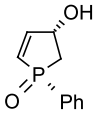
K. Michał Pietrusiewicz,* Marek Koprowski and Zbigniew Pakulski

Tetrahedron: Asymmetry *13 (2002) 1017*



$C_{10}H_{11}O_2P$

(1*R*,3*S*)-2,3-Dihydro-3-hydroxy-1-phenyl-1*H*-phosphole-1-oxide

E.e. = 52%

$[\alpha]_D^{20} = -96$ (*c* 0.3, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: R_P,S_C

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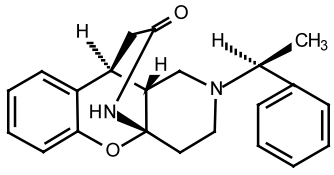
Tetrahedron: Asymmetry *13 (2002) 1021*



$C_{22}H_{24}N_2O_2$

(1*S*,9*S*,10*R*)-12-[(1′*S*)-1-Phenylethyl]-2-oxa-12,15-diazatetracyclo[7.5.3.0^{1,10}.0^{3,8}]heptadeca-3,5,7-trien-16-one

$[\alpha]_D^{20} = +31.6$ (*c* 2.05, $CHCl_3$)

Source of chirality: diastereoselective synthesis

Absolute configuration: 1*S*,9*S*,10*R*,1′*S*

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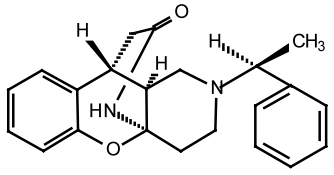
Tetrahedron: Asymmetry *13 (2002) 1021*



$C_{22}H_{24}N_2O_2$

(1*R*,9*R*,10*S*)-12-[(1′*S*)-1-Phenylethyl]-2-oxa-12,15-diazatetracyclo[7.5.3.0^{1,10}.0^{3,8}]heptadeca-3,5,7-trien-16-one

$[\alpha]_D^{20} = -27$ (*c* 2.0, $CHCl_3$)

Source of chirality: diastereoselective synthesis

Absolute configuration: 1*R*,9*R*,10*S*,1′*S*

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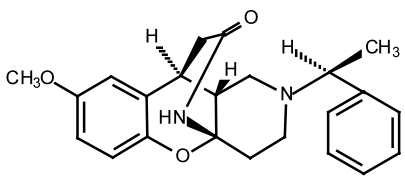
Tetrahedron: Asymmetry *13 (2002) 1021*



$C_{23}H_{26}N_2O_3$

(1*S*,9*S*,10*R*)-6-Methoxy-12-[(1′*S*)-1-phenylethyl]-2-oxa-12,15-diazatetracyclo[7.5.3.0^{1,10}.0^{3,8}]heptadeca-3,5,7-trien-16-one

$[\alpha]_{D=}^{20} = +21$ (*c* 1.08, $CHCl_3$)

Source of chirality: diastereoselective synthesis

Absolute configuration: 1*S*,9*S*,10*R*,1*S*

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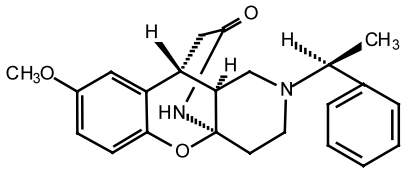
Tetrahedron: Asymmetry *13 (2002) 1021*



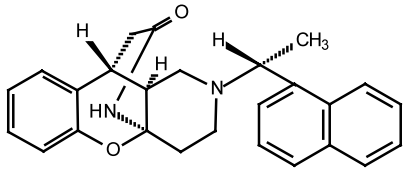
$[\alpha]_D^{20} = -70$ (c 0.8, $CHCl_3$)
Source of chirality: diastereoselective synthesis
Absolute configuration: 1*R*,9*R*,10*S*,1*S*

$C_{23}H_{26}N_2O_3$

(1*R*,9*R*,10*S*)-6-Methoxy-12-[(1′*S*)-1-phenylethyl]-2-oxa-12,15-diazatetracyclo[7.5.3.0^{1,10}.0^{3,8}]heptadeca-3,5,7-trien-16-one

Jolanta Biała, Zbigniew Czarnocki* and Jan K. Maurin

Tetrahedron: Asymmetry *13 (2002) 1021*



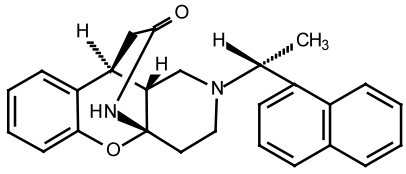
$[\alpha]_D^{20} = -86$ (c 0.83, $CHCl_3$)
Source of chirality: diastereoselective synthesis
Absolute configuration: 1*R*,9*R*,10*S*,1′*R*

$C_{26}H_{26}N_2O_2$

(1*R*,9*R*,10*S*)-12-[(1′*R*)-1-(2-Naphthyl)ethyl]-2-oxa-12,15-diazatetracyclo[7.5.3.0^{1,10}.0^{3,8}]heptadeca-3,5,7-trien-16-one

Jolanta Biała, Zbigniew Czarnocki* and Jan K. Maurin

Tetrahedron: Asymmetry *13 (2002) 1021*



$[\alpha]_D^{20} = +80$ (c 1.3, $CHCl_3$)
Source of chirality: diastereoselective synthesis
Absolute configuration 1*S*,9*S*,10*R*,1′*R*

$C_{26}H_{26}N_2O_2$

(1*S*,9*S*,10*R*)-12-[(1′*R*)-1-(2-Naphthyl)ethyl]-2-oxa-12,15-diazatetracyclo[7.5.3.0^{1,10}.0^{3,8}]heptadeca-3,5,7-trien-16-one

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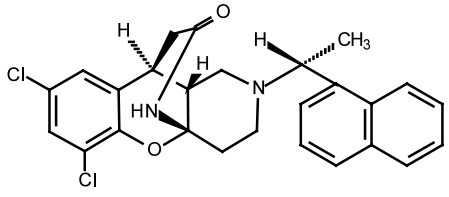
Tetrahedron: Asymmetry *13 (2002) 1021*



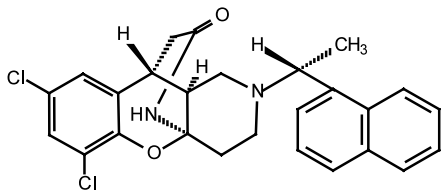
$[\alpha]_D^{20} = +81.8$ (c 0.83, $CHCl_3$)
Source of chirality: diastereoselective synthesis
Absolute configuration: 1*S*,9*S*,10*R*,1*R*

$C_{26}H_{24}Cl_2N_2O_2$

(1*S*,9*S*,10*R*)-4,6-Dichloro-12-[(1′*R*)-1-(2-naphthyl)ethyl]-2-oxa-12,15-diazatetracyclo[7.5.3.0^{1,10}.0^{3,8}]heptadeca-3,5,7-trien-16-one

Jolanta Biała, Zbigniew Czarnocki* and Jan K. Maurin

Tetrahedron: Asymmetry *13 (2002) 1021*



$[\alpha]_D^{20} = -100$ (c 1.46, $CHCl_3$)
Source of chirality: diastereoselective synthesis
Absolute configuration: 1*R*,9*R*,10*S*,1′*R*

$C_{26}H_{24}Cl_2N_2O_2$
(1*R*,9*R*,10*S*)-4,6-Dichloro-12-[(1′*R*)-1-(2-naphthyl)ethyl]-2-oxa-12,15-diazatetracyclo[7.5.3.$0^{1,10}$.$0^{3,8}$]heptadeca-3,5,7-trien-16-one

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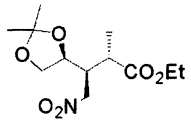
Américo C. Pinto, Cleide B. L. Freitas, Ayres G. Dias, Vera L. P. Pereira,* Bernard Tinant, Jean-Paul Declercq and Paulo R. R. Costa*

Tetrahedron: Asymmetry *13 (2002) 1025*



$[\alpha]_D^{25} = +13.3$ (c 1.35, $CHCl_3$)
Source of chirality: D-(+)-mannitol
Absolute configuration: 2*S*,3*S*,4*S*

$C_{12}H_{21}NO_6$
Ethyl (2*S*,3*S*,4*S*)-2-methyl-3-nitromethyl-4,5-*O*-isopropylidene pentanoate

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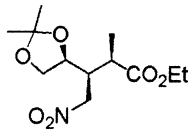
Américo C. Pinto, Cleide B. L. Freitas, Ayres G. Dias, Vera L. P. Pereira,* Bernard Tinant, Jean-Paul Declercq and Paulo R. R. Costa*

Tetrahedron: Asymmetry *13 (2002) 1025*



$[\alpha]_D^{25} = -7.0$ (c 1.48, $CHCl_3$)
Source of chirality: D-(+)-mannitol
Absolute configuration: 2*R*,3*S*,4*S*

$C_{12}H_{21}NO_6$
Ethyl (2*R*,3*S*,4*S*)-2-methyl-3-nitromethyl-4,5-*O*-isopropylidene pentanoate

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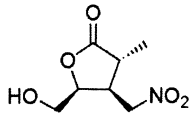
Tetrahedron: Asymmetry *13 (2002) 1025*



$[\alpha]_D^{25} = +113.7$ (c 1.16, MeOH)
Source of chirality: D-(+)-mannitol
Absolute configuration: 3*R*,4*S*,5*S*

$C_7H_{11}NO_5$
(3*R*,4*S*,5*S*)-5-Hydroxymethyl-3-methyl-4-nitromethyldihydrofuran-2-one

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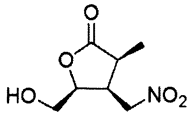
Tetrahedron: Asymmetry *13 (2002) 1025*



$C_7H_{11}NO_5$

(3*S*,4*S*,5*S*)-5-Hydroxymethyl-3-methyl-4-nitromethyldihydrofuran-2-one

$[\alpha]_D^{25} = +43.6$ (*c* 1.09, MeOH)
Source of chirality: D-(+)-mannitol
Absolute configuration: 3*S*,4*S*,5*S*
Mp = 71–72°C

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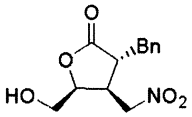
Tetrahedron: Asymmetry *13 (2002) 1025*



$C_{13}H_{15}NO_5$

(3*R*,4*S*,5*S*)-3-Benzyl-5-hydroxymethyl-4-nitromethyldihydrofuran-2-one

$[\alpha]_D^{25} = +45.1$ (*c* 1.22, MeOH)
Source of chirality: D-(+)-mannitol
Absolute configuration: 3*R*,4*S*,5*S*
Mp = 103–104°C

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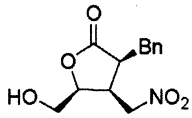
Tetrahedron: Asymmetry *13 (2002) 1025*



$C_{13}H_5NO_5$

(3*S*,4*S*,4*S*)-3-Benzyl-5-hydroxymethyl-4-nitromethyldihydrofuran-2-one

$[\alpha]_D^{25} = +76.5$ (*c* 1.05, MeOH)
Source of chirality: D-(+)-mannitol
Absolute configuration: 3*S*,4*S*,5*S*
Mp = 133–134°C

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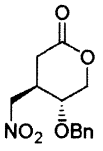
Tetrahedron: Asymmetry *13 (2002) 1025*



$C_{13}H_{15}NO_5$

(4*R*,5*R*)-5-Benzyloxy-4-nitromethyltetrahydropyran-2-one

$[\alpha]_D^{25} = +52.8$ (*c* 1.02, CH_2Cl_2)
Source of chirality: L-(+)-tartaric acid
Absolute configuration: 4*R*,5*R*

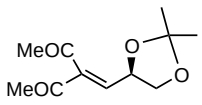
Yongwen Jiang and Dawei Ma*

Tetrahedron: Asymmetry *13 (2002) 1033*

$[\alpha]_D^{20} = +30.7$ (c 0.9, $CHCl_3$)

Source of chirality: using (*S*)-glyceraldehyde acetonide as starting material

Absolute configuration: *R*



$C_{11}H_{16}O_4$

(*R*)-3-(2,2-Dimethyl-(1,3)dioxolan-4-ylmethylene)pentane-2,4-dione

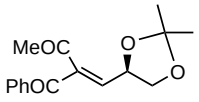
Yongwen Jiang and Dawei Ma*

Tetrahedron: Asymmetry *13 (2002) 1033*

$[\alpha]_D^{20} = +34.3$ (c 1.3, $CHCl_3$)

Source of chirality: using (*S*)-glyceraldehyde acetonide as starting material

Absolute configuration: *R*



$C_{16}H_{18}O_4$

(*R*)-2-(2,2-Dimethyl-(1,3)dioxolan-4-ylmethylene)-1-phenylbutane-1,3-dione

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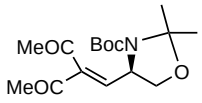
Tetrahedron: Asymmetry *13 (2002) 1033*

$[\alpha]_D^{20} = -11.1$ (c 0.9, $CHCl_3$)

Source of chirality: using (*S*)-Garner aldehyde as starting material

Absolute configuration: *R*



$C_{16}H_{25}NO_5$

(*R*)-(2-Acetyl-3-oxobut-1-enyl)-2,2-dimethyloxazolidine-3-carboxylic acid, *tert*-butyl ester

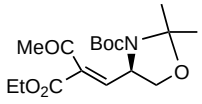
Yongwen Jiang and Dawei Ma*

Tetrahedron: Asymmetry *13 (2002) 1033*

$[\alpha]_D^{20} = -11.1$ (c 0.9, $CHCl_3$)

Source of chirality: using (*S*)-Garner aldehyde as starting material

Absolute configuration: *R*

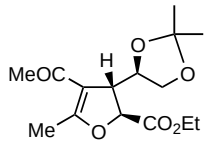


$C_{17}H_{27}NO_6$

(*R*)-(2-Ethoxycarbonyl-3-oxobut-1-enyl)-2,2-dimethyloxazolidine-3-carboxylic acid, *tert*-butyl ester

Yongwen Jiang and Dawei Ma*

Tetrahedron: Asymmetry *13 (2002) 1033*



$C_{15}H_{21}O_6$

(2*S*,3*R*)-4-Acetyl-3-[(*R*)-2,2-dimethyl-(1,3)dioxolan-4-yl]-5-methyl-2,3-dihydrofuran-2-carboxylic acid, ethyl ester

$[\alpha]_D^{20} = +28.9$ (*c* 0.74, $CHCl_3$)

Source of chirality: (*S*)-glyceraldehyde acetonide starting material

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

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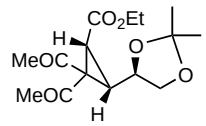
Tetrahedron: Asymmetry *13 (2002) 1033*



$C_{15}H_{21}O_6$

(1*R*,3*R*)-2,2-Diacetyl-3-[(*R*)-2,2-dimethyl-(1,3)dioxolan-4-yl]cyclopropanecarboxylic acid, ethyl ester

$[\alpha]_D^{20} = -117.7$ (*c* 0.64, $CHCl_3$)

Source of chirality: (*S*)-glyceraldehyde acetonide starting material

Absolute configuration: 1*R*,3*R*,1′*R*

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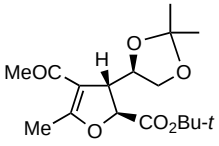
Tetrahedron: Asymmetry *13 (2002) 1033*



$C_{17}H_{25}O_6$

(2*S*,3*R*)-4-Acetyl-3-[(*R*)-2,2-dimethyl-(1,3)dioxolan-4-yl]-5-methyl-2,3-dihydrofuran-2-carboxylic acid, *tert*-butyl ester

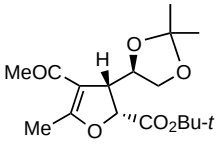
$[\alpha]_D^{20} = +38.6$ (*c* 1.5, $CHCl_3$)

Source of chirality: (*S*)-glyceraldehyde acetonide starting material

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

Yongwen Jiang and Dawei Ma*

Tetrahedron: Asymmetry *13 (2002) 1033*



$C_{17}H_{25}O_6$

(2*R*,3*R*)-4-Acetyl-3-[(*R*)-2,2-dimethyl-(1,3)dioxolan-4-yl]-5-methyl-2,3-dihydrofuran-2-carboxylic acid, *tert*-butyl ester

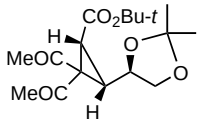
$[\alpha]_D^{20} = -35.0$ (*c* 1.0, $CHCl_3$)

Source of chirality: using (*S*)-glyceraldehyde acetonide as starting material

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

Yongwen Jiang and Dawei Ma*

Tetrahedron: Asymmetry *13 (2002) 1033*



$[\alpha]_D^{20} = -160.8$ (c 0.95, $CHCl_3$)

Source of chirality: (*S*)-glyceraldehyde acetonide starting material

Absolute configuration: 1*R*,3*R*,1′*R*

$C_{17}H_{25}O_6$

(1*R*,3*R*)-2,2-Diacetyl-3-[(*R*)-2,2-dimethyl-(1,3)dioxolan-4-yl]cyclopropanecarboxylic acid, *tert*-butyl ester

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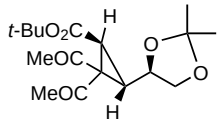
Tetrahedron: Asymmetry *13 (2002) 1033*



$[\alpha]_D^{20} = +92.1$ (c 2.1, $CHCl_3$)

Source of chirality: (*S*)-glyceraldehyde acetonide starting material

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

$C_{17}H_{25}O_6$

(1*R*,3*S*)-2,2-Diacetyl-3-[(*R*)-2,2-dimethyl-(1,3)dioxolan-4-yl]cyclopropanecarboxylic acid, *tert*-butyl ester

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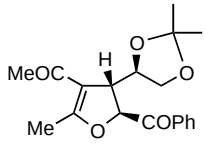
Yongwen Jiang and Dawei Ma*

Tetrahedron: Asymmetry *13 (2002) 1033*



$[\alpha]_D^{20} = +30.7$ (c 0.4, $CHCl_3$)

Source of chirality: (*S*)-glyceraldehyde acetonide starting material

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

$C_{19}H_{21}O_5$

(4*R*,5*S*)-1-[5-Benzoyl-4-((*R*)-2,2-dimethyl-(1,3)dioxolan-4-yl)-2-methyl-4,5-dihydrofuran-3-yl]ethanone

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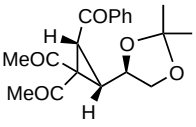
Yongwen Jiang and Dawei Ma*

Tetrahedron: Asymmetry *13 (2002) 1033*



$[\alpha]_D^{20} = +74.7$ (c 1.35, $CHCl_3$)

Source of chirality: using (*S*)-glyceraldehyde acetonide as starting material

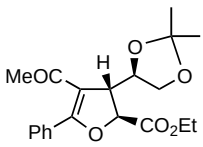
Absolute configuration: 1*R*,3*R*,1′*R*

$C_{19}H_{21}O_5$

(1*R*,3*R*)-2,2-Diacetyl-3-[(*R*)-2,2-dimethyl-(1,3)dioxolan-4-yl]cyclopropyl phenyl ketone

Yongwen Jiang and Dawei Ma*

Tetrahedron: Asymmetry *13 (2002) 1033*



$[\alpha]_D^{20} = -37.2$ (c 0.85, $CHCl_3$)

Source of chirality: (*S*)-glyceraldehyde acetonide starting material

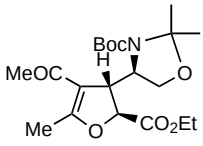
Absolute configuration: 2*S*,3*R*,1′*R*

$C_{17}H_{25}O_6$

(2*S*,3*R*)-4-Acetyl-3-[(*R*)-2,2-dimethyl-(1,3)dioxolan-4-yl]-5-phenyl-2,3-dihydrofuran-2-carboxylic acid, ethyl ester

Yongwen Jiang and Dawei Ma*

Tetrahedron: Asymmetry *13 (2002) 1033*



$[\alpha]_D^{20} = -4$ (c 0.85, $CHCl_3$)

Source of chirality: (*S*)-Garner aldehyde starting material

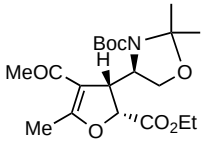
Absolute configuration: 2*S*,3*R*,1′*R*

$C_{20}H_{31}NO_7$

(*R*)-4-((2*S*,3*R*)-4-Acetyl-2-ethoxycarbonyl-5-methyl-2,3-dihydrofuran-3-yl)-2,2-dimethyloxazolidine-3-carboxylic acid, *tert*-butyl ester

Yongwen Jiang and Dawei Ma*

Tetrahedron: Asymmetry *13 (2002) 1033*



$[\alpha]_D^{20} = -15.7$ (c 2.45, $CHCl_3$)

Source of chirality: (*S*)-Garner aldehyde starting material

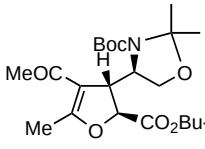
Absolute configuration: 2*R*,3*R*,1′*R*

$C_{20}H_{31}NO_7$

(*R*)-4-((2*R*,3*R*)-4-Acetyl-2-ethoxycarbonyl-5-methyl-2,3-dihydrofuran-3-yl)-2,2-dimethyloxazolidine-3-carboxylic acid, *tert*-butyl ester

Yongwen Jiang and Dawei Ma*

Tetrahedron: Asymmetry *13 (2002) 1033*



$[\alpha]_D^{20} = +79.7$ (c 0.35, $CHCl_3$)

Source of chirality: (*S*)-Garner aldehyde starting material

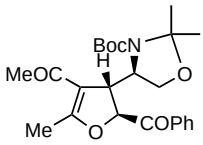
Absolute configuration: 2*S*,3*R*,1′*R*

$C_{22}H_{35}NO_7$

(*R*)-4-((2*S*,3*R*)-4-Acetyl-2-*tert*-butoxycarbonyl-5-methyl-2,3-dihydrofuran-3-yl)-2,2-dimethyloxazolidine-3-carboxylic acid, *tert*-butyl ester

Yongwen Jiang and Dawei Ma*

Tetrahedron: Asymmetry *13 (2002) 1033*



$C_{24}H_{31}NO_6$

$[\alpha]_D^{20} = -51.2$ (c 1.56, $CHCl_3$)

Source of chirality: (*S*)-Garner aldehyde starting material

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

(*R*)-4-((2*S*,3*R*)-4-Acetyl-2-benzoyl-5-methyl-2,3-dihydrofuran-3-yl)-2,2-dimethyloxazolidine-3-carboxylic acid, *tert*-butyl ester

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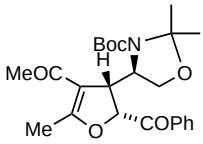
Yongwen Jiang and Dawei Ma*

Tetrahedron: Asymmetry *13 (2002) 1033*



$C_{24}H_{31}NO_6$

$[\alpha]_D^{20} = -124.4$ (c 1.55, $CHCl_3$)

Source of chirality: (*S*)-Garner aldehyde starting material

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

(*R*)-4-((2*R*,3*R*)-4-Acetyl-2-benzoyl-5-methyl-2,3-dihydrofuran-3-yl)-2,2-dimethyloxazolidine-3-carboxylic acid, *tert*-butyl ester

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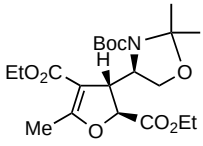
Yongwen Jiang and Dawei Ma*

Tetrahedron: Asymmetry *13 (2002) 1033*



$C_{21}H_{33}NO_8$

$[\alpha]_D^{20} = +33.8$ (c 0.76, $CHCl_3$)

Source of chirality: (*S*)-Garner aldehyde starting material

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

(2*S*,3*R*)-3-[(*R*)-3-*tert*-Butoxycabonyl-2,2-dimethyloxazolidine-4-yl]-5-methyl-2,3-dihydrofuran-2,4-dicarboxylic acid, ethyl ester

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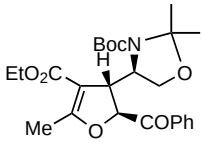
Yongwen Jiang and Dawei Ma*

Tetrahedron: Asymmetry *13 (2002) 1033*



$C_{25}H_{33}NO_7$

$[\alpha]_D^{20} = -35.8$ (c 1.23, $CHCl_3$)

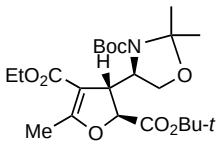
Source of chirality: (*S*)-Garner aldehyde starting material

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

(*R*)-4-((2*S*,3*R*)-2-Benzoyl-4-ethoxycarbonyl-5-methyl-2,3-dihydrofuran-3-yl)-2,2-dimethyloxazolidine-3-carboxylic acid, *tert*-butyl ester

Yongwen Jiang and Dawei Ma*

Tetrahedron: Asymmetry *13 (2002) 1033*



$C_{23}H_{37}NO_8$

(2*S*,3*R*)-3-[(*R*)-3-*tert*-Butoxycabonyl-2,2-dimethyloxazolidine-4-yl]-5-methyl-2,3-dihydrofuran-2,4-dicarboxylic acid, 2-*tert*-butyl ester-4-ethyl ester

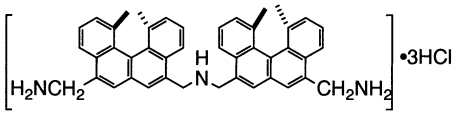
$[\alpha]_D^{20} = +36.7$ (*c* 1.65, $CHCl_3$)

Source of chirality: (*S*)-Garner aldehyde starting material

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

Shinobu Honzawa, Hitoshi Okubo, Keiichi Nakamura, Shuzo Anzai, Masahiko Yamaguchi* and Chizuko Kabuto

Tetrahedron: Asymmetry *13 (2002) 1043*



$C_{44}H_{44}N_3Cl_3$

(*M*,*M*)-5-{8-(Aminomethyl)-1,12-dimethylbenzo[*c*]phenanthrene-5-yl}methylaminomethyl-8-aminomethyl-1,12-dimethylbenzo[*c*]phenanthrene trihydrochloride

Ee = 100%

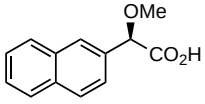
$[\alpha]_D^{25} = -12$ (*c* 0.44, MeOH)

Source of chirality: resolution

Absolute configuration: (*M*,*M*)

Mayumi Kimura, Atsuhito Kuboki and Takeshi Sugai*

Tetrahedron: Asymmetry *13 (2002) 1059*



$C_{13}H_{12}O_3$

(*R*)-Methoxy-(2-naphthyl)acetic acid

E.e. >99.9%

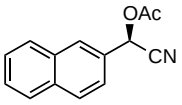
$[\alpha]_D^{20} = -173.9$ (*c* 0.35, MeOH)

Source of chirality: enzyme-catalyzed kinetic resolution

Absolute configuration: *R*

Mayumi Kimura, Atsuhito Kuboki and Takeshi Sugai*

Tetrahedron: Asymmetry *13 (2002) 1059*



$C_{14}H_{11}O_2N$

(*R*)-(2-Naphthyl)cyanomethyl acetate

E.e. >99.9%

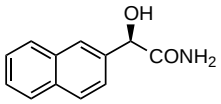
$[\alpha]_D^{22} = -17.9$ (*c* 1.00, $CHCl_3$)

Source of chirality: enzyme-catalyzed kinetic resolution

Absolute configuration: *R*

Mayumi Kimura, Atsuhito Kuboki and Takeshi Sugai*

Tetrahedron: Asymmetry *13 (2002) 1059*



$C_{12}H_{11}O_2N$

(*R*)-Hydroxy-(2-naphthyl)acetamide

E.e. >99.9%

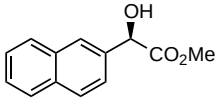
$[\alpha]_D^{22} = -62.8$ (*c* 0.50, DMSO)

Source of chirality: enzyme-catalyzed kinetic resolution

Absolute configuration: *R*

Mayumi Kimura, Atsuhito Kuboki and Takeshi Sugai*

Tetrahedron: Asymmetry *13 (2002) 1059*



$C_{13}H_{12}O_3$

Methyl (*R*)-hydroxy-(2-naphthyl)acetate

E.e. >99.9%

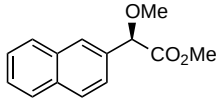
$[\alpha]_D^{28} = -164.0$ (*c* 1.00, $CHCl_3$)

Source of chirality: enzyme-catalyzed kinetic resolution

Absolute configuration: *R*

Mayumi Kimura, Atsuhito Kuboki and Takeshi Sugai*

Tetrahedron: Asymmetry *13 (2002) 1059*



$C_{14}H_{14}O_3$

Methyl (*R*)-methoxy-(2-naphthyl)acetate

E.e. >99.9%

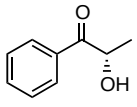
$[\alpha]_D^{23} = -140.7$ (*c* 0.51, $CHCl_3$)

Source of chirality: enzyme-catalyzed kinetic resolution

Absolute configuration: *R*

D. Kihumbu, T. Stillger, W. Hummel and A. Liese*

Tetrahedron: Asymmetry *13 (2002) 1069*



$C_9H_{10}O_2$

(2*S*)-2-Hydroxyphenylpropan-1-one

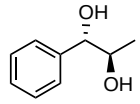
$[\alpha]_D^{20} = -86$ (*c*, 2, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: 2*S*

D. Kihumbu, T. Stillger, W. Hummel and A. Liese*

Tetrahedron: Asymmetry *13 (2002) 1069*



$C_9H_{12}O_2$

(1*S*,2*R*)-1-Phenylpropan-1,2-diol

D.e. = 99%

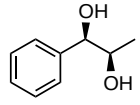
$[\alpha]_D^{20} = +36.1$ (*c* 2.52, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

D. Kihumbu, T. Stillger, W. Hummel and A. Liese*

Tetrahedron: Asymmetry *13 (2002) 1069*



$C_9H_{12}O_2$

(1*R*,2*R*)-1-Phenylpropan-1,2-diol

D.e. = 98%

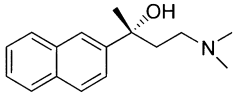
$[\alpha]_D^{20} = -51.3$ (*c* 3.5, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Ornella Azzolina,* Simona Collina, Gloria Brusotti, Daniela Rossi, Athos Callegari, Laura Linati, Annalisa Barbieri and Victor Ghislandi

Tetrahedron: Asymmetry *13 (2002) 1073*



$C_{16}H_{21}NO$

(*R*)-4-Dimethylamino-2-(naphthalen-2-yl)-butan-2-ol

E.e. = 99.9%

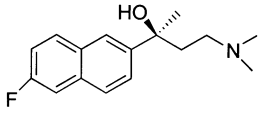
$[\alpha]_{405}^{22} = +14.8$ (*c* 1, MeOH)

Source of chirality: chromatographic chiral resolution

Absolute configuration: *R*

Ornella Azzolina,* Simona Collina, Gloria Brusotti, Daniela Rossi, Athos Callegari, Laura Linati, Annalisa Barbieri and Victor Ghislandi

Tetrahedron: Asymmetry *13 (2002) 1073*



$C_{16}H_{20}FNO$

(*S*)-4-Dimethylamino-2-(6-fluoronaphthalen-2-yl)butan-2-ol

E.e. = 99.9%

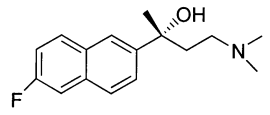
$[\alpha]_{405}^{22} = -6.5$ (*c* 0.5, MeOH)

Source of chirality: chromatographic chiral resolution

Absolute configuration: *S*

Ornella Azzolina,* Simona Collina, Gloria Brusotti, Daniela Rossi, Athos Callegari, Laura Linati, Annalisa Barbieri and Victor Ghislandi

Tetrahedron: Asymmetry *13 (2002) 1073*



$C_{16}H_{20}FNO$

(*R*)-4-Dimethylamino-2-(6-fluoronaphthalen-2-yl)butan-2-ol

E.e. = 99.3%

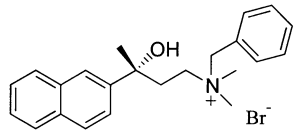
$[\alpha]_{405}^{22} = +6.4$ (*c* 0.5, MeOH)

Source of chirality: chromatographic chiral resolution

Absolute configuration: *R*

Ornella Azzolina,* Simona Collina, Gloria Brusotti, Daniela Rossi, Athos Callegari, Laura Linati, Annalisa Barbieri and Victor Ghislandi

Tetrahedron: Asymmetry *13 (2002) 1073*



$C_{23}H_{28}BrNO$

(*R*)-(+)-Benzyl-(3-hydroxy-3-naphthalen-2-ylbutyl)dimethylammonium bromide

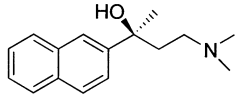
$[\alpha]_{405}^{22} = +29.9$ (*c* 0.6, MeOH)

Source of chirality: (+)-4-dimethylamino-2-(naphthalen-2-yl)butan-2-ol

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

Ornella Azzolina,* Simona Collina, Gloria Brusotti, Daniela Rossi, Athos Callegari, Laura Linati, Annalisa Barbieri and Victor Ghislandi

Tetrahedron: Asymmetry *13 (2002) 1073*



$C_{16}H_{21}NO$

(*S*)-4-Dimethylamino-2-(naphthalen-2-yl)butan-2-ol

E.e. = 99.5%

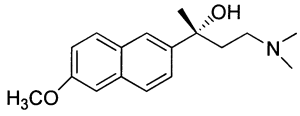
$[\alpha]_{405}^{22} = -14.1$ (*c* 1, MeOH)

Source of chirality: chromatographic chiral resolution

Absolute configuration: *S*

Ornella Azzolina,* Simona Collina, Gloria Brusotti, Daniela Rossi, Athos Callegari, Laura Linati, Annalisa Barbieri and Victor Ghislandi

Tetrahedron: Asymmetry *13 (2002) 1073*



$C_{17}H_{23}NO_2$

(*R*)-4-Dimethylamino-2-(6-methoxynaphthalen-2-yl)butan-2-ol

E.e. = 99.9%

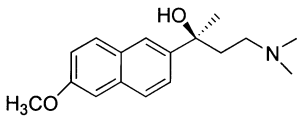
$[\alpha]_{405}^{22} = -42.4$ (*c* 1, MeOH)

Source of chirality: chromatographic chiral resolution

Absolute configuration: *R*

Ornella Azzolina,* Simona Collina, Gloria Brusotti, Daniela Rossi, Athos Callegari, Laura Linati, Annalisa Barbieri and Victor Ghislandi

Tetrahedron: Asymmetry *13 (2002) 1073*



$C_{17}H_{23}NO_2$

(*S*)-4-Dimethylamino-2-(6-methoxynaphthalen-2-yl)butan-2-ol

E.e. = 99.9%

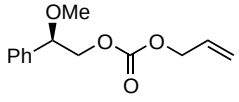
$[\alpha]_{405}^{22} = +42.5$ (*c* 1, MeOH)

Source of chirality: chromatographic chiral resolution

Absolute configuration: *S*

María I. Monterde, Rosario Brieva, Víctor M. Sánchez, Miguel Bayod and Vicente Gotor*

Tetrahedron: Asymmetry *13 (2002) 1091*



$C_{13}H_{16}O_4$

(*R*)-(−)-2-Methoxy-2-phenylethyl acetate and allyl carbonate

E.e. = 93% (by ^{1}H NMR in the presence of Eu(hfc)$_3$)

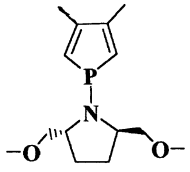
$[\alpha]_D^{25} = -63$ (*c* 1.0, $CHCl_3$)

Source of chirality: lipase-catalyzed alkoxycarbonylation

Absolute configuration: 2*R* (from the literature)

Jérôme Hydrio, Maryse Gouygou,* Frédéric Dallemer, Jean-Claude Daran* and Gilbert G. A. Balavoine

Tetrahedron: Asymmetry *13 (2002) 1097*



$C_{14}H_{22}NO_2P$

1-[(*S*,*S*)-2,5-Bis(methoxymethyl)pyrrolidino]-3,4-dimethylphosphole

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

Source of chirality: homochiral starting material

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

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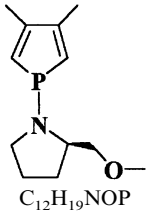
Tetrahedron: Asymmetry *13 (2002) 1097*



$C_{12}H_{19}NOP$

1-[(*S*)-2-Methoxymethylpyrrolidino]-3,4-dimethylphosphole

$[\alpha]_D = -14.8$ (*c* 0.25, CH_2Cl_2)

Source of chirality: homochiral starting material

Absolute configuration: 2*S*

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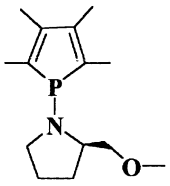
Tetrahedron: Asymmetry *13 (2002) 1097*



$C_{14}H_{23}NOP$

1-[(*S*)-2-Methoxymethylpyrrolidino]-2,3,4,5-tetramethylphosphole

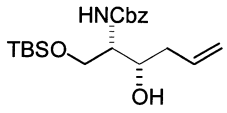
$[\alpha]_D = -56.0$ (*c* 0.80, CH_2Cl_2)

Source of chirality: homochiral starting material

Absolute configuration: 2*S*

D. Gryko, P. Prokopowicz and J. Jurczak*

Tetrahedron: Asymmetry *13 (2002) 1103*



$C_{20}H_{33}NO_4Si$

(1*S*,2*S*)-[1-(*tert*-Butyldimethylsilanyloxymethyl)-2-hydroxypent-4-enyl]carbamic acid benzyl ester

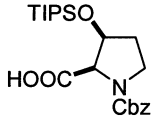
$[\alpha]_D^{20}$ +20.5 (*c* 1.47, $CHCl_3$)

Source of chirality: diastereoselective allyl addition to L-serinal

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

D. Gryko, P. Prokopowicz and J. Jurczak*

Tetrahedron: Asymmetry *13 (2002) 1103*



$C_{22}H_{35}NO_5Si$

(2*R*,3*S*)-3-Triisopropylsilanyloxypyrrolidine-1,2-dicarboxylic acid-1-benzyl ester

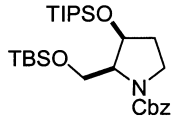
$[\alpha]_D^{20}$ −7.32 (*c* 2.30, $CHCl_3$)

Source of chirality: diastereoselective transformations of L-serinal

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

D. Gryko, P. Prokopowicz and J. Jurczak*

Tetrahedron: Asymmetry *13 (2002) 1103*



$C_{22}H_{51}NO_4Si_2$

(2*S*,3*S*)-(2-(*tert*-Butyldimethylsilanyloxymethyl)-3-triisopropylsilanyloxy)pyrrolidine-1-carboxylic acid benzyl ester

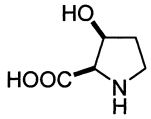
$[\alpha]_D^{20}$ +27.6 (*c* 1.50, $CHCl_3$)

Source of chirality: diastereoselective transformations of L-serinal

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

D. Gryko, P. Prokopowicz and J. Jurczak*

Tetrahedron: Asymmetry *13 (2002) 1103*



$C_5H_9NO_3$

(2*R*,3*S*)-3-Hydroxypyrrolidine-2-carboxylic acid

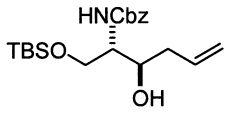
$[\alpha]_D^{20}$ +89 (*c* 0.7, H_2O)

Source of chirality: diastereoselective transformations of L-serinal

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

D. Gryko, P. Prokopowicz and J. Jurczak*

Tetrahedron: Asymmetry *13 (2002) 1103*



$C_{20}H_{33}NO_4Si$

(1*S*,2*R*)-[1-(*tert*-Butyldimethylsilanyloxymethyl)-2-hydroxypent-4-enyl]carbamic acid benzyl ester

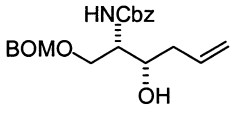
$[\alpha]_D^{20}$ +27.3 (*c* 1.56, $CHCl_3$)

Source of chirality: diastereoselective allyl addition to L-serinal

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

D. Gryko, P. Prokopowicz and J. Jurczak*

Tetrahedron: Asymmetry *13 (2002) 1103*



$C_{22}H_{27}NO_5$

(1*S*,2*S*)-[1-(Benzyloxymethyl)-2-hydroxypent-4-enyl]carbamic acid benzyl ester

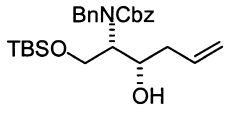
$[\alpha]_D^{20}$ −1.5 (*c* 0.85, $CHCl_3$)

Source of chirality: diastereoselective allyl addition to L-serinal

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

D. Gryko, P. Prokopowicz and J. Jurczak*

Tetrahedron: Asymmetry *13 (2002) 1103*



$C_{27}H_{39}NO_4Si$

(1*S*,2*S*)-Benzyl-[1-(*tert*-butyldimethylsilanyloxymethyl)-2-hydroxypent-4-enyl]carbamic acid benzyl ester

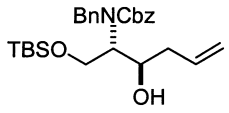
$[\alpha]_D^{20}$ +13.9 (*c* 1.60, $CHCl_3$)

Source of chirality: diastereoselective allyl addition to L-serinal

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

D. Gryko, P. Prokopowicz and J. Jurczak*

Tetrahedron: Asymmetry *13 (2002) 1103*



$C_{27}H_{39}NO_4Si$

(1*S*,2*R*)-Benzyl-[1-(*tert*-butyldimethylsilanyloxymethyl)-2-hydroxypent-4-enyl]carbamic acid benzyl ester

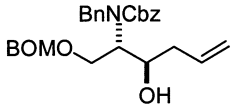
$[\alpha]_D^{20}$ −10.8 (*c* 0.90, $CHCl_3$)

Source of chirality: diastereoselective allyl addition to L-serinal

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

D. Gryko, P. Prokopowicz and J. Jurczak*

Tetrahedron: Asymmetry *13 (2002) 1103*



$C_{29}H_{33}NO_5$

(1*S*,2*R*)-Benzyl-[1-(benzyloxymethyl)-2-hydroxypent-4-enyl]carbamic acid benzyl ester

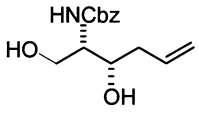
$[\alpha]_D^{20}$ −10.1 (*c* 1.76, $CHCl_3$)

Source of chirality: diastereoselective allyl addition to L-serinal

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

D. Gryko, P. Prokopowicz and J. Jurczak*

Tetrahedron: Asymmetry *13 (2002) 1103*



$C_{14}H_{19}NO_4$

(1*S*,2*S*)-(2-Hydroxy-1-hydroxymethylpent-4-enyl)carbamic acid benzyl ester

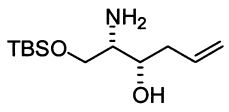
$[\alpha]_D^{20}$ +3.0 (*c* 2.9, $CHCl_3$)

Source of chirality: diastereoselective transformations of L-serinal

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

D. Gryko, P. Prokopowicz and J. Jurczak*

Tetrahedron: Asymmetry *13 (2002) 1103*



$C_{12}H_{29}NO_2Si$

(2*S*,3*S*)-[2-Amino-1-(*tert*-butyldimethylsilanyloxy)hex-5-en]-3-ol

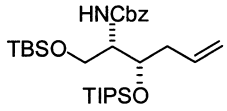
$[\alpha]_D^{20}$ −15.9 (*c* 1.28, $CHCl_3$)

Source of chirality: diastereoselective transformations of L-serinal

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

D. Gryko, P. Prokopowicz and J. Jurczak*

Tetrahedron: Asymmetry *13 (2002) 1103*



$C_{29}H_{54}NO_4Si_2$

(1*S*,2*S*)-[1-(*tert*-Butyldimethylsilanyloxymethyl)-2-triisopropylsilanyloxy-pent-4-enyl]carbamic acid benzyl ester

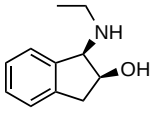
$[\alpha]_D^{20}$ +5.6 (*c* 1.70, $CHCl_3$)

Source of chirality: diastereoselective transformations of L-serinal

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

Rachel A. Dixon and Simon Jones*

Tetrahedron: Asymmetry *13 (2002) 1115*



$C_{11}H_{15}NO$

(1*R*,2*S*)-1-Ethylamino-indan-2-ol

E.e. = 100%

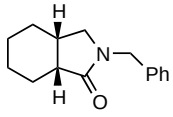
$[\alpha]_D = -5.1$ (*c* 1, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Rachel A. Dixon and Simon Jones*

Tetrahedron: Asymmetry *13 (2002) 1115*



$C_{15}H_{19}NO$

(3a*S*,7a*R*)-2-Benzyl-octahydroisoindol-1-one

E.e. = 91%

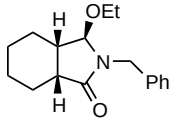
$[\alpha]_D = +19.6$ (*c* 0.5, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: 3a*S*,7a*R*

Rachel A. Dixon and Simon Jones*

Tetrahedron: Asymmetry *13 (2002) 1115*



$C_{17}H_{23}NO_2$

(3*R*,3a*S*,7a*R*)-2-Benzyl-3-ethoxy-octahydroinden-1-one

E.e. = 75%

$[\alpha]_D = +53.4$ (*c* 1.2, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: 3a*S*,7a*R*