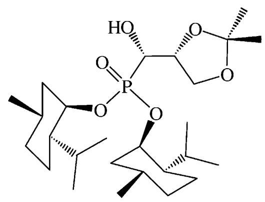
Stereochemistry abstracts

Anastasia O. Kolodiazhna, Valery P. Kukhar,
Alexander N. Chernega and Oleg I. Kolodiazhnyi*

Tetrahedron: Asymmetry *15 (2004) 1961*



$C_{26}H_{49}O_6P$

Di(1*R*,2*S*,5*R*)-menthyl (1*S*,2*R*)-[2,2-dimethyl-1,3-dioxolan-4-yl]-1-hydroxymethylphosphonate

Ee >98% (NMR)

$[\alpha]_D = -65$ (c 2, toluene)

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

Absolute configuration: *S*,*R*

Anastasia O. Kolodiazhna, Valery P. Kukhar,
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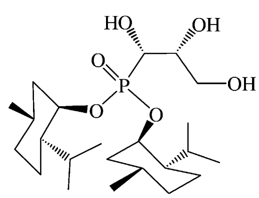
Tetrahedron: Asymmetry *15 (2004) 1961*



$C_{23}H_{45}O_6P$

Di(1*R*,2*S*,5*R*)-menthyl (1*S*,2*R*)-1,2,3-trihydroxypropylphosphonate

Ee >98% (NMR)

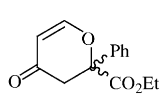
$[\alpha]_D = -60$ (c 2, $CHCl_3$)

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

Absolute configuration: *S*,*R*

Christian Wolf,* Zaid Fadul, Pili A. Hawes and Emily C. Volpe

Tetrahedron: Asymmetry *15 (2004) 1987*



$C_{14}H_{14}O_{14}$

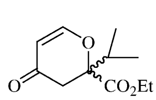
(+)-2-Ethoxycarbonyl-5,6-dihydro-2-phenylpyran-4-one

Ee = 40%

$[\alpha]_D^{22} = +17.5$ (c 1.2, CH_2Cl_2)

Christian Wolf,* Zaid Fadul, Pili A. Hawes and Emily C. Volpe

Tetrahedron: Asymmetry *15 (2004) 1987*



$C_{11}H_{16}O_4$

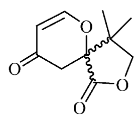
(−)-2-Ethoxycarbonyl-5,6-dihydro-2-isopropylpyran-4-one

Ee = 68%

$[\alpha]_D^{22} = -22.1$ (c 1.2, CH_2Cl_2)

Christian Wolf,* Zaid Fadul, Pili A. Hawes and Emily C. Volpe

Tetrahedron: Asymmetry *15 (2004) 1987*



$C_{10}H_{12}O_4$

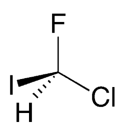
(−)-4,4-Dimethyl-2,6-dioxa-spiro[4.5]dec-7-ene-1,9-dione

Ee = 49%

$[\alpha]_D^{22} = -69.4$ (*c* 1.2, CH_2Cl_2)

Jeanne Crassous,* Zhengjin Jiang, Volker Schurig and Prasad L. Polavarapu

Tetrahedron: Asymmetry *15 (2004) 1995*



CHFClI

(*S*)-Chlorofluoroiodomethane

Ee = 63.3%

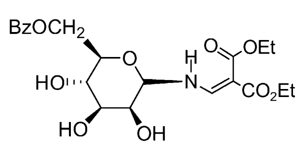
$[\alpha]_D^{25} = +1.6$ (*c* 2.15, cyclohexane)

Source of chirality: decarboxylation of {(+)-FClICCO$_2$H, (−)-strychnine}

Absolute configuration: (*S*)

M. Ángeles Pradera, Francisco J. Sayago, José M. Illangua, Manuel Angulo, Consolación Gasch and José Fuentes*

Tetrahedron: Asymmetry *15 (2004) 2003*



$C_{21}H_{27}NO_{10}$

6-*O*-Benzoyl-*N*-(2,2-diethoxycarbonylvinyl)-β-D-mannopyranosylamine

$[\alpha]_D^{22} = +52$ (*c* 1.0, MeOH)

Source of chirality: D-mannose and diastereoselective synthesis

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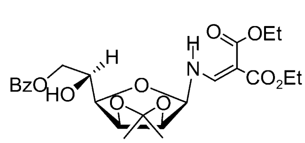
Tetrahedron: Asymmetry *15 (2004) 2003*



$C_{24}H_{31}NO_{10}$

6-*O*-Benzoyl-*N*-(2,2-diethoxycarbonylvinyl)-2,3-*O*-isopropylidene-β-D-mannofuranosylamine

$[\alpha]_D^{22} = +88$ (*c* 0.9, CH_2Cl_2)

Source of chirality: D-mannose and diastereoselective synthesis

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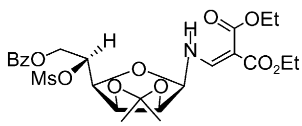
Tetrahedron: Asymmetry *15 (2004) 2003*



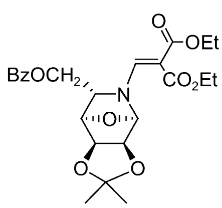
$[\alpha]_D^{20} = +75$ (c 0.8, CH_2Cl_2)
Source of chirality: D-mannose and diastereoselective synthesis

$C_{25}H_{33}NO_{12}S$

6-*O*-Benzoyl-*N*-(2,2-diethoxycarbonylvinyl)-2,3-*O*-isopropylidene-5-*O*-mesyl-β-D-mannofuranosylamine

M. Ángeles Pradera, Francisco J. Sayago, José M. Illangua, Manuel Angulo, Consolación Gasch and José Fuentes*

Tetrahedron: Asymmetry *15 (2004) 2003*



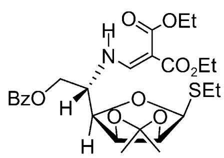
$[\alpha]_D^{24} = +109$ (c 1.1, CH_2Cl_2)
Source of chirality: D-mannose and diastereoselective synthesis

$C_{24}H_{29}NO_9$

1,5-Anhydro-6-*O*-benzoyl-*N*-(2,2-diethoxycarbonylvinyl)-2,3-*O*-isopropylidene-α-D-gulofuranosylamine

M. Ángeles Pradera, Francisco J. Sayago, José M. Illangua, Manuel Angulo, Consolación Gasch and José Fuentes*

Tetrahedron: Asymmetry *15 (2004) 2003*



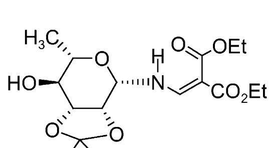
$[\alpha]_D^{23} = +37$ (c 1.5, CH_2Cl_2)
Source of chirality: D-mannose and diastereoselective synthesis

$C_{26}H_{35}NO_9S$

Ethyl 6-*O*-benzoyl-5-deoxy-5-*N*-(2,2-diethoxycarbonylvinylamine)-2,3-*O*-isopropylidene-1-thio-α-L-gulofuranoside

M. Ángeles Pradera, Francisco J. Sayago, José M. Illangua, Manuel Angulo, Consolación Gasch and José Fuentes*

Tetrahedron: Asymmetry *15 (2004) 2003*



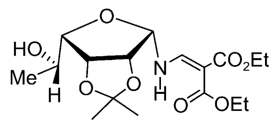
$[\alpha]_D^{24} = -58$ (c 1.0, CH_2Cl_2)
Source of chirality: L-rhamnose and diastereoselective synthesis

$C_{17}H_{27}NO_8$

N-(2,2-Diethoxycarbonylvinyl)-2,3-*O*-isopropylidene-β-L-rhamnopyranosylamine

M. Ángeles Pradera, Francisco J. Sayago, José M. Illangua, Manuel Angulo, Consolación Gasch and José Fuentes*

Tetrahedron: Asymmetry *15 (2004) 2003*



$C_{17}H_{27}NO_8$

N-(2,2-Diethoxycarbonylvinyl)-2,3-*O*-isopropylidene-β-L-rhamnofuranosylamine

$[\alpha]_D^{24} = -81$ (*c* 1.0, CH_2Cl_2)

Source of chirality: L-rhamnose and diastereoselective synthesis

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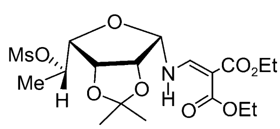
Tetrahedron: Asymmetry *15 (2004) 2003*



$C_{18}H_{29}NO_{10}S$

N-(2,2-Diethoxycarbonylvinyl)-2,3-*O*-isopropylidene-5-*O*-mesyl-β-L-rhamnofuranosylamine

$[\alpha]_D^{24} = -40$ (*c* 0.9, CH_2Cl_2)

Source of chirality: L-rhamnose and diastereoselective synthesis

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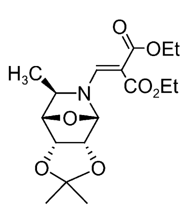
Tetrahedron: Asymmetry *15 (2004) 2003*



$C_{17}H_{25}NO_7$

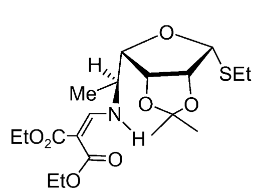
1,5-Anhydro-6-deoxy-*N*-(2,2-diethoxycarbonylvinyl)-2,3-*O*-isopropylidene-α-D-gulofuranosylamine

$[\alpha]_D^{24} = -17$ (*c* 1.0, CH_2Cl_2)

Source of chirality: L-rhamnose and diastereoselective synthesis

M. Ángeles Pradera, Francisco J. Sayago, José M. Illangua, Manuel Angulo, Consolación Gasch and José Fuentes*

Tetrahedron: Asymmetry *15 (2004) 2003*



$C_{19}H_{31}NO_7S$

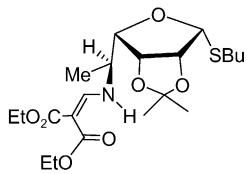
Ethyl 5,6-di-deoxy-5-*N*-(2,2-diethoxycarbonylvinylamine)-2,3-*O*-isopropylidene-1-thio-α-D-gulofuranoside

$[\alpha]_D^{24} = -49$ (*c* 0.9, CH_2Cl_2)

Source of chirality: L-rhamnose and diastereoselective synthesis

M. Ángeles Pradera, Francisco J. Sayago, José M. Illangua, Manuel Angulo, Consolación Gasch and José Fuentes*

Tetrahedron: Asymmetry *15 (2004) 2003*



$[\alpha]_D^{24} = -132$ (c 1.0, CH_2Cl_2)
Source of chirality: L-rhamnose and diastereoselective synthesis

$C_{21}H_{35}NO_7S$

Buthyl 5,6-di-deoxy-5-*N*-(2,2-diethoxycarbonylvinylamine)-2,3-*O*-isopropylidene-1-thio-α-D-gulofuranoside

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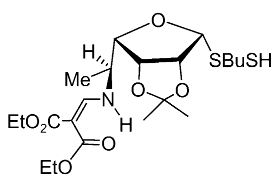
Tetrahedron: Asymmetry *15 (2004) 2003*



$[\alpha]_D^{24} = -56$ (c 1.0, CH_2Cl_2)
Source of chirality: L-rhamnose and diastereoselective synthesis

$C_{21}H_{35}NO_7S_2$

4-Buthylthio 5,6-di-deoxy-5-*N*-(2,2-diethoxycarbonylvinylamine)-2,3-*O*-isopropylidene-1-thio-α-D-gulofuranoside

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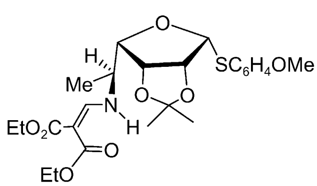
M. Ángeles Pradera, Francisco J. Sayago, José M. Illangua, Manuel Angulo, Consolación Gasch and José Fuentes*

Tetrahedron: Asymmetry *15 (2004) 2003*



$[\alpha]_D^{22} = +42$ (c 1.3, CH_2Cl_2)
Source of chirality: L-rhamnose and diastereoselective synthesis

$C_{24}H_{33}NO_8S$

(4-Methoxy)phenyl 5,6-di-deoxy-5-*N*-(2,2-diethoxycarbonylvinylamine)-2,3-*O*-isopropylidene-1-thio-α-D-gulofuranoside

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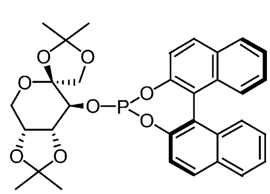
Hanmin Huang, Xiongcai Liu, Song Chen, Huilin Chen and Zhuo Zheng*

Tetrahedron: Asymmetry *15 (2004) 2011*



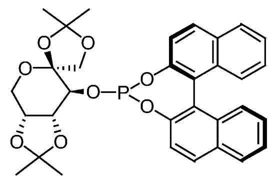
Ee ⩾99%
$[\alpha]_D^{25} = -430.5$ (c 1.06, THF)
Source of chirality: D-fructose and BINOL
Absolute configuration: (2*S*,3*S*,4*R*,5*R*,*R*$_a$)

$C_{32}H_{32}O_8P$

1,2:4,5-Di-*O*-isopropylidene-3-*O*-((*R*)-2,2′-*O*,*O*-(1,1′-binaphthyl)dioxophosphite)-D-fructose

Hanmin Huang, Xiongcai Liu, Song Chen, Huilin Chen and Zhuo Zheng*

Tetrahedron: Asymmetry *15 (2004) 2011*



Ee ⩾99%
$[\alpha]_D^{25} = +197.0$ (*c* 1.20, THF)
Source of chirality: D-fructose and BINOL
Absolute configuration: (2*S*,3*S*,4*R*,5*R*,S_a)

$C_{32}H_{32}O_8P$
1,2:4,5-Di-*O*-isopropylidene-3-*O*-((*S*)-2,2′-*O*,*O*-(1,1′-binaphthyl)dioxophosphite)-D-fructose

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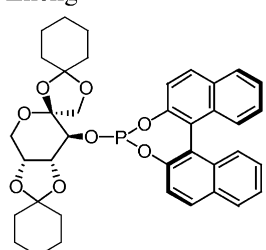
Tetrahedron: Asymmetry *15 (2004) 2011*

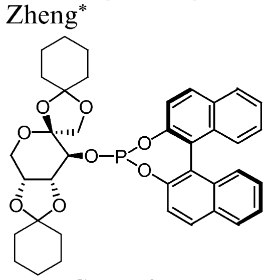


Ee ⩾99%
$[\alpha]_D^{25} = -382.45$ (*c* 1.08, THF)
Source of chirality: D-fructose and BINOL
Absolute configuration: (2*S*,3*S*,4*R*,5*R*,R_a)

$C_{38}H_{40}O_8P$
1,2:4,5-Di-*O*-cyclohexylidene-3-*O*-((*R*)-2,2′-*O*,*O*-(1,1′-binaphthyl)dioxophosphite)-D-fructose

Hanmin Huang, Xiongcai Liu, Song Chen, Huilin Chen and Zhuo Zheng*

Tetrahedron: Asymmetry *15 (2004) 2011*



Ee ⩾99%
$[\alpha]_D^{25} = +147.9$ (*c* 0.98, THF)
Source of chirality: D-fructose and stereoselective synthesis
Absolute configuration: (2*S*,3*S*,4*R*,5*R*,S_a)

$C_{38}H_{40}O_8P$
1,2:4,5-Di-*O*-cyclohexylidene-3-*O*-((*S*)-2,2′-*O*,*O*-(1,1′-binaphthyl)dioxophosphite)-D-fructose

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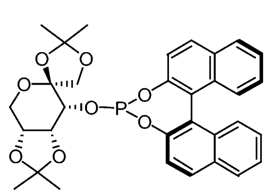
Tetrahedron: Asymmetry *15 (2004) 2011*

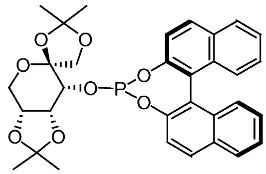


Ee ⩾99%
$[\alpha]_D^{25} = -360.7$ (*c* 1.20, THF)
Sourceof chirality: D-fructose and BINOL
Absolute configuration: (2*S*,3*R*,4*R*,5*R*,R_a)

$C_{32}H_{32}O_8P$
1,2:4,5-Di-*O*-isopropylidene-3-*O*-((*R*)-2,2′-*O*,*O*-(1,1′-binaphthyl)dioxophosphite)-β-D-fructopyranose

Hanmin Huang, Xiongcai Liu, Song Chen, Huilin Chen and Zhuo Zheng*

Tetrahedron: Asymmetry *15 (2004) 2011*



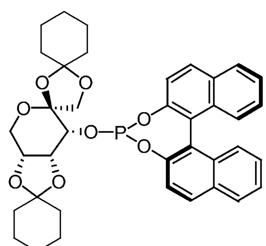
Ee ⩾99%
$[\alpha]_D^{25} = +201.1$ (*c* 0.89, THF)
Source of chirality: D-fructose and BINOL
Absolute configuration: (2*S*,3*R*,4*R*,5*R*,S_a)

$C_{32}H_{32}O_8P$

1,2:4,5-Di-*O*-isopropylidene-3-*O*-((*S*)-2,2′-*O*,*O*-(1,1′-binaphthyl)dioxophosphite)-β-D-fructopyranose

Hanmin Huang, Xiongcai Liu, Song Chen, Huilin Chen and Zhuo Zheng*

Tetrahedron: Asymmetry *15 (2004) 2011*



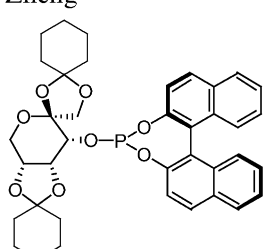
Ee ⩾99%
$[\alpha]_D^{25} = -325.4$ (*c* 1.05, THF)
Source of chirality: D-fructose and stereoselective synthesis
Absolute configuration: (2*S*,3*R*,4*R*,5*R*,R_a)

$C_{38}H_{40}O_8P$

1,2:4,5-Di-*O*-cyclohexylidene-3-*O*-((*R*)-2,2′-*O*,*O*-(1,1′-binaphthyl)dioxophosphite)-β-D-fructopyranose

Hanmin Huang, Xiongcai Liu, Song Chen, Huilin Chen and Zhuo Zheng*

Tetrahedron: Asymmetry *15 (2004) 2011*



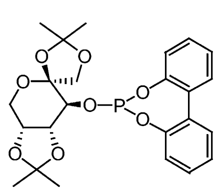
Ee ⩾99%
$[\alpha]_D^{25} = +151.8$ (*c* 1.23, THF)
Source of chirality: D-fructose and BINOL
Absolute configuration: (2*S*,3*R*,4*R*,5*R*,S_a)

$C_{38}H_{40}O_8P$

1,2:4,5-Di-*O*-cyclohexylidene-3-*O*-((*S*)-2,2′-*O*,*O*-(1,1′-binaphthyl)dioxophosphite)-β-D-fructopyranose

Hanmin Huang, Xiongcai Liu, Song Chen, Huilin Chen and Zhuo Zheng*

Tetrahedron: Asymmetry *15 (2004) 2011*



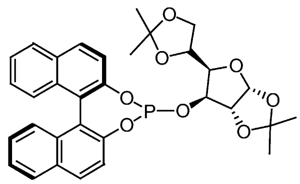
Ee ⩾99%
$[\alpha]_D^{25} = -123.6$ (*c* 1.06, THF)
Source of chirality: D-fructose
Absolute configuration: (2*S*,3*S*,4*R*,5*R*)

$C_{24}H_{28}O_8P$

1,2:4,5-Di-*O*-isopropylidene-3-*O*-(2,2′-*O*,*O*-(1,1′-biphenyl)dioxophosphite)-β-D-fructopyranose

Hanmin Huang, Xiongcai Liu, Song Chen, Huilin Chen and Zhuo Zheng*

Tetrahedron: Asymmetry *15 (2004) 2011*

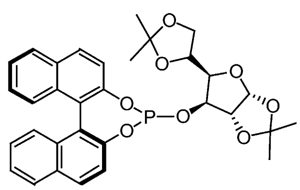


Ee ⩾99%
$[\alpha]_D^{25} = -303.1$ (c 1.14, THF)
Source of chirality: D-glucose and BINOL
Absolute configuration: (1*R*,2*R*,3*S*,4*R*,5*R*,*R*$_a$)

$C_{32}H_{32}O_8P$
1,2:5,6-Di-*O*-isopropylidene-3-*O*-((*R*)-2,2′-*O*,*O*-(1,1′-binaphthyl)dioxophosphite)-D-glucose

Hanmin Huang, Xiongcai Liu, Song Chen, Huilin Chen and Zhuo Zheng*

Tetrahedron: Asymmetry *15 (2004) 2011*

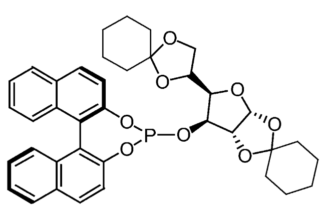


Ee ⩾99%
$[\alpha]_D^{25} = +291.9$ (c 1.11, THF)
Source of chirality: D-glucose and BINOL
Absolute configuration: (1*R*,2*R*,3*S*,4*R*,5*R*,*S*$_a$)

$C_{32}H_{32}O_8P$
1,2:5,6-Di-*O*-isopropylidene-3-*O*-((*S*)-2,2′-*O*,*O*-(1,1′-binaphthyl)dioxophosphite)-D-glucose

Hanmin Huang, Xiongcai Liu, Song Chen, Huilin Chen and Zhuo Zheng*

Tetrahedron: Asymmetry *15 (2004) 2011*

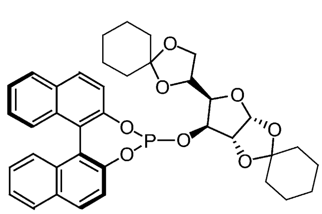


Ee ⩾99%
$[\alpha]_D^{25} = -267.7$ (c 1.13, THF)
Source of chirality: D-glucose and BINOL
Absolute configuration: (1*R*,2*R*,3*S*,4*R*,5*R*,*R*$_a$)

$C_{38}H_{40}O_8P$
1,2:5,6-Di-*O*-cyclohexylidene-3-*O*-((*R*)-2,2′-*O*,*O*-(1,1′-binaphthyl)dioxophosphite)-D-glucose

Hanmin Huang, Xiongcai Liu, Song Chen, Huilin Chen and Zhuo Zheng*

Tetrahedron: Asymmetry *15 (2004) 2011*

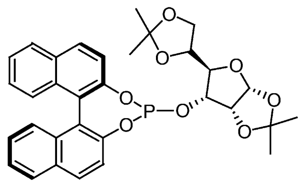


Ee ⩾99%
$[\alpha]_D^{25} = +262.7$ (c 1.08, THF)
Source of chirality: D-glucose and BINOL
Absolute configuration: (1*R*,2*R*,3*S*,4*R*,5*R*,*S*$_a$)

$C_{38}H_{40}O_8P$
1,2:5,6-Di-*O*-cyclohexylidene-3-*O*-((*S*)-2,2′-*O*,*O*-(1,1′-binaphthyl)dioxophosphite)-D-glucose

Hanmin Huang, Xiongcai Liu, Song Chen, Huilin Chen and Zhuo Zheng*

Tetrahedron: Asymmetry *15 (2004) 2011*



Ee ⩾99%

$[\alpha]_D^{25} = -248.7$ (*c* 0.98, THF)

Source of chirality: D-glucose and BINOL

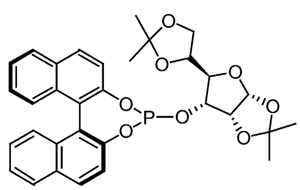
Absolute configuration: (1*R*,2*R*,3*R*,4*R*,5*R*,*R*a)

$C_{32}H_{32}O_8P$

1,2:5,6-Di-*O*-isopropylidene-3-*O*-((*R*)-2,2′-*O*,*O*-(1,1′-binaphthyl)dioxophosphite)-β-D-glucofuranose

Hanmin Huang, Xiongcai Liu, Song Chen, Huilin Chen and Zhuo Zheng*

Tetrahedron: Asymmetry *15 (2004) 2011*



Ee ⩾99%

$[\alpha]_D^{25} = +318.4$ (*c* 1.15, THF)

Source of chirality: D-glucose and BINOL

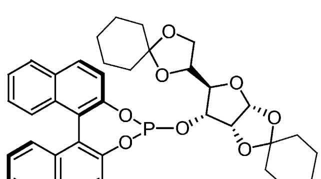
Absolute configuration: (1*R*,2*R*,3*R*,4*R*,5*R*,*S*a)

$C_{32}H_{32}O_8P$

1,2:5,6-Di-*O*-isopropylidene-3-*O*-((*S*)-2,2′-*O*,*O*-(1,1′-binaphthyl)dioxophosphite)-β-D-glucofuranose

Hanmin Huang, Xiongcai Liu, Song Chen, Huilin Chen and Zhuo Zheng*

Tetrahedron: Asymmetry *15 (2004) 2011*



Ee ⩾99%

$[\alpha]_D^{25} = -192.45$ (*c* 1.00, THF)

Source of chirality: D-glucose and BINOL

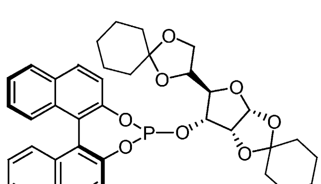
Absolute configuration: (1*R*,2*R*,3*R*,4*R*,5*R*,*R*a)

$C_{38}H_{40}O_8P$

1,2:5,6-Di-*O*-cyclohexylidene-3-*O*-((*R*)-2,2′-*O*,*O*-(1,1′-binaphthyl)dioxophosphite)-β-D-glucofuranose

Hanmin Huang, Xiongcai Liu, Song Chen, Huilin Chen and Zhuo Zheng*

Tetrahedron: Asymmetry *15 (2004) 2011*



Ee ⩾99%

$[\alpha]_D^{25} = +358.5$ (*c* 1.00, THF)

Source of chirality: D-glucose and BINOL

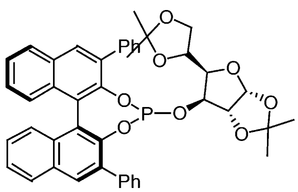
Absolute configuration: (1*R*,2*R*,3*R*,4*R*,5*R*,*S*a)

$C_{38}H_{40}O_8P$

1,2:5,6-Di-*O*-cyclohexylidene-3-*O*-((*S*)-2,2′-*O*,*O*-(1,1′-binaphthyl)dioxophosphite)-β-D-glucofuranose

Hanmin Huang, Xiongcai Liu, Song Chen, Huilin Chen and Zhuo Zheng*

Tetrahedron: Asymmetry *15 (2004) 2011*



$C_{44}H_{40}O_8P$

1,2:5,6-Di-*O*-isopropylidene-3-*O*-((*S*)-2,2′-*O*,*O*-(3,3′-diphenyl-1,1′-binaphthyl)dioxophosphite)-D-glucose

Ee $\geqslant$99%

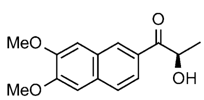
$[\alpha]_D^{25} = +350.0$ (*c* 0.86, THF)

Source of chirality: D-glucose and BINOL

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

Nobuyuki Matsunaga,* Tomohiro Kaku, Akio Ojida and Akihiro Tasaka

Tetrahedron: Asymmetry *15 (2004) 2021*



$C_{15}H_{16}O_4$

(2*R*)-1-(6,7-Dimethoxy-2-naphthyl)-2-hydroxypropan-1-one

Ee = 98%

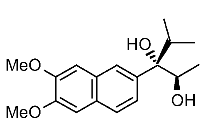
$[\alpha]_D^{20} = +55.0$ (*c* 1.00, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (2*R*)

Nobuyuki Matsunaga,* Tomohiro Kaku, Akio Ojida and Akihiro Tasaka

Tetrahedron: Asymmetry *15 (2004) 2021*



$C_{18}H_{24}O_4$

(2*R*,3*S*)-3-(6,7-Dimethoxy-2-naphthyl)-4-methylpentane-2,3-diol

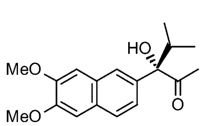
$[\alpha]_D^{20} = +13.9$ (*c* 1.01, MeOH)

Source of chirality: asymmetric synthesis

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

Nobuyuki Matsunaga,* Tomohiro Kaku, Akio Ojida and Akihiro Tasaka

Tetrahedron: Asymmetry *15 (2004) 2021*



$C_{18}H_{22}O_4$

(3*S*)-3-(6,7-Dimethoxy-2-naphthyl)-3-hydroxy-4-methylpentan-2-one

Ee = 98%

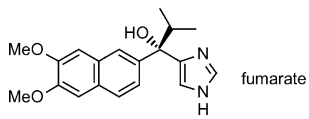
$[\alpha]_D^{20} = +10.7$ (*c* 0.99, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (3*S*)

Nobuyuki Matsunaga,* Tomohiro Kaku, Akio Ojida and Akihiro Tasaka

Tetrahedron: Asymmetry *15 (2004) 2021*

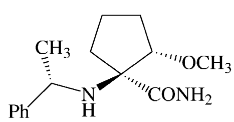


Ee >99.9%
$[\alpha]_D^{20} = -34.4$ (*c* 1.00, MeOH)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*S*)

$C_{23}H_{26}N_2O_7$
(1*S*)-1-(6,7-Dimethoxy-2-naphthyl)-1-(1*H*-imidazol-4-yl)-2-methylpropan-1-ol fumarate

Udo Meyer, Elke Breitling, Philippe Bisel and August W. Frahm*

Tetrahedron: Asymmetry *15 (2004) 2029*

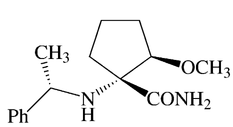


$[\alpha]_D^{25} = -3$ (*c* 0.81, CH_3OH)
Source of chirality: asymmetric synthesis
Absolute configuration: α*S*,1*S*,2*S*

$C_{15}H_{22}N_2O_2$
trans-(α*S*,1*S*,2*S*)-2-Methoxy-1-(1-phenylethylamino)cyclopentanecarboxamide

Udo Meyer, Elke Breitling, Philippe Bisel and August W. Frahm*

Tetrahedron: Asymmetry *15 (2004) 2029*

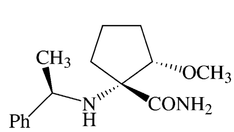


$[\alpha]_D^{25} = -93$ (*c* 1.10, CH_3OH)
Source of chirality: asymmetric synthesis
Absolute configuration: α*S*,1*R*,2*R*

$C_{15}H_{22}N_2O_2$
trans-(α*S*,1*R*,2*R*)-2-Methoxy-1-(1-phenylethylamino)cyclopentanecarboxamide

Udo Meyer, Elke Breitling, Philippe Bisel and August W. Frahm*

Tetrahedron: Asymmetry *15 (2004) 2029*

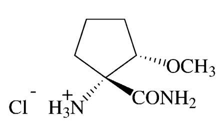


$[\alpha]_D^{25} = +32$ (*c* 1.08, CH_3OH)
Source of chirality: asymmetric synthesis
Absolute configuration: α*R*,1*R*,2*S*

$C_{15}H_{22}N_2O_2$
cis-(α*R*,1*R*,2*S*)-2-Methoxy-1-(1-phenylethylamino)cyclopentanecarboxamide

Udo Meyer, Elke Breitling, Philippe Bisel and August W. Frahm* | *Tetrahedron:* Asymmetry *15 (2004) 2029*

Udo Meyer, Elke Breitling, Philippe Bisel and August W. Frahm* | *Tetrahedron:* Asymmetry *15 (2004) 2029*



$C_7H_{15}N_2O_2Cl$

cis-(1*R*,2*S*)-1-Amino-2-methoxycyclopentanecarboxamide hydrochloride

$[\alpha]_D^{25} = +9$ (*c* 1.05, CH_3OH)
Source of chirality: asymmetric synthesis
Absolute configuration: 1*R*,2*S*

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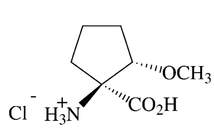


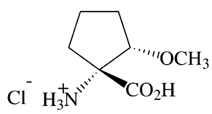
$C_7H_{14}NO_3Cl$

trans-(1*S*,2*S*)-1-Amino-2-methoxycyclopentanecarboxylic acid hydrochloride

$[\alpha]_D^{25} = +43$ (*c* 0.85, CH_3OH)
Source of chirality: asymmetric synthesis
Absolute configuration: 1*S*,2*S*

Udo Meyer, Elke Breitling, Philippe Bisel and August W. Frahm*

Tetrahedron: Asymmetry *15 (2004) 2029*



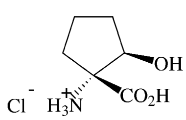
$C_7H_{14}NO_3Cl$

cis-(1*R*,2*S*)-1-Amino-2-methoxycyclopentanecarboxylic acid hydrochloride

$[\alpha]_D^{25} = +24$ (c 0.91, CH_3OH)
Source of chirality: asymmetric synthesis
Absolute configuration: 1*R*,2*S*

Udo Meyer, Elke Breitling, Philippe Bisel and August W. Frahm*

Tetrahedron: Asymmetry *15 (2004) 2029*



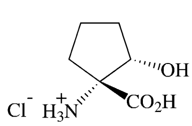
$C_6H_{12}NO_3Cl$

trans-(1*R*,2*R*)-1-Amino-2-hydroxycyclopentanecarboxylic acid hydrochloride

$[\alpha]_D^{25} = -29$ (c 1.03, CH_3OH)
Source of chirality: asymmetric synthesis
Absolute configuration: 1*R*,2*R*

Udo Meyer, Elke Breitling, Philippe Bisel and August W. Frahm*

Tetrahedron: Asymmetry *15 (2004) 2029*



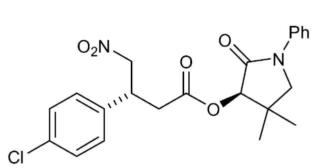
$C_6H_{12}NO_3Cl$

cis-(1*R*,2*S*)-1-Amino-2-hydroxycyclopentanecarboxylic acid hydrochloride

$[\alpha]_D^{25} = +17$ (c 0.97, CH_3OH)
Source of chirality: asymmetric synthesis
Absolute configuration: 1*R*,2*S*

Pelayo Camps,* Diego Muñoz-Torrero* and Laura Sánchez

Tetrahedron: Asymmetry *15 (2004) 2039*



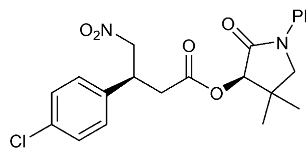
$C_{22}H_{23}ClN_2O_5$

(3*R*,3′R)-4,4-Dimethyl-2-oxo-1-phenylpyrrolidin-3-yl 4-nitro-3-(4-chlorophenyl)butanoate

Dr >98:2
Ee >99%
$[\alpha]_D^{20} = +40.1$ (c 1.00, CH_2Cl_2)
Source of chirality: (*R*)-*N*-phenylpantolactam
Absolute configuration: 3*R*,3′*R*

Pelayo Camps,* Diego Muñoz-Torrero* and Laura Sánchez

Tetrahedron: Asymmetry *15 (2004) 2039*



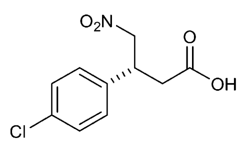
$C_{22}H_{23}ClN_2O_5$

(3*S*,3′*R*)-4,4-Dimethyl-2-oxo-1-phenylpyrrolidin-3-yl 4-nitro-3-(4-chlorophenyl)butanoate

Dr = 92:8
Ee >99%
$[\alpha]_D^{20} = +24.3$ (*c* 1.04, CH_2Cl_2)
Source of chirality: (*R*)-*N*-phenylpantolactam
Absolute configuration: 3*S*,3′*R*

Pelayo Camps,* Diego Muñoz-Torrero* and Laura Sánchez

Tetrahedron: Asymmetry *15 (2004) 2039*



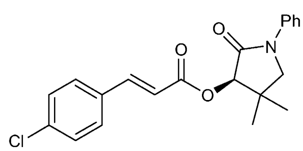
$C_{10}H_{10}ClNO_4$

(*R*)-4-Nitro-3-(4-chlorophenyl)butanoic acid

Ee >99%
$[\alpha]_D^{20} = +10.5$ (*c* 2.04, MeOH)
Source of chirality: asymmetric synthesis
Absolute configuration: *R*

Pelayo Camps,* Diego Muñoz-Torrero* and Laura Sánchez

Tetrahedron: Asymmetry *15 (2004) 2039*



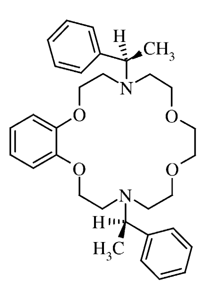
$C_{21}H_{20}ClNO_3$

(*R*)-4,4-Dimethyl-2-oxo-1-phenylpyrrolidin-3-yl 3-(4-chlorophenyl)-2-propenoate

Ee >99%
$[\alpha]_D^{20} = -46.1$ (*c* 1.04, $CHCl_3$)
Source of chirality: (*R*)-*N*-phenylpantolactam
Absolute configuration: *R*

Nadir Demirel,* Yasemin Bulut and Halil Hoşgören

Tetrahedron: Asymmetry *15 (2004) 2045*

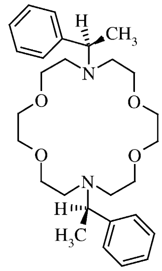


$[\alpha]_D^{20} = +27.4$ (*c* 0.05, CH_2CI_2)
Source of chirality: (*R*)-(+)-1-phenylethyl amine
Absolute configuration: *R*,*R*

N,*N*′-Di-(*R*)-(+)-1-phenylethyl-1,7,10,16-tetraoxa-4,13-diaza-cyclolooctadecane-2,3-benzo-cyclooctadec-2-ene

Nadir Demirel,* Yasemin Bulut and Halil Hoşgören

Tetrahedron: Asymmetry *15 (2004) 2045*



$[\alpha]_D^{20} = +19.2$ (c 0.05, CH_2Cl_2)
Source of chirality: (*R*)-(+)-1-phenylethyl amine
Absolute configuration: *R*,*R*

N,*N*′-Di-(*R*)-(+)-1-phenylethyl-1,7,10,16-tetraoxa-4,13-diaza-cyclolooctadecane

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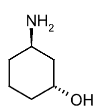
Laura M. Levy, Gonzalo de Gonzalo and Vicente Gotor*

Tetrahedron: Asymmetry *15 (2004) 2051*

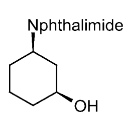


$C_6H_{13}ON$
(1*R*,3*R*)-3-Aminocyclohexanol

Ee 98% by chiral HPLC
$[\alpha]_D^{20} = -9.1$ (c 0.9, MeOH)
Source of chirality: enzymatic resolution
Absolute configuration: 1*R*,3*R*

Laura M. Levy, Gonzalo de Gonzalo and Vicente Gotor*

Tetrahedron: Asymmetry *15 (2004) 2051*

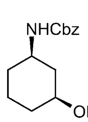


$C_{14}H_{15}O_3N$
2-((1*R*,3*S*)-3-Hydroxycyclohexyl)isoindole-1,3-dione

Ee 95% by chiral HPLC
$[\alpha]_D^{20} = +41.9$ (c 0.6, $CHCl_3$)
Source of chirality: enzymatic resolution
Absolute configuration: 1*R*,3*S*

Laura M. Levy, Gonzalo de Gonzalo and Vicente Gotor*

Tetrahedron: Asymmetry *15 (2004) 2051*

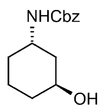


$C_{14}H_{19}O_3N$
((1*R*,3*S*)-3-Hydroxycyclohexyl)carbamic acid benzyl ester

Ee 28% by chiral HPLC
$[\alpha]_D^{20} = -11.0$ (c 0.52, $CHCl_3$)
Source of chirality: enzymatic resolution
Absolute configuration: 1*R*,3*S*

Laura M. Levy, Gonzalo de Gonzalo and Vicente Gotor*

Tetrahedron: Asymmetry *15 (2004) 2051*



$C_{14}H_{19}O_3N$

((1*S*,3*S*)-3-Hydroxycyclohexyl)carbamic acid benzyl ester

Ee 78% by chiral HPLC

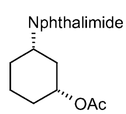
$[\alpha]_D^{20} = +4.7$ (*c* 0.5, $CHCl_3$)

Source of chirality: enzymatic resolution

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

Laura M. Levy, Gonzalo de Gonzalo and Vicente Gotor*

Tetrahedron: Asymmetry *15 (2004) 2051*



$C_{16}H_{17}O_4N$

Acetic acid (1*R*,3*S*)-3-(1,3-dioxo-1,3-dihydroisoindol-2-yl)cyclohexyl ester

Ee >99% by chiral HPLC

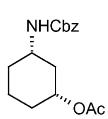
$[\alpha]_D^{20} = +28.2$ (*c* 0.5, $CHCl_3$)

Source of chirality: enzymatic resolution

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

Laura M. Levy, Gonzalo de Gonzalo and Vicente Gotor*

Tetrahedron: Asymmetry *15 (2004) 2051*



$C_{16}H_{21}O_4N$

Acetic acid (1*R*,3*S*)-3-benzyloxycarbonylaminocyclohexyl ester

Ee >99% by chiral HPLC

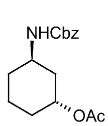
$[\alpha]_D^{20} = +9.1$ (*c* 0.45, $CHCl_3$)

Source of chirality: enzymatic resolution

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

Laura M. Levy, Gonzalo de Gonzalo and Vicente Gotor*

Tetrahedron: Asymmetry *15 (2004) 2051*



$C_{16}H_{21}O_4N$

Acetic acid (1*R*,3*R*)-3-benzyloxycarbonylaminocyclohexyl ester

Ee 98% by chiral HPLC

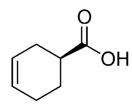
$[\alpha]_D^{20} = -9.6$ (*c* 0.13, $CHCl_3$)

Source of chirality: enzymatic resolution

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

Cihangir Tanyeli* and Engin Turkut

Tetrahedron: Asymmetry *15 (2004) 2057*

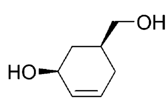


$C_7H_{10}O_2$
(*S*)-3-Cyclohexene-1-carboxylic acid

Ee = >99%
$[\alpha]_D^{25} = -95.5$ (*c* 7.0, MeOH)
Source of chirality: enzymatic resolution
Absolute configuration: 1*S*

Cihangir Tanyeli* and Engin Turkut

Tetrahedron: Asymmetry *15 (2004) 2057*



$C_7H_{12}O_2$
(1*S*,5*S*)-5-(Hydroxymethyl)-2-cyclohexen-1-ol

Ee = >99%
$[\alpha]_D^{25} = -20.4$ (*c* 1.5, MeOH)
Source of chirality: enzymatic resolution
Absolute configuration: 1*S*,5*S*

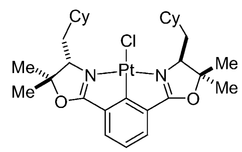
Jean-Michel Camus, Jacques Andrieu,* Philippe Richard, Rinaldo Poli, Christophe Darcel and Sylvain Jugé*

Tetrahedron: Asymmetry *15 (2004) 2061*

$[\alpha]_D = -76$ (*c* 0.5, $CHCl_3$)

John S. Fossey, Geraint Jones, Majid Motevalli, Huy V. Nguyen, Christopher J. Richards,* Mark A. Stark and Helen V. Taylor

Tetrahedron: Asymmetry *15 (2004) 2067*



$C_{30}H_{43}ClN_2O_2Pt$

(*S*,*S*)-2,6-Bis(5′,5′-dimethyl-4′-methylenecyclohexyl-2′-oxazolinyl)phenylplatinum(II) chloride

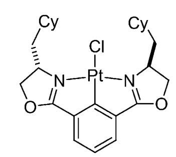
$[\alpha]_D^{22} = +150$ (*c* 0.1, CH_2Cl_2)

Source of chirality: (*S*)-2-amino-3-cyclohexanepropanoic acid

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

John S. Fossey, Geraint Jones, Majid Motevalli, Huy V. Nguyen, Christopher J. Richards,* Mark A. Stark and Helen V. Taylor

Tetrahedron: Asymmetry *15 (2004) 2067*



$C_{26}H_{35}ClN_2O_2Pt$

(*S*,*S*)-2,6-Bis(4′-methylenecyclohexyl-2′-oxazolinyl)phenylplatinum(II) chloride

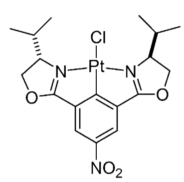
$[\alpha]_D^{20} = +136$ (*c* 0.03, $CHCl_3$)

Source of chirality: (*S*)-2-amino-3-cyclohexanepropanoic acid

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

John S. Fossey, Geraint Jones, Majid Motevalli, Huy V. Nguyen, Christopher J. Richards,* Mark A. Stark and Helen V. Taylor

Tetrahedron: Asymmetry *15 (2004) 2067*



$C_{18}H_{22}ClN_3O_4Pt$

(*S*,*S*)-2,6-Bis(4′-methylethyl-2′-oxazolinyl)-4-nitrophenylplatinum(II) chloride

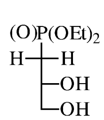
$[\alpha]_D^{20} = +72$ (*c* 0.1, $CHCl_3$)

Source of chirality: (*S*)-valine

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

Andrzej E. Wróblewski* and Anetta Hałajewska-Wosik

Tetrahedron: Asymmetry *15 (2004) 2075*



$C_7H_{17}O_5P$

Diethyl (*R*)-2,3-dihydroxypropylphosphonate

Ee = 100%

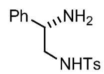
$[\alpha]_D = -15.3$ (*c* 1.9, ethanol)

Source of chirality: D-mannitol

Absolute configuration: *R*

Aidan Hayes, Guy Clarkson and Martin Wills*

Tetrahedron: Asymmetry *15 (2004) 2079*



$C_{15}H_{18}N_2O_2S$

N-((*S*)-2-Amino-2-phenyl-ethyl)-4-methyl-benzenesulfonamide

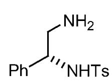
Ee = 100%

$[\alpha]_D^{20} = +85$ (*c* 1.50, $CHCl_3$)

Source of chirality: phenylglycinol of *R*-configuration

Aidan Hayes, Guy Clarkson and Martin Wills*

Tetrahedron: Asymmetry *15 (2004) 2079*



$C_{15}H_{18}N_2O_2S$

N-((*R*)-2-Amino-1-phenyl-ethyl)-4-methyl-benzenesulfonamide

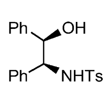
Ee = 100%

$[\alpha]_D^{20} = +85$ (*c* 1.50, $CHCl_3$)

Source of chirality: phenylglycinol of *R*-configuration

Aidan Hayes, Guy Clarkson and Martin Wills*

Tetrahedron: Asymmetry *15 (2004) 2079*



$C_{21}H_{21}NO_3S$

N-((1*S*,2*R*)-2-Hydroxy-1,2-diphenyl-ethyl)-4-methyl-benzenesulfonamide

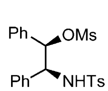
Ee = 100%

$[\alpha]_D^{19} = -29.2$ (*c* 0.55, acetone)

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

Aidan Hayes, Guy Clarkson and Martin Wills*

Tetrahedron: Asymmetry *15 (2004) 2079*



$C_{22}H_{23}NO_5S_2$

(1*R*,2*S*)-1,2-Diphenyl-2-(toluene-4-sulfonylamino)-ethyl ester

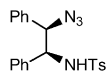
Ee = 100%

$[\alpha]_D^{19} = -34.5$ (*c* 0.50, acetone)

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

Aidan Hayes, Guy Clarkson and Martin Wills*

Tetrahedron: Asymmetry *15 (2004) 2079*



$C_{21}H_{20}N_4O_2S$

N-((1*S*,2*R*)-2-Azido-1,2-diphenyl-ethyl)-4-methyl-benzenesulfonamide

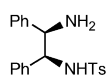
Ee = 100%

$[\alpha]_D^{19} = -62.8$ (*c* 0.55, acetone)

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

Aidan Hayes, Guy Clarkson and Martin Wills*

Tetrahedron: Asymmetry *15 (2004) 2079*



$C_{21}H_{22}N_2O_2S$

N-((1*S*,2*R*)-2-Amino-1,2-diphenyl-ethyl)-4-methyl-benzenesulfonamide

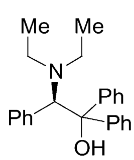
Ee = 100%

$[\alpha]_D = +34.8$ (*c* 0.65, $CHCl_3$)

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

Noemí García-Delgado, Montserrat Fontes, Miquel A. Pericàs,* Antoni Riera and Xavier Verdaguer*

Tetrahedron: Asymmetry *15 (2004) 2085*



$C_{24}H_{27}NO$

(*R*)-2-Diethylamino-1,1,2-triphenylethanol

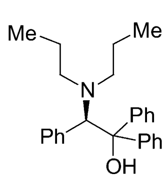
$[\alpha]_D = -121.2$ (*c* 1.01, $CHCl_3$)

Source of chirality: (*S*)-triphenyloxirane

Absolute configuration: *R*

Noemí García-Delgado, Montserrat Fontes, Miquel A. Pericàs,* Antoni Riera and Xavier Verdaguer*

Tetrahedron: Asymmetry *15 (2004) 2085*



$C_{26}H_{31}NO$

(*R*)-2-Di-*n*-propylamino-1,1,2-triphenylethanol

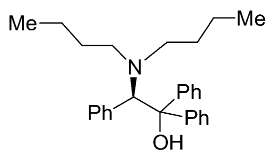
$[\alpha]_D = -118.2$ (*c* 1.60, $CHCl_3$)

Source of chirality: (*S*)-triphenyloxirane

Absolute configuration: *R*

Noemí García-Delgado, Montserrat Fontes, Miquel A. Pericàs,* Antoni Riera and Xavier Verdaguer*

Tetrahedron: Asymmetry *15 (2004) 2085*



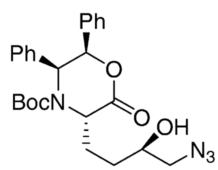
$C_{28}H_{34}NO$

(*R*)-2-Di-*n*-butylamino-1,1,2-triphenylethanol

$[\alpha]_D = -115.5$ (*c* 1.08, $CHCl_3$)
Source of chirality: (*S*)-triphenyloxirane
Absolute configuration: *R*

Pietro Allevi* and Mario Anastasia

Tetrahedron: Asymmetry *15 (2004) 2091*



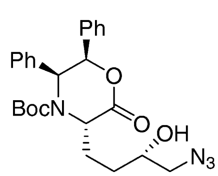
$C_{25}H_{30}N_4O_5$

tert-Butyl (3*S*,5*S*,6*R*)-3-[(3*R*)-4-azido-3-hydroxybutyl]-2-oxo-5,6-diphenyl-1,4-oxazinane-4-carboxylate

$[\alpha]_D^{25} = -57.0$ (*c* 1, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (3*S*,5*S*,6*R*,3′*R*)

Pietro Allevi* and Mario Anastasia

Tetrahedron: Asymmetry *15 (2004) 2091*



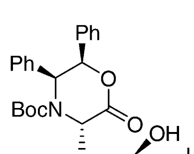
$C_{25}H_{30}N_4O_5$

tert-Butyl (3*S*,5*S*,6*R*)-3-[(3*S*)-4-azido-3-hydroxybutyl]-2-oxo-5,6-diphenyl-1,4-oxazinane-4-carboxylate

$[\alpha]_D^{25} = -52.0$ (*c* 1, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (3*S*,5*S*,6*R*,3′*R*)

Pietro Allevi* and Mario Anastasia

Tetrahedron: Asymmetry *15 (2004) 2091*



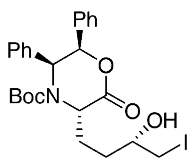
$C_{25}H_{30}INO_5$

tert-Butyl (3*S*,5*S*,6*R*)-3-[(3*R*)-3-hydroxy-4-iodobutyl]-2-oxo-5,6-diphenyl-1,4-oxazinane-4-carboxylate

$[\alpha]_D^{25} = -43.2$ (*c* 1, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (3*S*,5*S*,6*R*,3′*R*)

Pietro Allevi* and Mario Anastasia

Tetrahedron: Asymmetry *15 (2004) 2091*



$[\alpha]_D^{25} = -44.7$ (c 1, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (3*S*,5*S*,6*R*,3′*S*)

$C_{25}H_{30}INO_5$
tert-Butyl (3*S*,5*S*,6*R*)-3-[(3*S*)-3-hydroxy-4-iodobutyl]-2-oxo-5,6-diphenyl-1,4-oxazinane-4-carboxylate