Tetrahedron: Asymmetry *20 (2009) 1912*

Ee = 67% (by chiral HPLC)
$[\alpha]_D^{20} = +66.4$ (*c* 0.51, $CHCl_3$)
Source of chirality: chiral catalyst
Absolute configuration: unknown

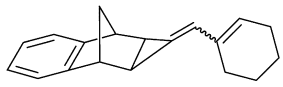
$C_{19}H_{16}$

(+)-10-Benzylidenetetracyclo[6.3.1.$0^{2,7}$.$0^{9,11}$]dodeca-2,4,6-triene

David Gatineau, Delphine Moraleda, Jean-Valère Naubron, Thomas Bürgi, Laurent Giordano *, Gérard Buono *

Tetrahedron: Asymmetry *20 (2009) 1912*

Ee = 72% (by chiral HPLC)
$[\alpha]_D^{20} = +46.0$ (*c* 0.52, $CHCl_3$)
Source of chirality: chiral catalyst
Absolute configuration: unknown



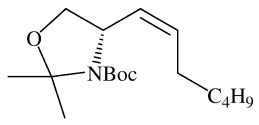
$C_{19}H_{20}$

(+)-10-Cyclohex-1-enylmethylenetetracyclo[6.3.1.$0^{2,7}$.$0^{9,11}$]dodeca-2,4,6-triene

Srivari Chandrasekhar *, Bhoopendra Tiwari

Tetrahedron: Asymmetry *20 (2009) 1924*

$[\alpha]_D^{25} = -75.5$ (*c* 1.0, $CHCl_3$)
Source of chirality: D-serine
Absolute configuration: (2*S*,*Z*)



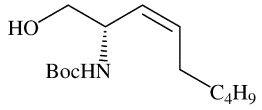
$C_{17}H_{31}NO_3$

(*S*,*Z*)-*tert*-Butyl 4-(hept-1-enyl)-2,2-dimethyloxazolidine-3-carboxylate

Srivari Chandrasekhar *, Bhoopendra Tiwari

Tetrahedron: Asymmetry *20 (2009) 1924*

$[\alpha]_D^{25} = -27.2$ (*c* 1.0, $CHCl_3$)
Source of chirality: D-serine
Absolute configuration: (2*S*,*Z*)



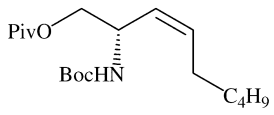
$C_{14}H_{27}NO_3$

(*S*,*Z*)-*tert*-Butyl 1-hydroxynon-3-en-2-ylcarbamate

Srivari Chandrasekhar *, Bhoopendra Tiwari

Tetrahedron: Asymmetry *20 (2009) 1924*

$[\alpha]_D^{25} = -8.4$ (*c* 0.7, $CHCl_3$)
Source of chirality: D-serine
Absolute configuration: (2*S*,*Z*)



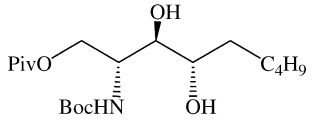
$C_{19}H_{35}NO_4$

(*S*,*Z*)-2-(*tert*-Butoxycarbonylamino)non-3-enyl pivalate

Srivari Chandrasekhar *, Bhoopendra Tiwari

Tetrahedron: Asymmetry *20 (2009) 1924*

$[\alpha]_D^{25} = -19.2$ (*c* 1.35, $CHCl_3$)
Source of chirality: AD mix-α
Absolute configuration: (2*R*,3*R*,4*S*)



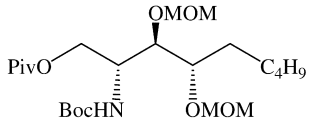
$C_{19}H_{37}NO_6$

(2*R*,3*R*,4*S*)-2-(*tert*-Butoxycarbonylamino)-3,4-dihydroxynonyl pivalate

Srivari Chandrasekhar *, Bhoopendra Tiwari

Tetrahedron: Asymmetry *20 (2009) 1924*

$[\alpha]_D^{25} = +24.1$ (*c* 1.0, $CHCl_3$)
Source of chirality: AD mix-α
Absolute configuration: (2*R*,3*R*,4*S*)



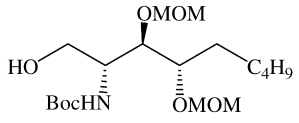
$C_{23}H_{45}NO_8$

(2*R*,3*R*,4*S*)-2-(*tert*-Butoxycarbonylamino)-3,4-bis(methoxymethoxy)nonyl pivalate

Srivari Chandrasekhar *, Bhoopendra Tiwari

Tetrahedron: Asymmetry *20 (2009) 1924*

$[\alpha]_D^{25} = +30.3$ (*c* 1.0, $CHCl_3$)
Source of chirality: AD mix-α
Absolute configuration: (2*R*,3*R*,4*S*)

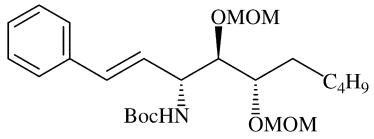


$C_{18}H_{37}NO_7$

tert-Butyl (2*R*,3*R*,4*S*)-1-hydroxy-3,4-bis(methoxymethoxy)nonan-2-ylcarbamate

Srivari Chandrasekhar*, Bhoopendra Tiwari

Tetrahedron: Asymmetry *20 (2009) 1924*



$[\alpha]_D^{25} = -18.5$ (*c* 1.3, $CHCl_3$)
Source of chirality: AD mix-α
Absolute configuration: (3*R*,4*R*,5*S*,*E*)

$C_{25}H_{41}NO_6$

tert-Butyl (3*R*,4*R*,5*S*,*E*)-4,5-bis(methoxymethoxy)-1-phenyldec-1-en-3-ylcarbamate

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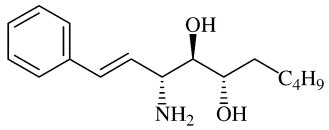
Srivari Chandrasekhar*, Bhoopendra Tiwari

Tetrahedron: Asymmetry *20 (2009) 1924*



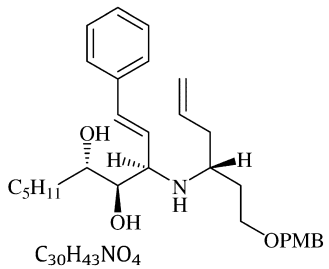
$[\alpha]_D^{25} = +14.0$ (*c* 0.9, $CHCl_3$)
Source of chirality: AD mix-α
Absolute configuration: (3*R*,4*R*,5*S*,*E*)

$C_{16}H_{25}NO_2$

(3*R*,4*R*,5*S*,*E*)-3-Amino-1-phenyldec-1-ene-4,5-diol

Srivari Chandrasekhar*, Bhoopendra Tiwari

Tetrahedron: Asymmetry *20 (2009) 1924*



$[\alpha]_D^{25} = -5.5$ (*c* 1.5, $CHCl_3$)
Source of chirality: diastereoselective allylation
Absolute configuration: (3*R*,4*R*,5*S*,*E*)

$C_{30}H_{43}NO_4$

(3*R*,4*R*,5*S*,*E*)-3-((*R*)-1-(4-Methoxybenzyloxy)hex-5-en-3-ylamino)-1-phenyldec-1-ene-4,5-diol

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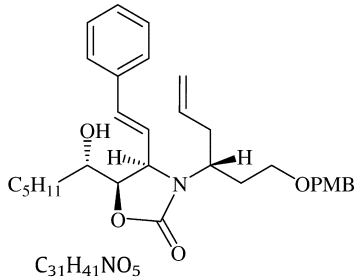
Srivari Chandrasekhar*, Bhoopendra Tiwari

Tetrahedron: Asymmetry *20 (2009) 1924*



$[\alpha]_D^{25} = +14.8$ (*c* 1.0, $CHCl_3$)
Source of chirality: diastereoselective allylation
Absolute configuration: (4*R*,5*R*,3*R*,*E*)

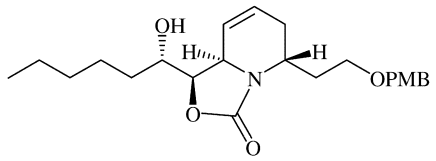
$C_{31}H_{41}NO_5$

(4*R*,5*R*)-5-((*S*)-1-Hydroxyhexyl)-3-((*R*)-1-(4-methoxybenzyloxy)hex-5-en-3-yl)-4-((*E*)-styryl)oxazolidin-2-one

Srivari Chandrasekhar *, Bhoopendra Tiwari

Tetrahedron: Asymmetry *20 (2009) 1924*

$[\alpha]_D^{25} = +32.1$ (*c* 1.1, $CHCl_3$)
Source of chirality: diastereoselective allylation
Absolute configuration: (1*R*,5*R*,8*aR*)



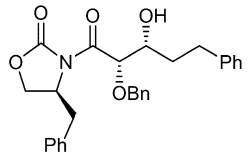
$C_{23}H_{33}NO_5$

(1*R*,5*R*,8*aR*)-1-((*S*)-1-Hydroxyhexyl)-5-(2-(4-methoxybenzyloxy)ethyl)-5,6-dihydro-1*H*-oxazolo[3,4-a]pyridin-3(8*aH*)-one

Ahmed Kamal *, Papagari Venkat Reddy, S. Prabhakar

Tetrahedron: Asymmetry *20 (2009) 1936*

$[\alpha]_D^{25} = +70.5$ (*c* 1.5, $CHCl_3$)
Source of chirality: Evans' asymmetric aldol
Absolute configuration:(2*S*,3*R*)



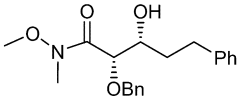
$C_{28}H_{29}NO_5$

(4*S*)-4-Benzyl-3-[(2*S*,3*R*)-2-(benzyloxy)-3-hydroxy-5-phenylpentanoyl]-1,3-oxazolan-2-one

Ahmed Kamal *, Papagari Venkat Reddy, S. Prabhakar

Tetrahedron: Asymmetry *20 (2009) 1936*

$[\alpha]_D^{25} = -13.5$ (*c* 1.1, $CHCl_3$)
Source of chirality: Evans' asymmetric aldol
Absolute configuration:(2*S*,3*R*)



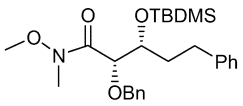
$C_{20}H_{25}NO_4$

(2*S*,3*R*)-2-(Benzyloxy)-3-hydroxy-*N*-methoxy-*N*-methyl-5-phenylpentanamide

Ahmed Kamal *, Papagari Venkat Reddy, S. Prabhakar

Tetrahedron: Asymmetry *20 (2009) 1936*

$[\alpha]_D^{25} = -4.4$ (*c* 1.4, $CHCl_3$)
Source of chirality: Evans' asymmetric aldol
Absolute configuration: (2*S*,3*R*)



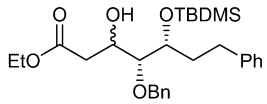
$C_{26}H_{39}NO_4Si$

(2*S*,3*R*)-2-(Benzyloxy)-3-(*tert*-butyldimethylsilyloxy)-*N*-methoxy-*N*-methyl-5-phenylpentanamide

Ahmed Kamal *, Papagari Venkat Reddy, S. Prabhakar

Tetrahedron: Asymmetry *20 (2009) 1936*

$[\alpha]_D^{25} = +33.4$ (*c* 1.1, $CHCl_3$)
Source of chirality: Evans' asymmetric aldol
Absolute configuration: (4*R*,5*R*)



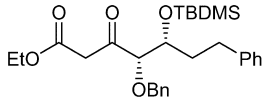
$C_{28}H_{42}O_5Si$

Ethyl(4*R*,5*R*)-4-(benzyloxy)-5-[1-(*tert*-butyl)-1,1-dimethylsilyl]oxy-3-hydroxy-7-phenylheptanoate

Ahmed Kamal *, Papagari Venkat Reddy, S. Prabhakar

Tetrahedron: Asymmetry *20 (2009) 1936*

$[\alpha]_D^{25} = +6.8$ (*c* 1.1, $CHCl_3$)
Source of chirality: Evans' asymmetric aldol
Absolute configuration: (4*S*,5*R*)



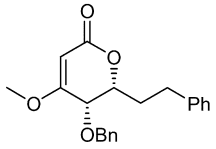
$C_{28}H_{40}O_5Si$

Ethyl(4*S*,5*R*)-4-(benzyloxy)-5-[1-(*tert*-butyl)-1,1-dimethylsilyl]oxy-3-oxo-7-phenylheptanoate

Ahmed Kamal *, Papagari Venkat Reddy, S. Prabhakar

Tetrahedron: Asymmetry *20 (2009) 1936*

$[\alpha]_D^{25} = -118.9$ (*c* 1.5, $CHCl_3$)
Source of chirality: Evans' asymmetric aldol
Absolute configuration: (5*S*,6*R*)



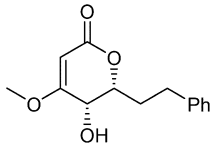
$C_{21}H_{22}O_4$

(5*S*,6*R*)-5-(Benzyloxy)-4-methoxy-6-phenethyl-5,6-dihydro-2H-2-pyranone

Ahmed Kamal *, Papagari Venkat Reddy, S. Prabhakar

Tetrahedron: Asymmetry *20 (2009) 1936*

$[\alpha]_D^{25} = -63.2$ (*c* 1.1, $CHCl_3$)
Source of chirality: Evans' asymmetric aldol
Absolute configuration: (5*S*,6*R*)

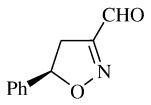


$C_{14}H_{16}O_4$

(5*S*,6*R*)-5-Hydroxy-4-methoxy-6-phenethyl-5,6-dihydro-2*H*-2-pyranone

Giuseppe Cremonesi, Piero Dalla Croce, Alessandra Forni, Maddalena Gallanti, Raffaella Gandolfi, Concetta La Rosa *

Tetrahedron: Asymmetry *20 (2009) 1940*



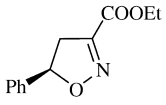
$C_{10}H_9NO_2$

(5*R*)-5-Phenyl-4,5-dihydroisoxazole-3-carbaldehyde

Ee = 96% [HPLC]
$[\alpha]_D^{20} = -459$ (*c* 1.29, $CHCl_3$)
Source of chirality: enzymatic resolution
Absolute configuration: (*R*)

Giuseppe Cremonesi, Piero Dalla Croce, Alessandra Forni, Maddalena Gallanti, Raffaella Gandolfi, Concetta La Rosa *

Tetrahedron: Asymmetry *20 (2009) 1940*



$C_{12}H_{13}NO_3$

(5*R*)-5-Phenyl-4,5-dihydroisoxazole-3-carboxylic acid ethyl ester

Ee = 96% [HPLC]
$[\alpha]_D^{20} = -285.3$ (*c* 0.95, $CHCl_3$)
Source of chirality: enzymatic resolution
Absolute configuration: (*R*)

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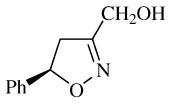
Tetrahedron: Asymmetry *20 (2009) 1940*



$C_{10}H_{11}NO_2$

[(5*R*)-5-Phenyl-4,5-dihydroisoxazole-3-yl]-methanol

Ee = 96% [HPLC]
$[\alpha]_D^{20} = -166.3$ (*c* 1.05, $CHCl_3$)
Source of chirality: enzymatic resolution
Absolute configuration: (*R*)

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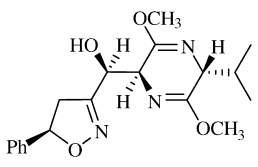
Tetrahedron: Asymmetry *20 (2009) 1940*



$C_{19}H_{25}N_3O_4$

(*S*)-[(2*S*,5*R*)-5-Isopropyl-3,6-dimethoxy-2,5,dihydropyrazin-2-yl]-[(5*R*)-5-phenyl-4,5-dihydroisoxazol-3-yl]-methanol

Dr = >98% [NMR]
$[\alpha]_D^{20} = -149.35$ (*c* 0.96, $CHCl_3$)
Source of chirality: *Schöllkopf*'s reagent
Absolute configuration: (2*S*, 5*R*, 1′*S*)

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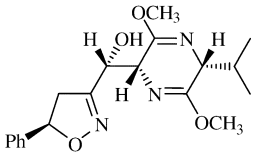
Tetrahedron: Asymmetry *20 (2009) 1940*



Dr = >98% [NMR]
$[\alpha]_D^{20} = -78.7$ (*c* 1.41, $CHCl_3$)
Source of chirality: *Schöllkopf*'s reagent
Absolute configuration: (2*R*,1′*R*)

$C_{19}H_{25}N_3O_4$

(*R*)-[(2*R*,5*R*)-5-Isopropyl-3,6-dimethoxy-2,5-dihydropyrazin-2-yl]-[(5*R*)-5-phenyl-4,5-dihydroisoxazol-3-yl]-methanol

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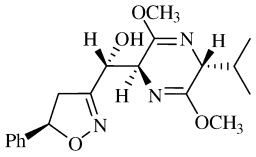
Tetrahedron: Asymmetry *20 (2009) 1940*



Dr = >98% [NMR]
$[\alpha]_D^{20} = -51.2$ (*c* 0.65, $CHCl_3$)
Source of chirality: *Schöllkopf*'s reagent
Absolute configuration: (2*S*,1′*R*)

$C_{19}H_{25}N_3O_4$

(*R*)-[(2*S*,5*R*)-5-Isopropyl-3,6-dimethoxy-2,5-dihydropyrazin-2-yl]-[(5*R*)-5-phenyl-4,5-dihydroisoxazol-3-yl]-methanol

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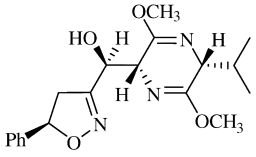

Dr = >98% [NMR]
$[\alpha]_D^{20} = -41.4$ (*c* 0.45, $CHCl_3$)
Source of chirality: *Schöllkopf*'s reagent
Absolute configuration: (2*R*,1′*S*)

$C_{19}H_{25}N_3O_4$

(*S*)-[(2*R*,5*R*)-5-Isopropyl-3,6-dimethoxy-2,5-dihydropyrazin-2-yl]-[(5*R*)-5-phenyl-4,5-dihydroisoxazol-3-yl]-methanol

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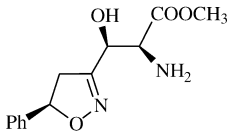
Tetrahedron: Asymmetry *20 (2009) 1940*



Dr = >98% [NMR]
$[\alpha]_D^{20} = -54.1$ (*c* 0.77, $CHCl_3$)
Source of chirality: *Schöllkopf*'s reagent
Absolute configuration: (2*S*,3*S*)

$C_{13}H_{16}N_2O_4$

(2*S*)-Amino-(3*S*)-hydroxy-3-[(5*R*)-phenyl-4,5-dihydroisoxazol-3-yl]-propionic acid methyl ester

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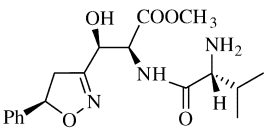

Dr = >98% [NMR]
$[\alpha]_D^{20} = -80.7$ (*c* 0.32, $CHCl_3$)
Source of chirality: *Schöllkopf*'s reagent
Absolute configuration: (2*S*,3*S*)

$C_{18}H_{25}N_3O_5$

(2*S*)-[(2*R*)-Amino-3-methyl-butyrylamino]-(3*S*)-hydroxy-3-[(5*R*)-5-phenyl-4,5-dihydroisoxazol-3-yl]-propionic acid methyl ester

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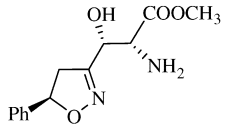

Dr = >98% [NMR]
$[\alpha]_D^{20} = -99.7$ (*c* 0.30, $CHCl_3$)
Source of chirality: *Schöllkopf*'s reagent
Absolute configuration: (2*R*,3*R*)

$C_{13}H_{16}N_2O_4$

(2*R*)-Amino-[(3*R*)-hydroxy-3-(5*R*)-5-phenyl-4,5-dihyroisoxazol-3-yl]-propionic acid methyl ester

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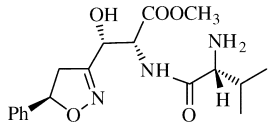
Tetrahedron: Asymmetry *20 (2009) 1940*



Dr = >98% [NMR]
$[\alpha]_D^{20} = -35.3$ (*c* 0.15, $CHCl_3$)
Source of chirality: *Schöllkopf*'s reagent
Absolute configuration: (2*R*,3*R*)

$C_{18}H_{25}N_3O_5$

(2*R*)-[(2*R*)-Amino-3-methyl-butyrylamino]-(3*R*)-hydroxy-3-[(5*R*)-5-phenyl-4,5-dihydroisoxazol-3-yl]-propionic acid methyl ester

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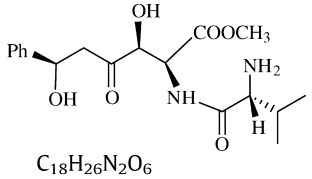
Tetrahedron: Asymmetry *20 (2009) 1940*



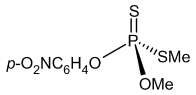
Dr = >98% [NMR]
$[\alpha]_D^{20} = +60.6$ (*c* 0.42, $CHCl_3$)
Source of chirality: *Schöllkopf*'s reagent
Absolute configuration: (2*S*,3*S*)

$C_{18}H_{26}N_2O_6$

(2*S*,3*S*,6*R*)-2-[(2*R*)-2-Amino-3-methyl-butyrylamino]-3,6-dihydroxy-4-oxo-6-phenyl-hexanoic acid methyl ester

Marian Mikołajczyk *, Jerzy Łuczak, Piotr Kiełbasiński, Stefano Colonna

Tetrahedron: Asymmetry *20 (2009) 1948*



$C_8H_{10}NO_4PS_2$

O,*S*-Dimethyl *O*-*p*-nitrophenyl phosphorodithioate

Ee = 97.0%
$[\alpha]_D$ = +24.0 (*c* 0.25, $CHCl_3$)
Source of chirality : enzymatic kinetic resolution
Absolute configuration : (*R*)