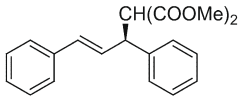
Junmin Chen, Feng Lang, Dong Li, Linfeng Cun, Jin Zhu, Jingen Deng, Jian Liao *

Tetrahedron: Asymmetry *20 (2009) 1953*



$C_{20}H_{20}O_4$

(*S,E*)-Dimethyl 2-(1,3-diphenylallyl)malonate

Ee = 93%
$[\alpha]_D^{25} = -21.4$ (*c* 1.40, $CHCl_3$)
Source of chirality: asymmetric allylic alkylation
Absolute configuration: (*S,E*)

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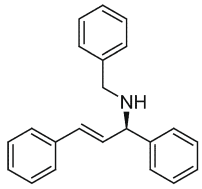
Tetrahedron: Asymmetry *20 (2009) 1953*



$C_{22}H_{21}N$

(*R,E*)-*N*-Benzyl-1,3-diphenylprop-2-en-1-amine

Ee = 73%
$[\alpha]_D^{25} = -7.6$ (*c* 0.48, $CHCl_3$)
Source of chirality: asymmetric allylic amination
Absolute configuration: (*R,E*)

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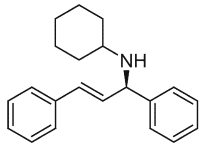
Tetrahedron: Asymmetry *20 (2009) 1953*



$C_{21}H_{25}N$

(*R,E*)-*N*-(1,3-Diphenylallyl)cyclohexanamine

Ee = 70%
$[\alpha]_D^{25} = -8.5$ (*c* 0.46, $CHCl_3$)
Source of chirality: asymmetric allylic amination
Absolute configuration: (*R,E*)

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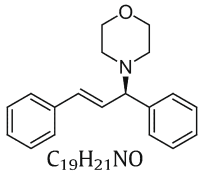
Tetrahedron: Asymmetry *20 (2009) 1953*



$C_{19}H_{21}NO$

(*R,E*)-4-(1,3-Diphenylallyl)morpholine

Ee = 76%
$[\alpha]_D^{25} = -7.4$ (*c* 0.34, $CHCl_3$)
Source of chirality: asymmetric allylic amination
Absolute configuration: (*R,E*)

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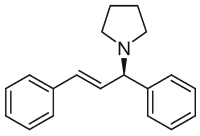
Tetrahedron: Asymmetry *20 (2009) 1953*



$C_{19}H_{21}N$

(*R*,*E*)-1-(1,3-Diphenylallyl)pyrrolidine

Ee = 52%
$[\alpha]_D^{25} = -2.6$ (*c* 1.0, $CHCl_3$)
Source of chirality: asymmetric allylic amination
Absolute configuration: (*R*,*E*)

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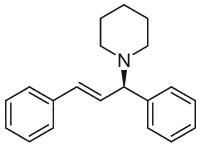
Tetrahedron: Asymmetry *20 (2009) 1953*



$C_{20}H_{23}N$

(*R*,*E*)-1-(1,3-Diphenylallyl)piperidine

Ee = 56%
$[\alpha]_D^{25} = -11.7$ (*c* 0.32, $CHCl_3$)
Source of chirality: asymmetric allylic amination
Absolute configuration: (*R*,*E*)

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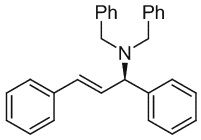
Tetrahedron: Asymmetry *20 (2009) 1953*



$C_{29}H_{27}N$

(*R*,*E*)-*N*,*N*-Dibenzyl-1,3-diphenylprop-2-en-1-amine

Ee = 3%
$[\alpha]_D^{25} = -2.9$ (*c* 0.50, $CHCl_3$)
Source of chirality: asymmetric allylic amination
Absolute configuration: (*R*,*E*)

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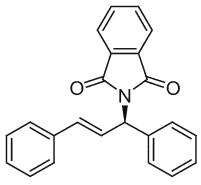
Tetrahedron: Asymmetry *20 (2009) 1953*



$C_{23}H_{17}NO_2$

(*R*,*E*)-2-(1,3-Diphenylallyl)isoindoline-1,3-dione

Ee = 55%
$[\alpha]_D^{25} = -36.5$ (*c* 0.50, $CHCl_3$)
Source of chirality: asymmetric allylic amination
Absolute configuration: (*R*,*E*)

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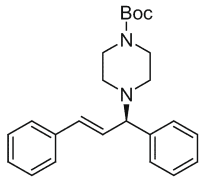
Tetrahedron: Asymmetry *20 (2009) 1953*



$C_{24}H_{30}N_2O_2$

(*R*,*E*)-*tert*-Butyl 4-(1,3-diphenylallyl)piperazine-1-carboxylate

Ee = 73%
$[\alpha]_D^{25} = -16.0$ (*c* 0.50, $CHCl_3$)
Source of chirality: asymmetric allylic amination
Absolute configuration: (*R*,*E*)

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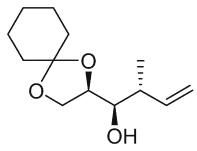
Tetrahedron: Asymmetry *20 (2009) 1957*



$C_{13}H_{22}O_3$

(2*R*,3*R*,4*R*)-1,2-Cyclohexylidenedioxy-4-methylhex-5-ene-3-ol

$[\alpha]_D^{24} = +45.9$ (*c* 1.81, $CHCl_3$)
Source of chirality: cyclohexylideneglyceraldehyde
Absolute configuration: (2*R*,3*R*,4*R*)

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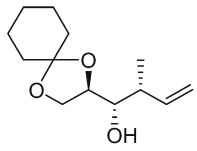
Tetrahedron: Asymmetry *20 (2009) 1957*



$C_{13}H_{22}O_3$

(2*R*,3*S*,4*R*)-1,2-Cyclohexylidenedioxy-4-methylhex-5-ene-3-ol

$[\alpha]_D^{24} = +29.8$ (*c* 1.40, $CHCl_3$)
Source of chirality: cyclohexylideneglyceraldehyde
Absolute configuration: (2*R*,3*S*,4*R*)

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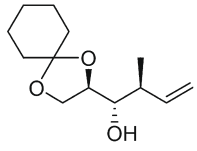
Tetrahedron: Asymmetry *20 (2009) 1957*



$C_{13}H_{22}O_3$

(2*R*,3*S*,4*S*)-1,2-Cyclohexylidenedioxy-4-methylhex-5-ene-3-ol

$[\alpha]_D^{24} = +2.4$ (*c* 1.17, $CHCl_3$)
Source of chirality: cyclohexylide
Absolute configuration: (2*R*,3*S*,4*S*)

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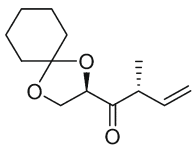
Tetrahedron: Asymmetry *20 (2009) 1957*



$C_{13}H_{20}O_3$

(2*R*,4*R*)-1,2-Cyclohexylidenedioxy-4-methyl-5-hexen-3-one

$[\alpha]_D^{24} = +10.2$ (*c* 1.56, $CHCl_3$)
Source of chirality: cyclohexylideneglyceraldehyde
Absolute configuration: (2*R*,4*R*)

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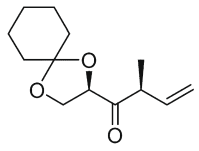
Tetrahedron: Asymmetry *20 (2009) 1957*



$C_{13}H_{20}O_3$

(2*R*,4*S*)-1,2-Cyclohexylidenedioxy-4-methyl-5-hexen-3-one

$[\alpha]_D^{24} = +5.9$ (*c* 1.08, $CHCl_3$)
Source of chirality: cyclohexylideneglyceraldehyde
Absolute configuration: (2*R*,4*S*)

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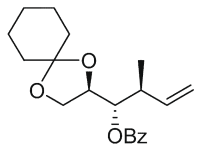
Tetrahedron: Asymmetry *20 (2009) 1957*



$C_{20}H_{26}O_4$

(3*S*,4*S*,5*R*)-4-Benzoyloxy-5,6-cyclohexylidenedioxy-3-methyl-1-hexene

$[\alpha]_D^{24} = +14.2$ (*c*, 1.47, $CHCl_3$)
Source of chirality: cyclohexylideneglyceraldehyde
Absolute configuration: (3*S*,4*S*,5*R*)

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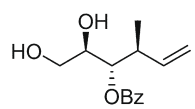
Tetrahedron: Asymmetry *20 (2009) 1957*



$C_{14}H_{18}O_4$

(2*R*,3*S*,4*S*)-3-Benzoyloxy-4-methyl-5-hexene-1,2-diol

$[\alpha]_D^{24} = +7.5$ (*c* 1.04, $CHCl_3$)
Source of chirality: cyclohexylideneglyceraldehyde
Absolute configuration: (2*R*,3*S*,4*S*)

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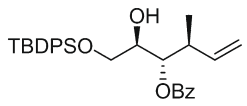
$[\alpha]_D^{24} = +7.9$ (*c* 0.971, $CHCl_3$)
Source of chirality: cyclohexylideneglyceraldehyde
Absolute configuration: (3*S*,4*S*,5*R*)



$C_{30}H_{36}O_4Si$

(3*S*,4*S*,5*R*)-4-Benzoyloxy-6-(*tert*)-butyldiphenylsilyloxy-3-methyl-1-hexene

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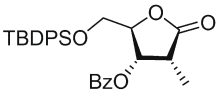
Tetrahedron: Asymmetry *20 (2009) 1957*

$[\alpha]_D^{24} = +16.3$ (*c* 0.884, $CHCl_3$)
Source of chirality: cyclohexylideneglyceraldehyde
Absolute configuration: (3*R*,4*S*,5*R*)



$C_{19}H_{28}O_5Si$

(3*R*,4*S*,5*R*)-(4-Benzoyloxy-3-methyl-5-(*tert*)-butyldiphenylsilyloxymethyl)dihydro-2 (3*H*)-furanone

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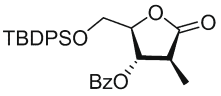
$[\alpha]_D^{24} = +21.1$ (*c* 0.721, $CHCl_3$)
Source of chirality: cyclohexylideneglyceraldehyde
Absolute configuration: (3*S*,4*S*,5*R*)



$C_{19}H_{28}O_5Si$

(3*S*,4*S*,5*R*)-(4-Benzoyloxy-3-methyl-5-(*tert*)-butyldiphenylsilyloxymethyl)dihydro-2 (3*H*)-furanone

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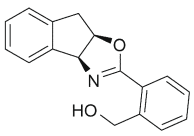
Tetrahedron: Asymmetry *20 (2009) 1962*

$[\alpha]_D^{20} = -178.5$ (*c* 1.02, $CHCl_3$)
Source of chirality: (1*S*,2*R*)-*cis*-1-amino-2-indanol
Absolute configuration: (3a*S*,8a*R*)



$C_{17}H_{15}NO_2$

2-(2′-Hydroxymethyl)phenyl-(3a*S*,8a*R*)-3a,8a-dihydro-8*H*-indeno[1,2-*d*]oxazoline

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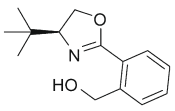
Tetrahedron: Asymmetry *20 (2009) 1962*



$[\alpha]_D^{20} = -26.6$ (*c* 0.94, $CHCl_3$)
Source of chirality: (*S*)-*tert*-leucinol
Absolute configuration: (*S*)

$C_{14}H_{19}NO_2$

(*S*)-2-(2′-Hydroxymethyl)phenyl-4-*tert*-butyloxazoline

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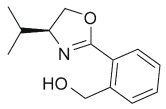
Tetrahedron: Asymmetry *20 (2009) 1962*



$[\alpha]_D^{20} = -42.9$ (*c* 0.99, $CHCl_3$)
Source of chirality: (*S*)-valinol
Absolute configuration: (*S*)

$C_{13}H_{17}NO_2$

(*S*)-2-(2′-Hydroxymethyl)phenyl-4-*i*-propyloxazoline

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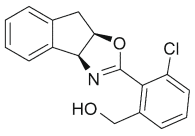
Tetrahedron: Asymmetry *20 (2009) 1962*



$[\alpha]_D^{20} = -209.5$ (*c* 0.93, $CHCl_3$)
Source of chirality: (1*S*,2*R*)-*cis*-1-amino-2-indanol
Absolute configuration: (3a*S*,8a*R*)

$C_{17}H_{14}ClNO_2$

2-(2′-Hydroxymethyl-6′-chloro)phenyl-(3a*S*,8a*R*)-3a,8a-dihydro-8*H*-indeno[1,2-*d*]oxazoline

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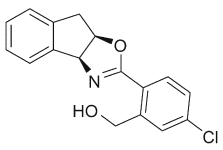
Tetrahedron: Asymmetry *20 (2009) 1962*



$[\alpha]_D^{20} = -156.4$ (*c* 0.98, $CHCl_3$)
Source of chirality: (1*S*,2*R*)-*cis*-1-amino-2-indanol
Absolute configuration: (3a*S*,8a*R*)

$C_{17}H_{14}ClNO_2$

2-(2′-Hydroxymethyl-4′-chloro)phenyl-(3a*S*,8a*R*)-3a,8a-dihydro-8*H*-indeno[1,2-*d*]oxazoline

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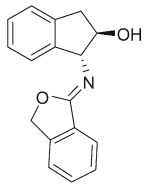
Tetrahedron: Asymmetry *20 (2009) 1962*



$C_{17}H_{15}NO_2$

(1*R*,2*R*)-*trans*-1-(3*H*-Isobenzofuran-1-ylideneamino)-indan-2-ol

$[\alpha]_D^{20} = -304.8$ (*c* 0.81, DMSO)
Source of chirality: (1*R*,2*R*)-*trans*-1-amino-2-indanol
Absolute configuration: (1*R*,2*R*)

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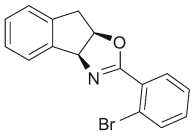
Tetrahedron: Asymmetry *20 (2009) 1962*



$C_{15}H_{12}BrNO$

2-(2′-Bromophenyl)-(3a*S*,8a*R*)-3a,8a-dihydro-8*H*-indeno[1,2-*d*]oxazoline

$[\alpha]_D^{20} = -164.7$ (*c* 1.09, $CHCl_3$)
Source of chirality: (1*S*,2*R*)-*cis*-1-amino-2-indanol
Absolute configuration: (3a*S*,8a*R*)

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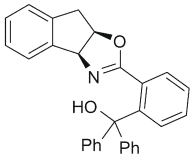
Tetrahedron: Asymmetry *20 (2009) 1962*



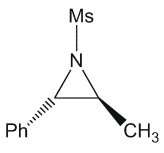
$C_{29}H_{23}NO_2$

2-(2′-Diphenylhydroxymethyl)phenyl-(3a*S*,8a*R*)-3a,8a-dihydro-8*H*-indeno[1,2-*d*]oxazoline

$[\alpha]_D^{20} = +268.4$ (*c* 0.94, $CHCl_3$)
Source of chirality: (1*S*,2*R*)-*cis*-1-amino-2-indanol
Absolute configuration: (3a*S*,8a*R*)

Jonathan A. Groeper, Joel B. Eagles, Shawn R. Hitchcock *

Tetrahedron: Asymmetry *20 (2009) 1969*



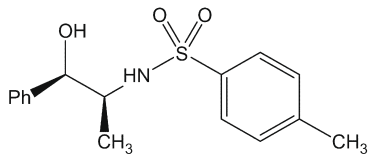
$C_{10}H_{14}NO_2S$

(2*S*,3*S*)-2-Methyl-1-(methanesulfonyl)-3-phenylaziridine

Colorless oil
$[\alpha]_D^{25} = -95.2$ (*c* 0.99, CH_2Cl_2)
Source of chirality: (1*R*,2*S*)-norephedrine
Absolute configuration: (2*S*,3*S*)

Jonathan A. Groeper, Joel B. Eagles, Shawn R. Hitchcock *

Tetrahedron: Asymmetry *20 (2009) 1969*



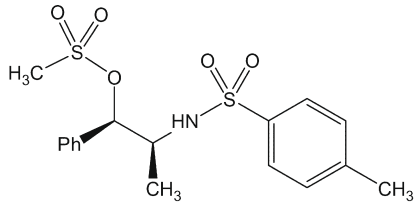
$C_{16}H_{20}NO_3S$

N-((1*R*,2*S*)-1-Hydroxy-1-phenyl-2-propyl)-*p*-toluenesulfonamide

White solid
$[\alpha]_D^{24} = -2.3$ (*c* 1.0, CH_2Cl_2)
Source of chirality: (1*R*,2*S*)-norephedrine
Absolute configuration: (1*R*,2*S*)

Jonathan A. Groeper, Joel B. Eagles, Shawn R. Hitchcock *

Tetrahedron: Asymmetry *20 (2009) 1969*



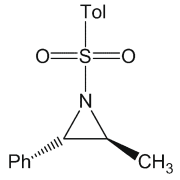
$C_{17}H_{25}N_2O_5S_2$

(1*R*,2*S*)-2-(*p*-Toluenesulfonamido)-1-phenylpropyl methanesulfonate

White solid
$[\alpha]_D^{25} = -68.7$ (*c* 1.0, CH_2Cl_2)
Source of chirality: (1*R*,2*S*)-norephedrine
Absolute configuration: (1*R*,2*S*)

Jonathan A. Groeper, Joel B. Eagles, Shawn R. Hitchcock *

Tetrahedron: Asymmetry *20 (2009) 1969*



$C_{16}H_{18}NO_2S$

(2*S*,3*S*)-2-Methyl-3-phenyl-1-toluenesulfonylaziridine

Colorless oil
$[\alpha]_D^{26} = +66.2$ (*c* 1.06, $CHCl_3$)
Source of chirality: (1*R*,2*S*)-norephedrine
Absolute configuration: (2*S*,3*S*)

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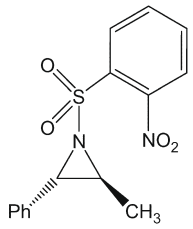
Tetrahedron: Asymmetry *20 (2009) 1969*



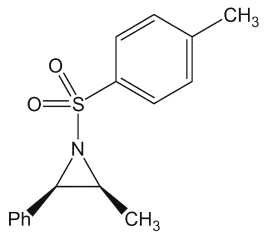
$C_{15}H_{15}N_2O_4S$

(2*S*,3*S*)-2-Methyl-1-(*o*-nitrobenzenesulfonyl)-3-phenylaziridine

Colorless oil
$[\alpha]_D^{24} = -93.5$ (*c* 0.77, CH_2Cl_2)
Source of chirality: (1*R*,2*S*)-norephedrine
Absolute configuration: (2*S*,3*S*)

Jonathan A. Groeper, Joel B. Eagles, Shawn R. Hitchcock *

Tetrahedron: Asymmetry *20 (2009) 1969*



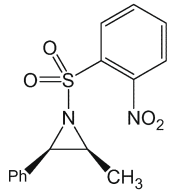
Colorless oil
$[\alpha]_D^{26} = -35.2$ (*c* 0.71, $CHCl_3$)
Source of chirality: (1*S*,2*S*)-pseudonorephedrine
Absolute configuration: (2*S*,3*R*)

$C_{16}H_{17}NO_2S$

(2*S*,3*R*)-2-Methyl-3-phenyl-1-toluenesulonylaziridine

Jonathan A. Groeper, Joel B. Eagles, Shawn R. Hitchcock *

Tetrahedron: Asymmetry *20 (2009) 1969*



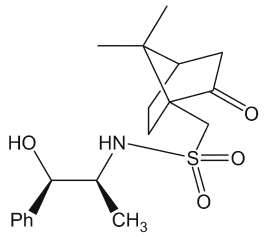
Colorless oil
$[\alpha]_D^{24} = -129.1$ (*c* 1.0, CH_2Cl_2)
Source of chirality: (1*S*,2*S*)-pseudonorephedrine
Absolute configuration: (2*S*,3*R*)

$C_{15}H_{15}N_2O_4S$

(2*S*,3*R*)-2-Methyl-1-(*o*-nitrobenzenesulfonyl)-3-phenylaziridine

Jonathan A. Groeper, Joel B. Eagles, Shawn R. Hitchcock *

Tetrahedron: Asymmetry *20 (2009) 1969*



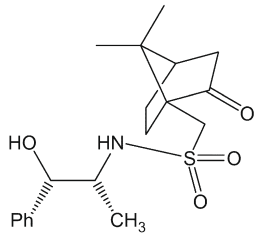
Colorless oil
$[\alpha]_D^{24} = +4.3$ (*c* 1.15 $CHCl_3$)
Source of chirality: (1*R*,2*S*)-norephedrine
Absolute configuration: (1*R*,2*S*)

$C_{19}H_{28}NO_4S$

1-(7,7-Dimethyl-2-oxobicyclo[2.2.1]-1-heptyl)-*N*-((1*R*,2*S*)-1-hydroxy-1-phenyl-2-propyl) methanesulfonamide

Jonathan A. Groeper, Joel B. Eagles, Shawn R. Hitchcock *

Tetrahedron: Asymmetry *20 (2009) 1969*



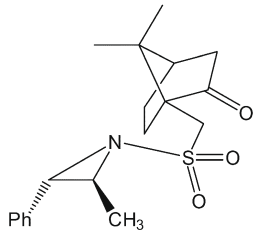
Colorless oil
$[\alpha]_D^{24} = +27.1$ (*c* 1.10, $CHCl_3$)
Source of chirality: (1*S*,2*R*)-norephedrine
Absolute configuration: (1*S*,2*R*)

$C_{19}H_{28}NO_4S$

1-(7,7-Dimethyl-2-oxobicyclo[2.2.1]heptan-1-yl)-*N*-((1*S*,2*R*)-1-hydroxy-1-phenyl-2-propyl)methanesulfonamide

Jonathan A. Groeper, Joel B. Eagles, Shawn R. Hitchcock *

Tetrahedron: Asymmetry *20 (2009) 1969*



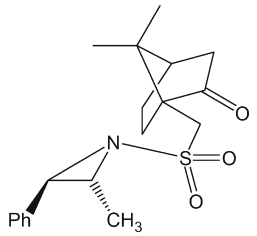
Colorless oil
$[\alpha]_D^{24} = +118.5$ (*c* 1.03, $CHCl_3$)
Source of chirality: (1*R*,2*S*)-norephedrine
Absolute configuration: (2*S*,3*S*)

$C_{19}H_{26}NO_3S$

7,7-Dimethyl-1-(((2*S*,3*S*)-2-methyl-3-phenylaziridin-1-ylsulfonyl)methyl)bicyclo [2.2.1]heptan-2-one

Jonathan A. Groeper, Joel B. Eagles, Shawn R. Hitchcock *

Tetrahedron: Asymmetry *20 (2009) 1969*



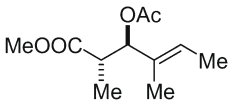
Colorless oil
$[\alpha]_D^{24} = -79.0$ (*c* 0.91, $CHCl_3$)
Source of chirality: (1*R*,2*S*)-norephedrine
Absolute configuration: (2*R*,3*R*)

$C_{19}H_{26}NO_3S$

7,7-Dimethyl-1-(((2*R*,3*R*)-2-methyl-3-phenylaziridin-1-ylsulfonyl)methyl)bicyclo [2.2.1]heptan-2-one

Ryosuke Kikuchi, Mikio Fujii, Hiroyuki Akita *

Tetrahedron: Asymmetry *20 (2009) 1975*



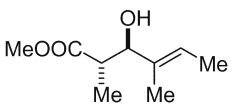
Ee = >99%
$[\alpha]_D^{23} = -12.7$ (*c* 1.0, $CHCl_3$)
Source of chirality: lipase
Absolute configuration: (2*S*,3*R*)

$C_{11}H_{18}O_4$

Methyl (2*S*,3*R*)-3-acetoxy-2,4-dimethylhex-(4*E*)-enoate

Ryosuke Kikuchi, Mikio Fujii, Hiroyuki Akita *

Tetrahedron: Asymmetry *20 (2009) 1975*



Ee = >99%
$[\alpha]_D^{19} = -10.4$ (*c* 1.21, $CHCl_3$)
Source of chirality: lipase
Absolute configuration: (2*S*,3R)

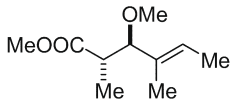
$C_9H_{16}O_3$

Methyl (2*S*,3*R*)-3-hydroxy-2,4-dimethylhex-(4*E*)-enoate

Ryosuke Kikuchi, Mikio Fujii, Hiroyuki Akita *

Tetrahedron: Asymmetry *20 (2009) 1975*

Ee = >99%
$[\alpha]_D^{20} = -21.4$ (*c* 1.1, $CHCl_3$)
Source of chirality: lipase
Absolute configuration: (2*S*,3*R*)



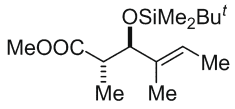
$C_{10}H_{18}O_3$

Methyl (2*S*,3*R*)-3-methoxy-2,4-dimethylhex-(4*E*)-enoate

Ryosuke Kikuchi, Mikio Fujii, Hiroyuki Akita *

Tetrahedron: Asymmetry *20 (2009) 1975*

Ee = >99%
$[\alpha]_D^{21} = -1.6$ (*c* 1.05, $CHCl_3$)
Source of chirality: lipase
Absolute configuration: (2*S*,3*R*)



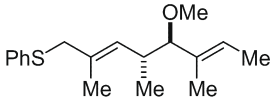
$C_{15}H_{30}O_3Si$

Methyl (2*S*,3*R*)-3-*tert*-butyldimethylsilyl-2,4-dimethyl-hex-(4*E*)-enoate

Ryosuke Kikuchi, Mikio Fujii, Hiroyuki Akita *

Tetrahedron: Asymmetry *20 (2009) 1975*

Ee = >99%
$[\alpha]_D^{18} = -18.4$ (*c* 0.98, $CHCl_3$)
Source of chirality: lipase
Absolute configuration: (4*R*,5*R*)



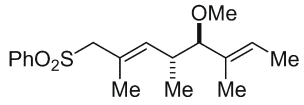
$C_{18}H_{26}OS$

(4*R*,5*R*)-2,4,6-Trimethyl-5-methoxy-1-phenylsulfanyl-octa-(2*E*,6*E*)-diene

Ryosuke Kikuchi, Mikio Fujii, Hiroyuki Akita *

Tetrahedron: Asymmetry *20 (2009) 1975*

Ee = >99%
$[\alpha]_D^{16} = +24.0$ (*c* 1.04, $CHCl_3$)
Source of chirality: lipase
Absolute configuration: (4*R*,5*R*)

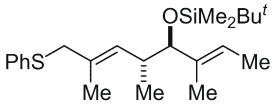


$C_{18}H_{26}O_3S$

(4*R*,5*R*)-2,4,6-Trimethyl-5-methoxy-1-phenylsulfonyl-octa-(2*E*,6*E*)-diene

Ryosuke Kikuchi, Mikio Fujii, Hiroyuki Akita *

Tetrahedron: Asymmetry *20 (2009) 1975*



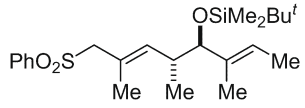
Ee = >99%
$[\alpha]_D^{15} = -6.9$ (*c* 0.97, $CHCl_3$)
Source of chirality: lipase
Absolute configuration: (4*R*,5*R*)

$C_{23}H_{38}OSSi$

(4*R*,5*R*)-*tert*-Butyldimethylsilyl-2,4,6-trimethyl-1-phenylsulfanyl-octa-(2*E*,6*E*)-diene

Ryosuke Kikuchi, Mikio Fujii, Hiroyuki Akita *

Tetrahedron: Asymmetry *20 (2009) 1975*



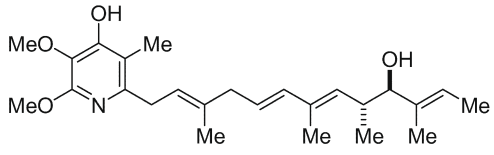
Ee = >99%
$[\alpha]_D^{13} = +49.5$ (*c* 1.03, $CHCl_3$)
Source of chirality: lipase
Absolute configuration: (4*R*,5*R*)

$C_{23}H_{38}O_3SSi$

(4*R*,5*R*)-*tert*-Butyldimethylsilyl-2,4,6-trimethyl-1-phenylsulfonyl-octa-(2*E*,6*E*)-diene

Ryosuke Kikuchi, Mikio Fujii, Hiroyuki Akita *

Tetrahedron: Asymmetry *20 (2009) 1975*



(+)-piericidin A_1

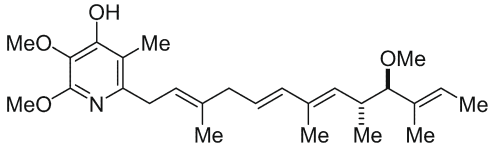
Ee = >99%
$[\alpha]_D^{14} = +2.1$ (*c* 0.14, MeOH)
Source of chirality: lipase
Absolute configuration: (9*R*,10*R*)

$C_{25}H_{37}NO_4$

(+)-Piericidin A1

Ryosuke Kikuchi, Mikio Fujii, Hiroyuki Akita *

Tetrahedron: Asymmetry *20 (2009) 1975*



(-)-piericidin B_1

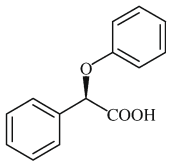
Ee = >99%
$[\alpha]_D^{17} = -8.2$ (*c* 0.43, MeOH)
Source of chirality: lipase
Absolute configuration: (9*R*,10*R*)

$C_{26}H_{39}NO_4$

(−)-Piericidin B1

Maria Maddalena Cavalluzzi, Claudio Bruno, Giovanni Lentini *, Angelo Lovece, Alessia Catalano, Alessia Carocci, Carlo Franchini

Tetrahedron: Asymmetry *20 (2009) 1984*



$C_{14}H_{12}O_3$

(−)-(*R*)-2-Phenoxy-2-phenylacetic acid

Ee = 93%
$[\alpha]_D^{20} = -114$ (*c* 1, MeOH)
Source of chirality: chiral pool
Absolute configuration: (*R*)

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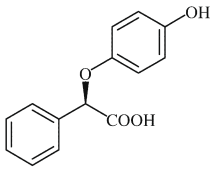
Tetrahedron: Asymmetry *20 (2009) 1984*



$C_{14}H_{12}O_4$

(−)-(*R*)-2-(4-Hydroxyphenoxy)-2-phenylacetic acid

Ee = 99%
$[\alpha]_D^{20} = -101$ (*c* 1, MeOH)
Source of chirality: chiral pool
Absolute configuration: (*R*)

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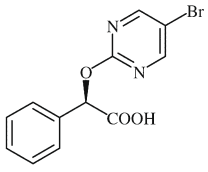
Tetrahedron: Asymmetry *20 (2009) 1984*



$C_{12}H_9BrN_2O_3$

(−)-(*R*)-2-(5-Bromopyrimidin-2-yloxy)-2-phenylacetic acid

Ee = 99%
$[\alpha]_D^{20} = -102$ (*c* 1, MeOH)
Source of chirality: chiral pool
Absolute configuration: (*R*)

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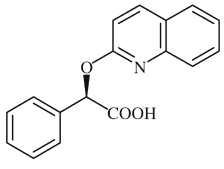
Tetrahedron: Asymmetry *20 (2009) 1984*



$C_{17}H_{13}NO_3$

(−)-(*R*)-2-Phenyl-2-(quinolin-2-yloxy)acetic acid

Ee = 98%
$[\alpha]_D^{20} = -167$ (*c* 1, MeOH)
Source of chirality: chiral pool
Absolute configuration: (*R*)

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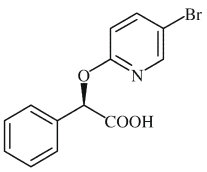
Alessia Catalano, Alessia Carocci, Carlo Franchini

Tetrahedron: Asymmetry *20 (2009) 1984*

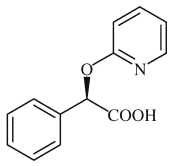


Ee = 99%
$[\alpha]_D^{20} = -104$ (*c* 1, MeOH)
Source of chirality: chiral pool
Absolute configuration: (*R*)

$C_{13}H_{10}BrNO_3$
(−)-(*R*)-2-(5-Bromopyridin-2-yloxy)-2-phenylacetic acid

Maria Maddalena Cavalluzzi, Claudio Bruno, Giovanni Lentini *, Angelo Lovece,
Alessia Catalano, Alessia Carocci, Carlo Franchini

Tetrahedron: Asymmetry *20 (2009) 1984*

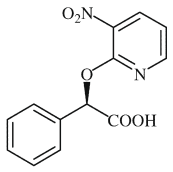


Ee = 98%
$[\alpha]_D^{20} = -148$ (*c* 1, MeOH)
Source of chirality: chiral pool
Absolute configuration: (*R*)

$C_{13}H_{11}NO_3$
(−)-(*R*)-2-Phenyl-2-(pyridin-2-yloxy)acetic acid

Maria Maddalena Cavalluzzi, Claudio Bruno, Giovanni Lentini *, Angelo Lovece,
Alessia Catalano, Alessia Carocci, Carlo Franchini

Tetrahedron: Asymmetry *20 (2009) 1984*

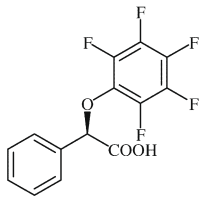


Ee = 98%
$[\alpha]_D^{20} = -141$ (*c* 1, MeOH)
Source of chirality: chiral pool
Absolute configuration: (*R*)

$C_{13}H_{10}N_2O_5$
(−)-(*R*)-2-(3-Nitropyridin-2-yloxy)-2-phenylacetic acid

Maria Maddalena Cavalluzzi, Claudio Bruno, Giovanni Lentini *, Angelo Lovece,
Alessia Catalano, Alessia Carocci, Carlo Franchini

Tetrahedron: Asymmetry *20 (2009) 1984*

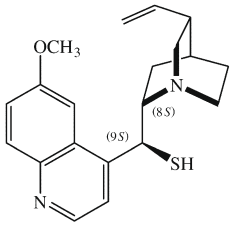


Ee = 96%
$[\alpha]_D^{20} = -157$ (*c* 1, MeOH)
Source of chirality: chiral pool
Absolute configuration: (*R*)

$C_{14}H_7F_5O_3$
(−)-(2*R*)-2-(Pentafluorophenoxy)-2-phenylacetic acid

Mariola Zielińska-Błajet, Jacek Skarżewski *

Tetrahedron: Asymmetry *20 (2009) 1992*



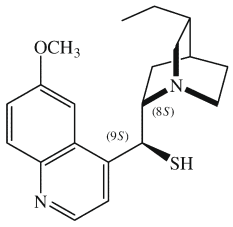
$C_{20}H_{24}N_2OS$

(1*S*,3*R*,4*S*,8*S*,9*S*)-6′-Methoxy-9-mercaptocinchonan (9-HS-*epi*-QN)

$[\alpha]_D = -72.8$ (*c* 0.92, CH_2Cl_2)
Source of chirality: S_N2 substitution on natural quinine
Absolute configuration: (1*S*,3*R*,4*S*,8*S*,9*S*)

Mariola Zielińska-Błajet, Jacek Skarżewski *

Tetrahedron: Asymmetry *20 (2009) 1992*



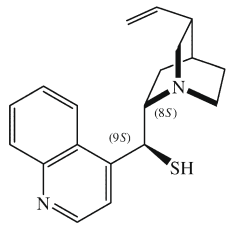
$C_{20}H_{26}N_2OS$

(1*S*,3*R*,4*S*,8*S*,9*S*)-10,11-Dihydro-6′-methoxy-9-mercaptocinchonan (9-HS-*epi*-DHQN)

$[\alpha]_D^{20} = -46.0$ (*c* 0.42, CH_2Cl_2)
Source of chirality: S_N2 substitution on natural dihydroquinine
Absolute configuration: (1*S*,3*R*,4*S*,8*S*,9*S*)

Mariola Zielińska-Błajet, Jacek Skarżewski *

Tetrahedron: Asymmetry *20 (2009) 1992*



$C_{19}H_{22}N_2S$

(1*S*,3*R*,4*S*,8*S*,9*S*)-9-Mercaptocinchonan (9-HS-*epi*-CD)

$[\alpha]_D^{20} = -58.1$(*c* 0.74, CH_2Cl_2)
Source of chirality: S_N2 substitution on natural cinchonidine
Absolute configuration: (1*S*,3*R*,4*S*,8*S*,9*S*)

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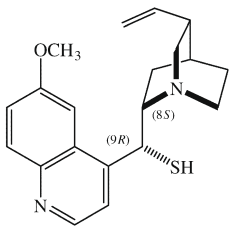
Tetrahedron: Asymmetry *20 (2009) 1992*



$C_{20}H_{24}N_2OS$

(1*S*,3*R*,4*S*,8*S*,9*R*)-6′-Methoxy-9-mercaptocinchonan (9-HS-QN)

$[\alpha]_D^{20} = +23.7$ (*c* 0.38, CH_2Cl_2)
Source of chirality: S_N2 substitution on 9-*epi*-quinine
Absolute configuration: (1*S*,3*R*,4*S*,8*S*,9*R*)

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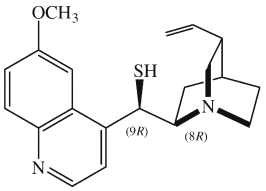
Tetrahedron: Asymmetry *20 (2009) 1992*



$[\alpha]_D$ = +148.9 (*c* 0.90, CH_2Cl_2)
Source of chirality: S_N2 substitution on natural quinidine
Absolute configuration: (1*S*,3*R*,4*S*,8*R*,9*R*)

$C_{20}H_{24}N_2OS$

(1*S*,3*R*,4*S*,8*R*,9*R*)-6′-Methoxy-9-mercaptocinchonan (9-HS-*epi*-QD)

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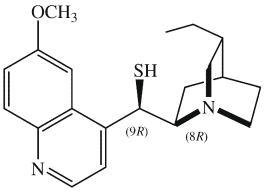
Tetrahedron: Asymmetry *20 (2009) 1992*



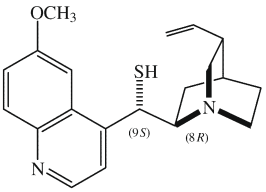
$[\alpha]_D$ = +141.4 (*c* 0.29, CH_2Cl_2)
Source of chirality: S_N2 substitution on natural dihydroquinidine
Absolute configuration: (1*S*,3*R*,4*S*,8*R*,9*R*)

$C_{20}H_{26}N_2OS$

(1*S*,3*R*,4*S*,8*R*,9*R*)-10,11-Dihydro-6′-methoxy-9-mercaptocinchonan (9-HS-*epi*-DHQD)

Mariola Zielińska-Błajet, Jacek Skarżewski *

Tetrahedron: Asymmetry *20 (2009) 1992*



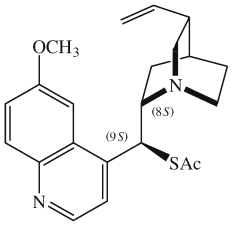
$[\alpha]_D$ = +106.0 (*c* 0.50, CH_2Cl_2)
Source of chirality: S_N2 substitution on 9-*epi*-quinidine
Absolute configuration: (1*S*,3*R*,4*S*,8*R*,9*S*)

$C_{20}H_{24}N_2OS$

(1*S*,3*R*,4*S*,8*R*,9*S*)-6′-Methoxy-9-mercaptocinchonan (9-HS-QD)

Mariola Zielińska-Błajet, Jacek Skarżewski *

Tetrahedron: Asymmetry *20 (2009) 1992*



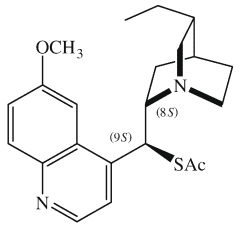
$[\alpha]_D$ = −11.0 (*c* 0.90, CH_2Cl_2)
Source of chirality: S_N2 substitution on natural quinine
Absolute configuration: (1*S*,3*R*,4*S*,8*S*,9*S*)

$C_{22}H_{26}N_2O_2S$

(1*S*,3*R*,4*S*,8*S*,9*S*)-6′-Methoxy-9-acetylthiocinchonan (9-CH_3COS-*epi*-QN)

Mariola Zielińska-Błajet, Jacek Skarżewski *

Tetrahedron: Asymmetry *20 (2009) 1992*



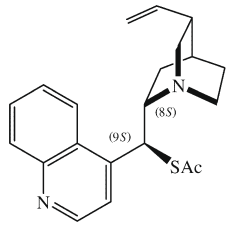
$[\alpha]_D^{20} = -14.2$ (*c* 0.20, CH_2Cl_2)
Source of chirality: S_N2 substitution on natural dihydroquinine
Absolute configuration: (1*S*,3*R*,4*S*,8*S*,9*S*)

$C_{22}H_{28}N_2O_2S$

(1*S*,3*R*,4*S*,8*S*,9*S*)-10,11-Dihydro-6′-methoxy-9-acetylthiocinchonan (9-CH_3COS-*epi*-DHQN)

Mariola Zielińska-Błajet, Jacek Skarżewski *

Tetrahedron: Asymmetry *20 (2009) 1992*



$[\alpha]_D^{20} = -21.8$ (*c* 0.87, CH_2Cl_2)
Source of chirality: S_N2 substitution on natural cinchonidine
Absolute configuration: (1*S*,3*R*,4*S*,8*S*,9*S*)

$C_{21}H_{24}N_2OS$

(1*S*,3*R*,4*S*,8*S*,9*S*)-9-Acetylthiocinchonan (9-CH_3COS-*epi*-CD)

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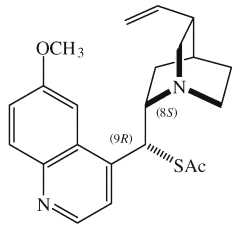
Tetrahedron: Asymmetry *20 (2009) 1992*



$[\alpha]_D^{20} = +38.1$ (*c* 0.42, CH_2Cl_2)
Source of chirality: S_N2 substitution on 9-*epi*-quinine
Absolute configuration: (1*S*,3*R*,4*S*,8*S*,9*R*)

$C_{22}H_{26}N_2O_2S$

(1*S*,3*R*,4*S*,8*S*,9*R*)-6′-Methoxy-9-acetylthiocinchonan (9-CH_3COS-QN)

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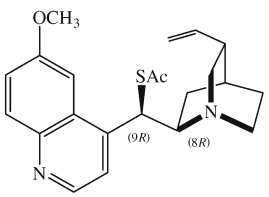
Tetrahedron: Asymmetry *20 (2009) 1992*



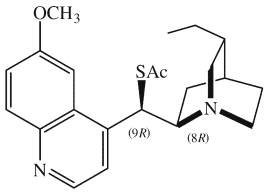
$[\alpha]_D$ = +87.0 (*c* 0.50, CH_2Cl_2)
Source of chirality: S_N2 substitution on natural quinidine
Absolute configuration: (1*S*,3*R*,4*S*,8*R*,9*R*)

$C_{22}H_{26}N_2O_2S$

(1*S*,3*R*,4*S*,8*R*,9*R*)-6′-Methoxy-9-acetylthiocinchonan (9-CH_3COS-*epi*-QD)

Mariola Zielińska-Błajet, Jacek Skarżewski *

Tetrahedron: Asymmetry *20 (2009) 1992*



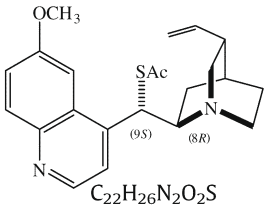
$[\alpha]_D$ = +62.5 (*c* 0.26, CH_2Cl_2)
Source of chirality: S_N2 substitution on natural dihydroquinidine
Absolute configuration: (1*S*,3*R*,4*S*,8*R*,9*R*)

$C_{22}H_{28}N_2O_2S$

(1*S*,3*R*,4*S*,8*R*,9*R*)-10,11-Dihydro-6′-methoxy-9-acetylthiocinchonan (9-CH_3COS-*epi*-DHQD)

Mariola Zielińska-Błajet, Jacek Skarżewski *

Tetrahedron: Asymmetry *20 (2009) 1992*



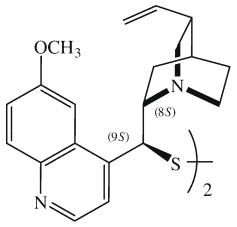
$[\alpha]_D$ = +64.9 (*c* 0.98, CH_2Cl_2)
Source of chirality: S_N2 substitution on 9-epi-quinidine
Absolute configuration: (1*S*,3*R*,4*S*,8*R*,9*S*)

$C_{22}H_{26}N_2O_2S$

(1*S*,3*R*,4*S*,8*R*,9*S*)-6′-Methoxy-9-acetylthiocinchonan (9-CH_3COS-QD)

Mariola Zielińska-Błajet, Jacek Skarżewski *

Tetrahedron: Asymmetry *20 (2009) 1992*



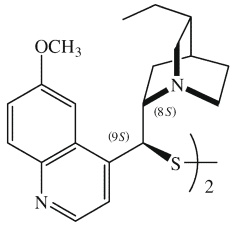
$[\alpha]_D$ = -25.8 (*c* 0.66, CH_2Cl_2)
Source of chirality: S_N2 substitution on natural quinine
Absolute configuration: (1*S*,3*R*,4*S*,8*S*,9*S*)

$C_{40}H_{46}N_4O_2S_2$

Bis((1*S*,3*R*,4*S*,8*S*,9*S*)-6′-methoxycinchonan-9-yl)disulfide (9-*epi*-QN-S-)$_2$)

Mariola Zielińska-Błajet, Jacek Skarżewski *

Tetrahedron: Asymmetry *20 (2009) 1992*



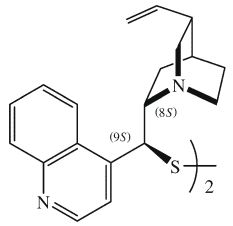
$[\alpha]_D^{20} = -9.1$ (*c* 0.32, CH_2Cl_2)
Source of chirality: S_N2 substitution on natural dihydroquinine
Absolute configuration: (1*S*,3*R*,4*S*,8*S*,9*S*)

$C_{40}H_{50}N_4O_2S_2$

Bis((1*S*,3*R*,4*S*,8*S*,9*S*)-10,11-dihydro-6′-methoxycinchonan-9-yl)disulfide (9-*epi*-DHQN-S-)$_2$)

Mariola Zielińska-Błajet, Jacek Skarżewski *

Tetrahedron: Asymmetry *20 (2009) 1992*



$[\alpha]_D^{20} = -35.0$ (*c* 0.52, CH_2Cl_2)
Source of chirality: S_N2 substitution on natural cinchonidine
Absolute configuration: (1*S*,3*R*,4*S*,8*S*,9*S*)

$C_{38}H_{42}N_4S_2$

Bis((1*S*,3*R*,4*S*,8*S*,9*S*)-cinchonan-9-yl)disulfide (9-*epi*-CD-S-)$_2$)

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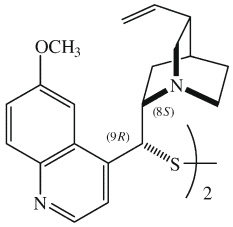
Tetrahedron: Asymmetry *20 (2009) 1992*



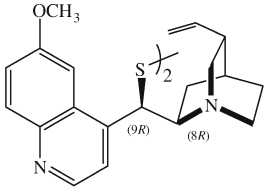
$[\alpha]_D^{20} = +15.4$ (*c* 0.26, CH_2Cl_2)
Source of chirality: S_N2 substitution on 9-*epi*-quinine
Absolute configuration: (1*S*,3*R*,4*S*,8*S*,9*R*)

$C_{40}H_{46}N_4O_2S_2$

Bis((1*S*,3*R*,4*S*,8*S*,9*R*)-6′-methoxycinchonan-9-yl)disulfide (9-QN-S-)$_2$)

Mariola Zielińska-Błajet, Jacek Skarżewski *

Tetrahedron: Asymmetry *20 (2009) 1992*



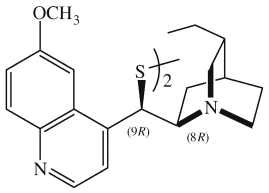
$[\alpha]_D = +94.1$ (*c* 0.34, CH_2Cl_2)
Source of chirality: S_N2 substitution on natural quinidine
Absolute configuration: (1*S*,3*R*,4*S*,8*R*,9*R*)

$C_{40}H_{46}N_4O_2S_2$

Bis((1*S*,3*R*,4*S*,8*R*,9*R*)-6′-methoxycinchonan-9-yl)disulfide (9-*epi*-QD-S-)$_2$)

Mariola Zielińska-Błajet, Jacek Skarżewski *

Tetrahedron: Asymmetry *20 (2009) 1992*



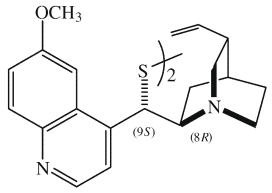
$[\alpha]_D = +46.8$ (*c* 0.24, CH_2Cl_2)
Source of chirality: S_N2 substitution on natural dihydroquinidine
Absolute configuration: (1*S*,3*R*,4*S*,8*R*,9*R*)

$C_{40}H_{50}N_4O_2S_2$

Bis((1*S*,3*R*,4*S*,8*R*,9*R*)-10,11-dihydro-6′-methoxycinchonan-9-yl)disulfide (9-*epi*-DHQD-S-)$_2$)

Mariola Zielińska-Błajet, Jacek Skarżewski *

Tetrahedron: Asymmetry *20 (2009) 1992*



$[\alpha]_D$ = +73.0 (*c* 0.28, CH_2Cl_2)
Source of chirality: S_N2 substitution on 9-*epi*-quinidine
Absolute configuration: (1*S*,3*R*,4*S*,8*R*,9*S*)

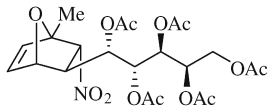
$C_{40}H_{46}N_4O_2S_2$

Bis((1*S*,3*R*,4*S*,8*R*,9*S*)-6′-methoxycinchonan-9-yl)disulfide (9-QD-S-)$_2$)

Noelia Araújo, María V. Gil, Emilio Román *, José A. Serrano

Tetrahedron: Asymmetry *20 (2009) 1999*

$[\alpha]_D$ = +27.3 (*c* 1.33, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (2*R*,3*R*)



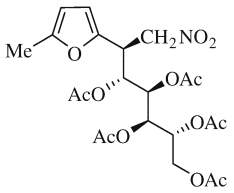
$C_{22}H_{29}NO_{13}$

(2*R*,3*R*)-1′,2′,3′,4′,5′-Penta-*O*-acetyl-1′-*C*-(4-methyl-3-*endo*-nitro-7-oxabicyclo[2.2.1]hept-5-en-2-*exo*-yl)-D-*galacto*-pentitol

Noelia Araújo, María V. Gil, Emilio Román *, José A. Serrano

Tetrahedron: Asymmetry *20 (2009) 1999*

$[\alpha]_D$ = +5.1 (*c* 0.28, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (2*S*)



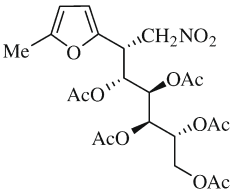
$C_{22}H_{29}NO_{13}$

3,4,5,6,7-Penta-*O*-acetyl-1,2-dideoxy-(2*S*)-(5′-methyl-2′-furyl)-1-nitro-D-*manno*-heptitol

Noelia Araújo, María V. Gil, Emilio Román *, José A. Serrano

Tetrahedron: Asymmetry *20 (2009) 1999*

$[\alpha]_D$ = +40.4 (*c* 0.52, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (2*R*)

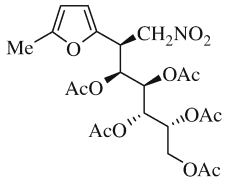


$C_{22}H_{29}NO_{13}$

3,4,5,6,7-Penta-*O*-acetyl-1,2-dideoxy-(2*R*)-(5′-methyl-2′-furyl)-1-nitro-D-*manno*-heptitol

Noelia Araújo, María V. Gil, Emilio Román *, José A. Serrano

Tetrahedron: Asymmetry *20 (2009) 1999*



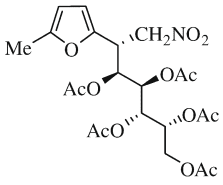
$C_{22}H_{29}NO_{13}$

$[\alpha]_D = -18.5$ (*c* 0.41, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (2*S*)

3,4,5,6,7-Penta-*O*-acetyl-1,2-dideoxy-(2*S*)-(5′-methyl-2′-furyl)-1-nitro-D-*galacto*-heptitol

Noelia Araújo, María V. Gil, Emilio Román *, José A. Serrano

Tetrahedron: Asymmetry *20 (2009) 1999*



$C_{22}H_{29}NO_{13}$

$[\alpha]_D = +10.2$ (*c* 0.43, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (2*R*)

3,4,5,6,7-Penta-*O*-acetyl-1,2-dideoxy-(2*R*)-(5′-methyl-2′-furyl)-1-nitro-D-*galacto*-heptitol

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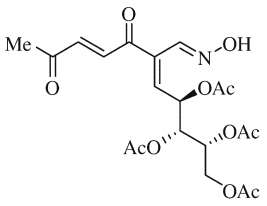
Tetrahedron: Asymmetry *20 (2009) 1999*



$C_{20}H_{25}NO_{11}$

$[\alpha]_D = +17.5$ (*c* 0.40, $CHCl_3$)
Source of chirality: asymmetric synthesis

(2*E*)-2-[(2′*E*)-2′-penten-1′,4′-dione-1′-yl]-4,5,6,7-tetra-*O*-acetyl-D-*lyxo*-tetritol-2-heptenose oxime

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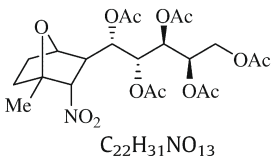
Tetrahedron: Asymmetry *20 (2009) 1999*



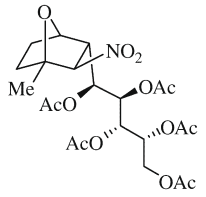
$C_{22}H_{31}NO_{13}$

$[\alpha]_D = +94.1$ (*c* 0.50, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (2*S*,3*S*)

(2*S*,3*S*)-1′,2′,3′,4′,5′-Penta-*O*-acetyl-1′-*C*-(4-methyl-3-*endo*-nitro-7-oxabicyclo[2.2.1]heptan-2-*exo*-yl)-D-*galacto*-pentitol

Noelia Araújo, María V. Gil, Emilio Román *, José A. Serrano

Tetrahedron: Asymmetry *20 (2009) 1999*



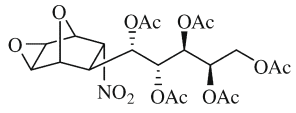
$[\alpha]_D = -15.6$ (*c* 0.50, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (2*R*,3*R*)

$C_{22}H_{31}NO_{13}$

(2*R*,3*R*)-1′,2′,3′,4′,5′-Penta-*O*-acetyl-1′-*C*-(4-methyl-3-*exo*-nitro-7-oxabicyclo[2.2.1]heptan-2-*endo*-yl)-D-*galacto*-pentitol

Noelia Araújo, María V. Gil, Emilio Román *, José A. Serrano

Tetrahedron: Asymmetry *20 (2009) 1999*



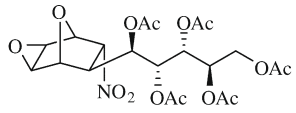
$[\alpha]_D = +56.4$ (*c* 0.22, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (2*R*,3*R*)

$C_{21}H_{27}NO_{14}$

(2*R*,3*R*)-1′,2′,3′,4′,5′-Penta-*O*-acetyl-1′-*C*-(5,6-*exo*-epoxy-3-*endo*-nitro-7-oxabicyclo[2.2.1]hept-5-en-2-*exo*-yl)-D-*galacto*-pentitol

Noelia Araújo, María V. Gil, Emilio Román *, José A. Serrano

Tetrahedron: Asymmetry *20 (2009) 1999*



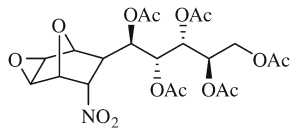
$[\alpha]_D = +35.6$ (*c* 0.50, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (2*R*,3*R*)

$C_{21}H_{27}NO_{14}$

(2*R*,3*R*)-1′,2′,3′,4′,5′-Penta-*O*-acetyl-1′-*C*-(5,6-*exo*-epoxy-3-*endo*-nitro-7-oxabicyclo[2.2.1]hept-5-en-2-*exo*-yl)-D-*manno*-pentitol

Noelia Araújo, María V. Gil, Emilio Román *, José A. Serrano

Tetrahedron: Asymmetry *20 (2009) 1999*



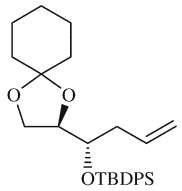
$[\alpha]_D = -31.1$ (*c* 0.52, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (2*S*,3*S*)

$C_{21}H_{27}NO_{14}$

(2*S*,3*S*)-1′,2′,3′,4′,5′-Penta-*O*-acetyl-1′-*C*-(5,6-*exo*-epoxy-3-*endo*-nitro-7-oxabicyclo[2.2.1]hept-5-en-2-*exo*-yl)-D-*manno*-pentitol

Bhaskar Dhotare, Angshuman Chattopadhyay *

Tetrahedron: Asymmetry *20 (2009) 2007*



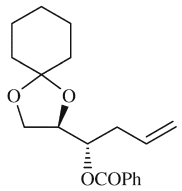
$[\alpha]_D^{25} = +15.3$ (*c* 2.8, $CHCl_3$)
Source of chirality: D-mannitol
Absolute configuration: (2*R*,3*S*)

$C_{28}H_{38}O_3Si$

(2*R*,3*S*)-1,2-*O*-Cyclohexylidine-3-*tert*-butyldiphenylsilyloxy-5-hexene

Bhaskar Dhotare, Angshuman Chattopadhyay *

Tetrahedron: Asymmetry *20 (2009) 2007*



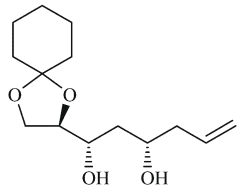
$[\alpha]_D^{25} = +11.45$ (*c* 2.2, $CHCl_3$)
Source of chirality: D-mannitol
Absolute configuration: (2*R*,3*S*)

$C_{19}H_{24}O_4$

(2*R*,3*S*)-1,2-*O*-Cyclohexylidine-3-benzoyloxy-5-hexene

Bhaskar Dhotare, Angshuman Chattopadhyay *

Tetrahedron: Asymmetry *20 (2009) 2007*



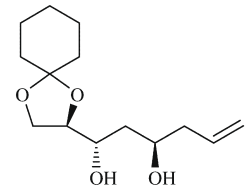
$[\alpha]_D^{25} = +10.4$ (*c* 2.0, $CHCl_3$)
Source of chirality: D-mannitol
Absolute configuration: (2*R*,3*S*,5*S*)

$C_{14}H_{24}O_4$

(2*R*,3*S*,5*S*)-1,2-*O*-Cyclohexylidine-1,2,3,5-tetrahydroxyoct-7-ene

Bhaskar Dhotare, Angshuman Chattopadhyay *

Tetrahedron: Asymmetry *20 (2009) 2007*



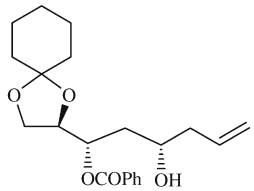
$[\alpha]_D^{25} = +0.5$ (*c* 1.2, $CHCl_3$)
Source of chirality: D-mannitol
Absolute configuration: (2*R*,3*S*,5*R*)

$C_{14}H_{24}O_4$

(2*R*,3*S*,5*R*)-1,2-*O*-Cyclohexylidine-1,2,3,5-tetrahydroxyoct-7-ene

Bhaskar Dhotare, Angshuman Chattopadhyay *

Tetrahedron: Asymmetry *20 (2009) 2007*



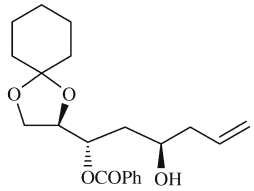
$[\alpha]_D^{25} = +10.5$ (*c* 1.04, $CHCl_3$)
Source of chirality: D-mannitol
Absolute configuration: (2*R*,3*S*,5*S*)

$C_{21}H_{28}O_5$

(2*R*,3*S*,5*S*)-1,2-*O*-Cyclohexylidine-3-*O*-benzoyl-1,2,3,5-tetrahydroxyoct-7-ene

Bhaskar Dhotare, Angshuman Chattopadhyay *

Tetrahedron: Asymmetry *20 (2009) 2007*



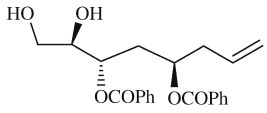
$[\alpha]_D^{25} = +12.7$ (*c* 1.76, $CHCl_3$)
Source of chirality: D-mannitol
Absolute configuration: (2*R*,3*S*,5*R*)

$C_{21}H_{28}O_5$

(2*R*,3*S*,5*R*)-1,2-*O*-Cyclohexylidine-3-*O*-benzoyl-1,2,3,5-tetrahydroxyoct-7-ene

Bhaskar Dhotare, Angshuman Chattopadhyay *

Tetrahedron: Asymmetry *20 (2009) 2007*



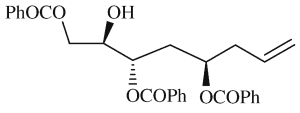
$[\alpha]_D^{25} = +13.2$ (*c* 4.78, $CHCl_3$)
Source of chirality: D-mannitol
Absolute configuration: (2*R*,3*S*,5*R*)

$C_{22}H_{24}O_6$

(2*R*,3*S*,5*R*)-1,2-*O*-Dibenzoyl-1,2,3,5-tetrahydroxyoct-7-ene

Bhaskar Dhotare, Angshuman Chattopadhyay *

Tetrahedron: Asymmetry *20 (2009) 2007*



$[\alpha]_D^{25} = +19.1$ (*c* 1.57, $CHCl_3$)
Source of chirality: D-mannitol
Absolute configuration: (2*R*,3*S*,5*R*)

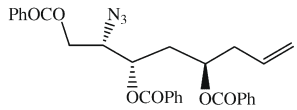
$C_{29}H_{28}O_7$

(2*R*,3*S*,5*R*)-1,2-*O*-Tribenzoyl-1,2,3,5-tetrahdrooxyoct-7-ene

Bhaskar Dhotare, Angshuman Chattopadhyay *

Tetrahedron: Asymmetry *20 (2009) 2007*

$[\alpha]_D^{25} = +13.7$ (*c* 1.2, $CHCl_3$)
Source of chirality: D-mannitol
Absolute configuration: (2*S*,3*S*,5*R*)



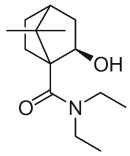
$C_{29}H_{27}O_6N_3$

(2*S*,3*S*,5*R*)-Azido-1,3,5-*O*-tribenzoyloxy-oct-7-ene

Dong-Sheng Lee *

Tetrahedron: Asymmetry *20 (2009) 2014*

Ee >99%
$[\alpha]_D = -18.7$ (*c* 1.38, $CHCl_3$)
Source of chirality: (1*S*)-ketopinic acid
Absolute configuration: (1*S*,2*R*,4*R*)



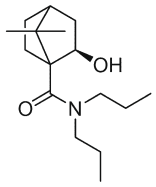
$C_{14}H_{25}NO_2$

(1*S*,2*R*,4*R*)-*N*,*N*-Diethyl-2-hydroxy-7,7-dimethylbicyclo[2.2.1]heptane-1-carboxamide

Dong-Sheng Lee *

Tetrahedron: Asymmetry *20 (2009) 2014*

Ee >99%
$[\alpha]_D = -0.3$ (*c* 2.84, $CHCl_3$)
Source of chirality: (1*S*)-ketopinic acid
Absolute configuration: (1*S*,2*R*,4*R*)



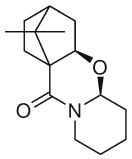
$C_{16}H_{29}NO_2$

(1*S*,2*R*,4*R*)-2-Hydroxy-7,7-dimethyl-*N*,*N*-dipropylbicyclo[2.2.1]heptane-1-carboxamide

Dong-Sheng Lee *

Tetrahedron: Asymmetry *20 (2009) 2014*

Ee >99%
$[\alpha]_D = -47.7$ (*c* 2.99, $CHCl_3$)
Source of chirality: (1*S*)-ketopinic acid
Absolute configuration: (1*S*,8*S*,10*R*,12*R*)

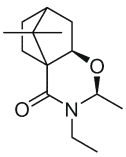


$C_{15}H_{23}NO_2$

(1*S*,8*S*,10*R*,12*R*)-15,15-Dimethyl-2-oxo-3-aza-9-oxo-tetracyclo[10.2.1.$0^{1,10}$.$0^{3,8}$]pentadecane

Dong-Sheng Lee *

Tetrahedron: Asymmetry *20 (2009) 2014*



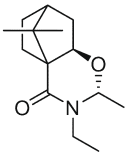
Ee >99%
$[\alpha]_D = -23.8$ (*c* 3.53, $CHCl_3$)
Source of chirality: (1*S*)-ketopinic acid
Absolute configuration: (1*S*,4*S*,6*R*,8*R*)

$C_{14}H_{23}NO_2$

(1*S*,4*S*,6*R*,8*R*)-3-Ethyl-4,11,11-trimethyl-5-oxa-3-aza-tricyclo[6.2.1.0^{1,6}]undecan-2-one

Dong-Sheng Lee *

Tetrahedron: Asymmetry *20 (2009) 2014*



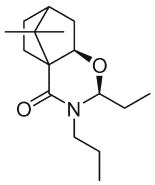
Ee >99%
$[\alpha]_D = -10.3$ (*c* 1.99, $CHCl_3$)
Source of chirality: (1*S*)-ketopinic acid
Absolute configuration: (1*S*,4*R*,6*R*,8*R*)

$C_{14}H_{23}NO_2$

(1*S*,4*S*,6*R*,8*R*)-3-Ethyl-4,11,11-trimethyl-5-oxa-3-aza-tricyclo[6.2.1.0^{1,6}]undecan-2-one

Dong-Sheng Lee *

Tetrahedron: Asymmetry *20 (2009) 2014*



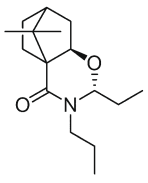
Ee >99%
$[\alpha]_D = -46.45$ (*c* 2.28, $CHCl_3$)
Source of chirality: (1*S*)-ketopinic acid
Absolute configuration: (1*S*,4*S*,6*R*,8*R*)

$C_{16}H_{27}NO_2$

(1*S*,4*S*,6*R*,8*R*)-3-Propyl-4-ethyl-11,11-dimethyl-5-oxa-3-aza-tricyclo[6.2.1.0^{1,6}]undecan-2-one

Dong-Sheng Lee *

Tetrahedron: Asymmetry *20 (2009) 2014*



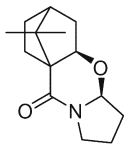
Ee >99%
$[\alpha]_D = +23.5$ (*c* 2.50, $CHCl_3$)
Source of chirality: (1*S*)-ketopinic acid
Absolute configuration: (1*S*,4*R*,6*R*,8*R*)

$C_{16}H_{27}NO_2$

(1*S*,4*R*,6*R*,8*R*)-3-Propyl-4-ethyl-11,11-dimethyl-5-oxa-3-aza-tricyclo[6.2.1.0^{1,6}]undecan-2-one

Dong-Sheng Lee *

Tetrahedron: Asymmetry *20 (2009) 2014*



Ee >99%
$[\alpha]_D$ = +12.0 (*c* 2.18, $CHCl_3$)
Source of chirality: (1*S*)-ketopinic acid
Absolute configuration: (1*S*,7*S*,9*R*,11*R*)

$C_{14}H_{21}NO_2$

(1*S*,7*S*,9*R*,11*R*)-14,14-Dimethyl-2-oxo-3-aza-8-oxo-tetracyclo[9.2.1.0^{1,9}.0^{3,7}]tetradecane

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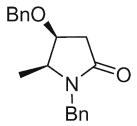
Shao-Hua Xiang, Hong-Qiu Yuan, Pei-Qiang Huang *

Tetrahedron: Asymmetry *20 (2009) 2021*



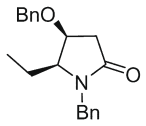
$[\alpha]_D^{20} = -19.8$ (*c* 1.0, $CHCl_3$)
Source of chirality: (*S*)-malic acid
Absolute configuration: (4*S*,5*S*)

$C_{19}H_{21}NO_2$

(4*S*,5*S*)-1-Benzyl-4-(benzyloxy)-5-methylpyrrolidin-2-one

Shao-Hua Xiang, Hong-Qiu Yuan, Pei-Qiang Huang *

Tetrahedron: Asymmetry *20 (2009) 2021*



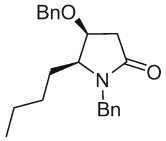
$[\alpha]_D^{20} = -2.7$ (*c* 1.0, $CHCl_3$)
Source of chirality: (*S*)-malic acid
Absolute configuration: (4*S*,5*S*)

$C_{20}H_{23}NO_2$

(4*S*,5*S*)-1-Benzyl-4-(benzyloxy)-5-ethylpyrrolidin-2-one

Shao-Hua Xiang, Hong-Qiu Yuan, Pei-Qiang Huang *

Tetrahedron: Asymmetry *20 (2009) 2021*



$[\alpha]_D^{20} = +7.8$ (*c* 1.0, $CHCl_3$)
Source of chirality: (*S*)-malic acid
Absolute configuration: (4*S*,5*S*)

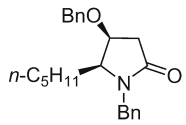
$C_{22}H_{27}NO_2$

(4*S*,5*S*)-1-Benzyl-4-(benzyloxy)-5-butylpyrrolidin-2-one

Shao-Hua Xiang, Hong-Qiu Yuan, Pei-Qiang Huang *

Tetrahedron: Asymmetry *20 (2009) 2021*

$[\alpha]_D^{20} = +7.9$ (*c* 1.0, $CHCl_3$)
Source of chirality: (*S*)-malic acid
Absolute configuration: (4*S*,5*S*)

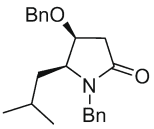


$C_{23}H_{29}NO_2$
(4*S*,5*S*)-1-Benzyl-4-(benzyloxy)-5-pentylpyrrolidin-2-one

Shao-Hua Xiang, Hong-Qiu Yuan, Pei-Qiang Huang *

Tetrahedron: Asymmetry *20 (2009) 2021*

$[\alpha]_D^{20} = +7.3$ (*c* 1.0, $CHCl_3$)
Source of chirality: (*S*)-malic acid
Absolute configuration: (4*S*,5*S*)

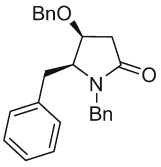


$C_{22}H_{27}NO_2$
(4*S*,5*S*)-1-Benzyl-4-(benzyloxy)-5-isobutylpyrrolidin-2-one

Shao-Hua Xiang, Hong-Qiu Yuan, Pei-Qiang Huang *

Tetrahedron: Asymmetry *20 (2009) 2021*

$[\alpha]_D^{20} = -4.2$ (*c* 1.0, $CHCl_3$)
Source of chirality: (*S*)-malic acid
Absolute configuration: (4*S*,5*S*)

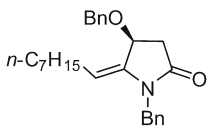


$C_{25}H_{25}NO_2$
(4*S*,5*S*)-1,5-Dibenzyl-4-(benzyloxy)pyrrolidin-2-one

Shao-Hua Xiang, Hong-Qiu Yuan, Pei-Qiang Huang *

Tetrahedron: Asymmetry *20 (2009) 2021*

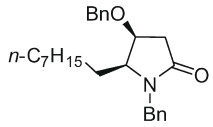
$[\alpha]_D^{20} = +80.0$ (*c* 1.0, $CHCl_3$)
Source of chirality: (*S*)-malic acid
Absolute configuration: (4*S*)



$C_{26}H_{33}NO_2$
(*S*,*E*)-1-Benzyl-4-(benzyloxy)-5-octylidenepyrrolidin-2-one

Shao-Hua Xiang, Hong-Qiu Yuan, Pei-Qiang Huang *

Tetrahedron: Asymmetry *20 (2009) 2021*



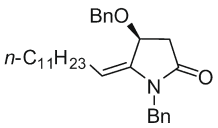
$C_{26}H_{35}NO_2$

(4*S*,5*S*)-1-Benzyl-4-(benzyloxy)-5-octylpyrrolidin-2-one

$[\alpha]_D^{20} = +10.4$ (*c* 1.0, $CHCl_3$)
Source of chirality: (*S*)-malic acid
Absolute configuration: (4*S*,5*S*)

Shao-Hua Xiang, Hong-Qiu Yuan, Pei-Qiang Huang *

Tetrahedron: Asymmetry *20 (2009) 2021*



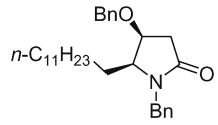
$C_{30}H_{41}NO_2$

(*S*,*E*)-1-Benzyl-4-(benzyloxy)-5-dodecylidenepyrrolidin-2-one

$[\alpha]_D^{20} = +80.6$ (*c* 1.0, $CHCl_3$)
Source of chirality: (*S*)-malic acid
Absolute configuration: (4*S*)

Shao-Hua Xiang, Hong-Qiu Yuan, Pei-Qiang Huang *

Tetrahedron: Asymmetry *20 (2009) 2021*



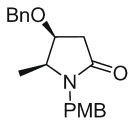
$C_{30}H_{43}NO_2$

(4*S*,5*S*)-1-Benzyl-4-(benzyloxy)-5-dodecylpyrrolidin-2-one

$[\alpha]_D^{20} = +10.5$ (*c* 1.0, $CHCl_3$)
Source of chirality: (*S*)-malic acid
Absolute configuration: (4*S*,5*S*)

Shao-Hua Xiang, Hong-Qiu Yuan, Pei-Qiang Huang *

Tetrahedron: Asymmetry *20 (2009) 2021*



$C_{20}H_{23}NO_3$

(4*S*,5*S*)-1-(4-methoxybenzyl)-4-(benzyloxy)-5-Methylpyrrolidin-2-one

$[\alpha]_D^{20} = -19.7$ (*c* 1.0, $CHCl_3$)
Source of chirality: (*S*)-malic acid
Absolute configuration: (4*S*,5*S*)

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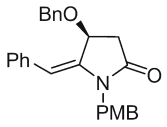
$[\alpha]_D^{20} = +291.0$ (*c* 1.0, $CHCl_3$)
Source of chirality: (*S*)-malic acid
Absolute configuration: (4*S*)



$C_{26}H_{25}NO_3$
(*S*,*E*)-5-Benzylidene-4-(benzyloxy)-1-(4-methoxybenzyl)pyrrolidin-2-one

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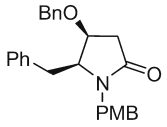
Tetrahedron: Asymmetry *20 (2009) 2021*

$[\alpha]_D^{20} = -5.7$ (*c* 1.0, $CHCl_3$)
Source of chirality: (*S*)-malic acid
Absolute configuration: (4*S*,5*S*)

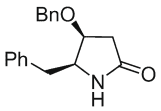


$C_{26}H_{27}NO_3$
(4*S*,5*S*)-5-Benzyl-4-(benzyloxy)-1-(4-methoxybenzyl)pyrrolidin-2-one

Shao-Hua Xiang, Hong-Qiu Yuan, Pei-Qiang Huang *

Tetrahedron: Asymmetry *20 (2009) 2021*

$[\alpha]_D^{20} = -35.6$ (*c* 1.0, $CHCl_3$)
Source of chirality: (*S*)-malic acid
Absolute configuration: (4*S*,5*S*)



$C_{18}H_{19}NO_2$
(4*S*,5*S*)-5-Benzyl-4-(benzyloxy)pyrrolidin-2-one

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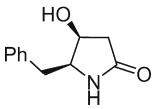
Tetrahedron: Asymmetry *20 (2009) 2021*

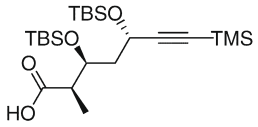
$[\alpha]_D^{20} = -43.5$ (*c* 1.0, MeOH)
Source of chirality: (*S*)-malic acid
Absolute configuration: (4*S*,5*S*)



$C_{11}H_{13}NO_2$
(4*S*,5*S*)-5-Benzyl-4-hydroxypyrrolidin-2-one

Shoubin Tang, Zhengshuang Xu *, Tao Ye *

Tetrahedron: Asymmetry *20 (2009) 2027*



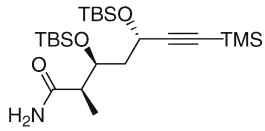
De = 100%
$[\alpha]_D^{20} = -28.8$ (*c* 1.2, $CHCl_3$)
Source of chirality: reaction substrate
Absolute configuration: (2*R*,3*S*,5*S*)

$C_{23}H_{48}O_4Si_3$

(2*R*,3*S*,5*S*)-3,5-Di-(*tert*-butyldimethylsilyloxy)-2-methyl-7-trimethylsilyl-hept-6-ynic-acid

Shoubin Tang, Zhengshuang Xu *, Tao Ye *

Tetrahedron: Asymmetry *20 (2009) 2027*



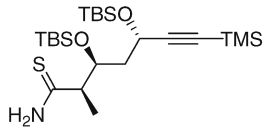
De = 100%
$[\alpha]_D^{20} = -34.5$ (*c* 3.3, $CHCl_3$)
Source of chirality: reaction substrate
Absolute configuration: (2*R*,3*S*,5*S*)

$C_{23}H_{49}NO_3Si_3$

(2*R*,3*S*,5*S*)-3,5-Di-(*tert*-butyldimethylsilyloxy)-2-methyl-7-trimethylsilyl-6-heptynamide

Shoubin Tang, Zhengshuang Xu *, Tao Ye *

Tetrahedron: Asymmetry *20 (2009) 2027*



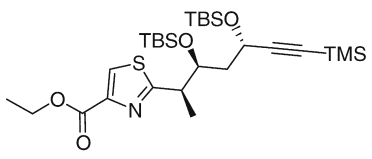
De = 100%
$[\alpha]_D^{20} = -26.8$ (*c* 0.85, $CHCl_3$)
Source of chirality: reaction substrate
Absolute configuration: (2*R*,3*S*,5*S*)

$C_{23}H_{49}NO_2Si_3S$

(2*R*,3*S*,5*S*)-3,5-Di-(*tert*-butyldimethylsilyloxy)-2-methyl-7-trimethylsilyl-6-heptyne-thioamide

Shoubin Tang, Zhengshuang Xu *, Tao Ye *

Tetrahedron: Asymmetry *20 (2009) 2027*



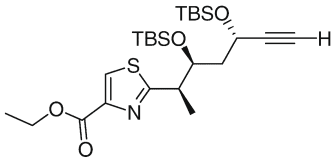
De = 100%
$[\alpha]_D^{20} = -18.4$ (*c* 1.05, $CHCl_3$)
Source of chirality: reaction substrate
Absolute configuration: (1′*R*, 2′*S*, 4′*S*)

$C_{28}H_{53}NO_4Si_3S$

2-[(1′*R*,2′*S*,4′*S*)-2′,4′-Bis-(*tert*-butyl-dimethyl-silanyloxy)-1′-methyl-6′-trimethylsilanyl-hex-5′-ynyl]-thiazole-4-carboxylic acid ethyl ester

Shoubin Tang, Zhengshuang Xu *, Tao Ye *

Tetrahedron: Asymmetry *20 (2009) 2027*



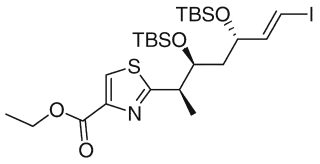
De = 100%
$[\alpha]_D^{20} = -21.4$ (*c* 1.05, $CHCl_3$)
Source of chirality: reaction substrate
Absolute configuration: (1′*R*, 2′*S*, 4′*S*)

$C_{25}H_{45}NO_4Si_2S$

2-[(1′*R*,2′*S*,4′*S*)-2′,4′-Di(*tert*-butyldimethylsilyloxy)-1′-methyl-5′-hexynyl]-4-thiazole carboxylic acid, ethyl ester

Shoubin Tang, Zhengshuang Xu *, Tao Ye *

Tetrahedron: Asymmetry *20 (2009) 2027*



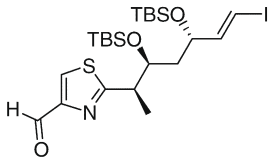
De = 100%
$[\alpha]_D^{20} = -27.2$ (*c* 1.4, $CHCl_3$)
Source of chirality: *E*-vinyl iodination and reaction substrate
Absolute configuration: (1′*R*, 2′*S*, 4′*S*)

$C_{25}H_{46}INO_4Si_2S$

2-[(1′*R*,2′*S*,4′*S*)-2′,4′-Di-(*tert*-butyldimethylsilyloxy)-6′-iodo-1′-methyl-(*E*)-5′-hexenyl]-4-thiazole carboxylic acid, ethyl ester

Shoubin Tang, Zhengshuang Xu *, Tao Ye *

Tetrahedron: Asymmetry *20 (2009) 2027*



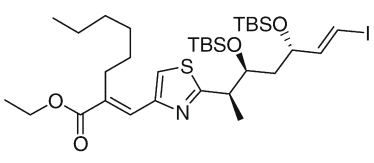
De = 100%
$[\alpha]_D^{20} = -14.3$ (*c* 1.1, $CHCl_3$)
Source of chirality: reaction substrate
Absolute configuration: (1′*R*, 2′*S*, 4′*S*)

$C_{23}H_{42}INO_3Si_2S$

2-[(1′*R*,2′*S*,4′*S*)-2′,4′-Di-(*tert*-butyldimethylsilyloxy)-6′-iodo-1′-methyl-(*E*)-5′-hexenyl]-4-formylthiazole

Shoubin Tang, Zhengshuang Xu *, Tao Ye *

Tetrahedron: Asymmetry *20 (2009) 2027*



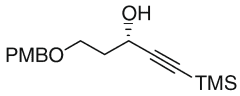
De = 100%
$[\alpha]_D^{20} = -36.3$ (*c* 1.2, $CHCl_3$)
Source of chirality: HWE olefination and reaction substrate
Absolute configuration: (1″*R*, 2″*S*, 4″*S*)

$C_{33}H_{60}INO_4Si_2S$

3-{2′-[(1″*R*,2″*S*,4″*S*)-2″,4″-Bis-(*tert*-butyl-dimethyl-silanyloxy)-6″-iodo-1″-methyl-hex-5″-enyl]-thiazol-4′-yl}-2-hexyl-acrylic acid ethyl ester

Shoubin Tang, Zhengshuang Xu *, Tao Ye *

Tetrahedron: Asymmetry *20 (2009) 2027*



Ee = 82%
$[\alpha]_D^{20} = -13.7$ (*c* 2.4, $CHCl_3$)
Source of chirality: asymmetric reduction of ketone with *S*-alpine
Absolute configuration: (3*S*)

$C_{16}H_{24}O_3Si$

3*S*-5-(4-Methoxybenzyloxy)-1-trimethylsilanyl-pent-1-yn-3-ol

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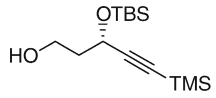
Shoubin Tang, Zhengshuang Xu *, Tao Ye *

Tetrahedron: Asymmetry *20 (2009) 2027*



Ee = 82%
$[\alpha]_D^{20} = -9.8$ (*c* 1.4, $CHCl_3$)
Source of chirality: reaction substrate
Absolute configuration: (3*S*)

$C_{14}H_{30}O_2Si_2$

3*S*-3-(*tert*-Butyl-dimethyl-silanyloxy)-5-trimethylsilanyl-pent-4-yn-1-ol

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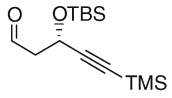
Shoubin Tang, Zhengshuang Xu *, Tao Ye *

Tetrahedron: Asymmetry *20 (2009) 2027*



Ee = 82%
$[\alpha]_D^{20} = -13.2$ (*c* 2.1, $CHCl_3$)
Source of chirality: reaction substrate
Absolute configuration: (3*S*)

$C_{14}H_{28}O_2Si_2$

3*S*-3-(*tert*-Butyl-dimethyl-silanyloxy)-5-trimethylsilanyl-pent-4-ynal

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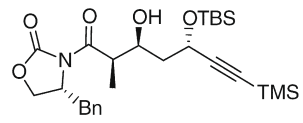
Shoubin Tang, Zhengshuang Xu *, Tao Ye *

Tetrahedron: Asymmetry *20 (2009) 2027*



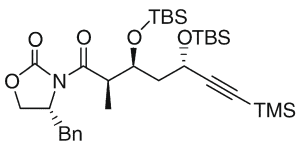
De = 92%
$[\alpha]_D^{20} = -44.3$ (*c* 1.5, $CHCl_3$)
Source of chirality: asymmetric Evans-aldol reaction
Absolute configuration: (2′*R*, 3′*S*, 5′*R*)

$C_{27}H_{43}NO_5Si_2$

(2′*R*, 3′*S*, 5′*R*)-4-Benzyl-3-[5′-(*tert*-butyldimethyl-silanyloxy)-3′-hydroxy-2′-methyl-7′-trimethylsilanyl-hept-6′-ynoyl]-oxazolidin-2-one

Shoubin Tang, Zhengshuang Xu *, Tao Ye *

Tetrahedron: Asymmetry *20 (2009) 2027*



De = 100%
$[\alpha]_D^{20} = -38.4$ (*c* 2.1, $CHCl_3$)
Source of chirality: reaction substrate
Absolute configuration: (2′*R*, 3′*S*, 5′*R*)-

$C_{33}H_{57}NO_5Si_3$

(2′*R*, 3′*S*, 5′*R*)-4-Benzyl-3-[3′,5′-bis-(*tert*-butyldimethyl-silanyloxy)-2′-methyl-7′-trimethylsilanyl-hept-6′-ynoyl]-oxazolidin-2-one

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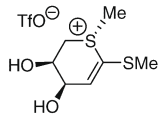
Marie Buchotte, Claudia Bello, Pierre Vogel, Nicolas Floquet, Murielle Muzard *, Richard Plantier-Royon *

Tetrahedron: Asymmetry *20 (2009) 2038*



$[\alpha]_D^{20} = -47.4$ (*c* 0.90, MeOH)
Source of chirality: L-arabinose
Absolute configuration: (*S*), (3*R*,4*R*)

$C_8H_{13}F_3O_5S_3$

Methyl 2-deoxy-5-[(*S*) methyl episulfonium]-1-thio-L-*erythro*-pent-1-enopyranoside trifluoromethanesulfonate

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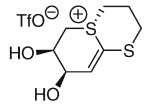
Marie Buchotte, Claudia Bello, Pierre Vogel, Nicolas Floquet, Murielle Muzard *, Richard Plantier-Royon *

Tetrahedron: Asymmetry *20 (2009) 2038*



$[\alpha]_D^{20} = +92.2$ (*c* 1.65, MeOH)
Source of chirality: L-arabinose
Absolute configuration: (5*S*,7*R*,8*R*)

$C_9H_{13}F_3O_5S_3$

(5*S*,7*R*,8*R*)-7,8-Dihydroxy-2,3,4,6,7,8-hexahydrothiopyrano[1,2-*a*][1,3]dithiin-5-ium trifluoromethanesulfonate

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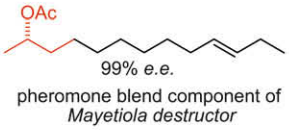
Renan S. Ferrarini, João V. Comasseto, Alcindo A. Dos Santos *

Tetrahedron: Asymmetry *20 (2009) 2043*



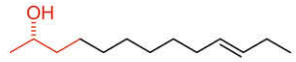
Ee = 99%
$[\alpha]_D^{22} = +0.95$ (*c* 1.02, $CHCl_3$)
Source of chirality: enantiopure hydroxytelluride
Absolute configuration: (2*S*)

$C_{15}H_{28}O_2$

(*S*,*E*)-Tridec-10-en-2-yl acetate

Renan S. Ferrarini, João V. Comasseto, Alcindo A. Dos Santos *

Tetrahedron: Asymmetry *20 (2009) 2043*



99% *e.e*
pheromone blend component of
Mayetiola destructor

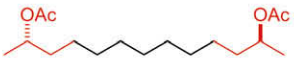
$C_{13}H_{26}O$

(*S*,*E*)-Tridec-10-en-2-ol

Ee = 99%
$[\alpha]_D^{20} = +6.8$ (*c* 1.00, $CHCl_3$)
Source of chirality: enantiopure hydroxytelluride
Absolute configuration: (2*S*)

Renan S. Ferrarini, João V. Comasseto, Alcindo A. Dos Santos *

Tetrahedron: Asymmetry *20 (2009) 2043*



99% *e.e*
pheromone blend component of
Contarini pisi

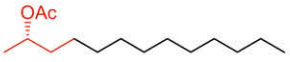
$C_{17}H_{32}O_4$

(2*S*,12*S*)-Tridecane-2,12-diyl diacetate

Ee = 99%
$[\alpha]_D^{20} = +2.0$ (*c* 1.20, $CHCl_3$)
Source of chirality: enantiopure hydroxytelluride
Absolute configuration: (2*S*,12*S*)

Renan S. Ferrarini, João V. Comasseto, Alcindo A. Dos Santos *

Tetrahedron: Asymmetry *20 (2009) 2043*



99% *e.e*
pheromone blend component of
Drosophila mulleri and Mayetiola destructor

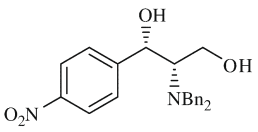
$C_{15}H_{30}O_2$

(*S*)-Tridecan-2-yl acetate

Ee = 99%
$[\alpha]_D^{20} = +4.5$ (*c* 1.00, hexane)
Source of chirality: enantiopure hydroxytelluride
Absolute configuration: (2*S*)

Maria D. Rozwadowska *, Anna Tomczak

Tetrahedron: Asymmetry *20 (2009) 2048*



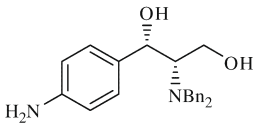
$C_{23}H_{24}N_2O_4$

(1*S*,2*S*)-(+)-2-*N*,*N*-Dibenzylamino-1-(4-nitrophenyl)-1,3-propanediol

Ee = 100%
$[\alpha]_D^{20} = +73.5$ (*c* 1.05, MeOH)
Source of chirality: stereoselective synthesis
Absolute configuration: (1*S*,2*S*)

Maria D. Rozwadowska *, Anna Tomczak

Tetrahedron: Asymmetry *20 (2009) 2048*



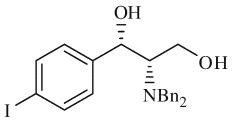
$C_{23}H_{26}N_2O_{2c}$

(1*S*,2*S*)-(+)-2-*N*,*N*-Dibenzylamino-1-(4-aminophenyl)-1,3-propanediol

Ee = 100%
$[\alpha]_D^{20} = +94.7$ (*c* 1.03, MeOH)
Source of chirality: stereoselective synthesis
Absolute configuration: (1*S*,2*S*)

Maria D. Rozwadowska *, Anna Tomczak

Tetrahedron: Asymmetry *20 (2009) 2048*



$C_{23}H_{24}INO_2$

(1*S*,2*S*)-(+)-2-*N*,*N*-Dibenzylamino-1-(4-iodophenyl)-1,3-propanediol

Ee = 100%
$[\alpha]_D^{20} = +65.1$ (*c* 1.1, MeOH)
Source of chirality: stereoselective synthesis
Absolute configuration: (1*S*,2*S*)

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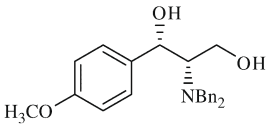
Tetrahedron: Asymmetry *20 (2009) 2048*



$C_{24}H_{27}NO_3$

(1*S*,2*S*)-(+)-2-*N*,*N*-Dibenzylamino-1-(4-methoxyphenyl)-1,3-propanediol

Ee = 100%
$[\alpha]_D^{20} = +88.9$ (*c* 1.01, MeOH)
Source of chirality: stereoselective synthesis
Absolute configuration: (1*S*,2*S*)

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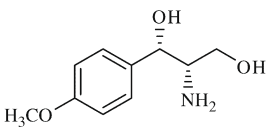
Tetrahedron: Asymmetry *20 (2009) 2048*



$C_{10}H_{15}NO_3$

(1*S*,2*S*)-(+)-2-Amino-1-(4-methoxyphenyl)-1,3-propanediol

Ee = 100%
$[\alpha]_D^{20} = +32.5$ (*c* 1.15, 2 M HCl)
Source of chirality: stereoselective synthesis
Absolute configuration: (1*S*,2*S*)

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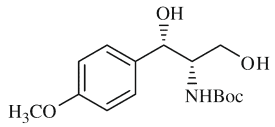
Tetrahedron: Asymmetry *20 (2009) 2048*



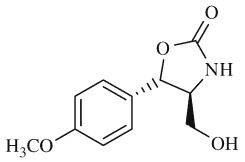
Ee = 100%
$[\alpha]_D^{20} = +27.9$ (*c* 1.0, MeOH)
Source of chirality: stereoselective synthesis
Absolute configuration: (1*S*,2*S*)

$C_{15}H_{23}NO_5$

(1*S*,2*S*)-(+)-2-*tert*-Butoxycarbonylamino-1-(4-methoxyphenyl)-1,3-propanediol

Maria D. Rozwadowska *, Anna Tomczak

Tetrahedron: Asymmetry *20 (2009) 2048*



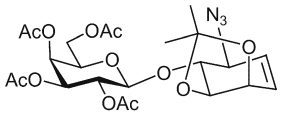
Ee = 100%
$[\alpha]_D^{20} = -72.5$ (*c* 1.025, acetone)
Source of chirality: stereoselective synthesis
Absolute configuration: (4*S*,5*S*)

$C_{11}H_{13}NO_4$

(4*S*,5*S*)-(−)-*Iso*cytoxazone

Ana Bellomo *, Julia B. Bonilla, Javier López-Prados, Manuel Martín-Lomas, David Gonzalez

Tetrahedron: Asymmetry *20 (2009) 2061*



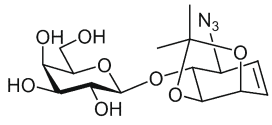
Ee >98%
$[\alpha]_D^{20} = +20$ (*c* 0.84, $CHCl_3$)
Source of chirality: enzymatic catalysis
Absolute configuration: (1*R*,2*S*,5*R*,6*R*)

$C_{23}H_{31}N_3O_{12}$

(1*R*,2*S*,5*R*,6*R*)-2′,3′,4′,6′-Tetra-*O*-acetyl-β-D-galactopyranosyl-(1′,1)-2-azido-5,6-*O*-isopropylidenedioxycyclohex-3-ene

Ana Bellomo *, Julia B. Bonilla, Javier López-Prados, Manuel Martín-Lomas, David Gonzalez

Tetrahedron: Asymmetry *20 (2009) 2061*



Ee >98%
$[\alpha]_D^{20} = +11$ (*c* 0.40, MeOH)
Source of chirality: enzymatic catalysis
Absolute configuration: (1*R*,2*S*,5*R*,6*R*)

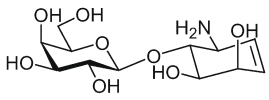
$C_{15}H_{23}N_3O_8$

(1*R*,2*S*,5*R*,6*R*)-β-D-Galactopyranosyl-(1′,1)-2-azido-5,6-*O*-isopropylidenedioxycyclohex-3-ene

Ana Bellomo*, Julia B. Bonilla, Javier López-Prados, Manuel Martín-Lomas, David Gonzalez

Tetrahedron: Asymmetry *20 (2009) 2061*

Ee >98%
$[\alpha]_D^{20} = -12$ (*c* 0.26, H_2O)
Source of chirality: enzymatic catalysis
Absolute configuration: (1*S*,2*R*,3*R*,6*S*)



$C_{12}H_{21}NO_8$

(1*S*,2*R*,3*R*,6*S*)-β-D-Galactopyranosyl-(1′,1)-6-amino-5,6-cyclohex-4-ene-2,3-diol

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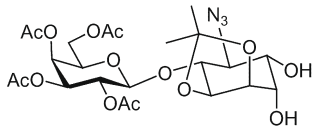
Ana Bellomo*, Julia B. Bonilla, Javier López-Prados, Manuel Martín-Lomas, David Gonzalez

Tetrahedron: Asymmetry *20 (2009) 2061*

Ee >98%
$[\alpha]_D^{20} = -57$ (*c* 0.25, CH_2Cl_2)
Source of chirality: enzymatic catalysis
Absolute configuration: (1*S*,2*S*,3*S*,4*R*,5*S*,6*R*)



$C_{23}H_{33}N_3O_{14}$

(1*S*,2*S*,3*S*,4*R*,5*S*,6*R*)-2′,3′,4′,6′-Tetra-*O*-acetyl-β-D-galactopyranosyl-(1′,4)-3-azido-5,6-*O*-isopropylidenedioxycyclohexan-1,2-diol

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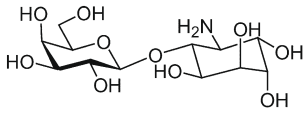
Ana Bellomo*, Julia B. Bonilla, Javier López-Prados, Manuel Martín-Lomas, David Gonzalez

Tetrahedron: Asymmetry *20 (2009) 2061*

Ee >98%
$[\alpha]_D^{20} = +12$ (*c* 0.48, H_2O)
Source of chirality: enzymatic catalysis
Absolute configuration: (1*R*,2*R*,3*S*,4*S*,5*R*,6*R*)



$C_{12}H_{23}NO_{10}$

(1*R*,2*R*,3*S*,4*S*,5*R*,6*R*)-β-D-Galactopyranosyl-(1′,3)-4-aminodeoxy-L-*chiro*-inositol

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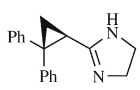
Naka Koyata, Tsuyoshi Miura, Yoko Akaiwa, Hisashi Sasaki, Rie Sato, Takuya Nagai, Hirohisa Fujimori, Takuya Noguchi, Masayuki Kirihara, Nobuyuki Imai*

Tetrahedron: Asymmetry *20 (2009) 2065*

Ee = 72%
$[\alpha]_D^{24} = +110.0$ (*c* 1.12, MeOH)
Source of chirality: catalytic enantioselective cyclopropanation
Absolute configuration: (*R*)

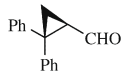


$C_{18}H_{18}N_2$

(*R*)-2-(2,2-Diphenylcyclopropyl)imidazoline

Naka Koyata, Tsuyoshi Miura, Yoko Akaiwa, Hisashi Sasaki, Rie Sato, Takuya Nagai, Hirohisa Fujimori, Takuya Noguchi, Masayuki Kirihara, Nobuyuki Imai *

Tetrahedron: Asymmetry *20 (2009) 2065*



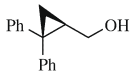
$C_{16}H_{14}O$

(*R*)-2,2-Diphenylcyclopropanecarboxaldehyde

Ee = 76%
$[\alpha]_D^{24} = +112.4$ (*c* 1.47, $CHCl_3$)
Source of chirality: catalytic enantioselective cyclopropanation
Absolute configuration: (*R*)

Naka Koyata, Tsuyoshi Miura, Yoko Akaiwa, Hisashi Sasaki, Rie Sato, Takuya Nagai, Hirohisa Fujimori, Takuya Noguchi, Masayuki Kirihara, Nobuyuki Imai *

Tetrahedron: Asymmetry *20 (2009) 2065*



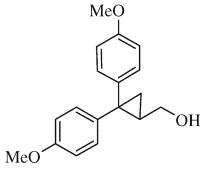
$C_{16}H_{16}O$

(*R*)-2,2-Diphenylcyclopropylmethanol

Ee = 76%
$[\alpha]_D^{24} = +115.9$ (*c* 1.07, $CHCl_3$)
Source of chirality: catalytic enantioselective cyclopropanation
Absolute configuration: (*R*)

Naka Koyata, Tsuyoshi Miura, Yoko Akaiwa, Hisashi Sasaki, Rie Sato, Takuya Nagai, Hirohisa Fujimori, Takuya Noguchi, Masayuki Kirihara, Nobuyuki Imai *

Tetrahedron: Asymmetry *20 (2009) 2065*



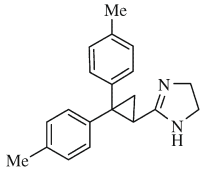
$C_{18}H_{20}O_3$

2,2-Bis(4-methoxyphenyl)cyclopropylmethanol

Ee = 51%
$[\alpha]_D^{24} = +74.2$ (*c* 1.04, $CHCl_3$)
Source of chirality: catalytic enantioselective cyclopropanation
Absolute configuration: unknown

Naka Koyata, Tsuyoshi Miura, Yoko Akaiwa, Hisashi Sasaki, Rie Sato, Takuya Nagai, Hirohisa Fujimori, Takuya Noguchi, Masayuki Kirihara, Nobuyuki Imai *

Tetrahedron: Asymmetry *20 (2009) 2065*



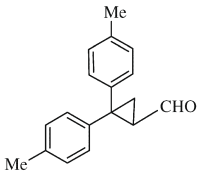
$C_{20}H_{22}N_2$

2-(2,2-Bis(4-methylphenyl)cyclopropyl)imidazoline

Ee = 65%
$[\alpha]_D^{23} = +66.0$ (*c* 0.90, MeOH)
Source of chirality: catalytic enantioselective cyclopropanation
Absolute configuration: unknown

Naka Koyata, Tsuyoshi Miura, Yoko Akaiwa, Hisashi Sasaki, Rie Sato, Takuya Nagai, Hirohisa Fujimori, Takuya Noguchi, Masayuki Kirihara, Nobuyuki Imai *

Tetrahedron: Asymmetry *20 (2009) 2065*



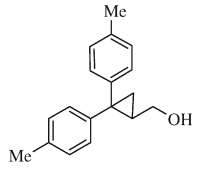
$C_{18}H_{18}O$

2,2-Bis(4-methylphenyl)cyclopropanecarboxaldehyde

Ee = 65%
$[\alpha]_D^{27} = +77.9$ (*c* 1.37, $CHCl_3$)
Source of chirality: catalytic enantioselective cyclopropanation
Absolute configuration: unknown

Naka Koyata, Tsuyoshi Miura, Yoko Akaiwa, Hisashi Sasaki, Rie Sato, Takuya Nagai, Hirohisa Fujimori, Takuya Noguchi, Masayuki Kirihara, Nobuyuki Imai *

Tetrahedron: Asymmetry *20 (2009) 2065*



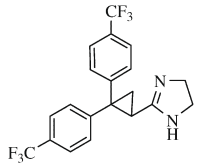
$C_{18}H_{20}O$

2,2-Bis(4-methylphenyl)cyclopropylmethanol

Ee = 65%
$[\alpha]_D^{24} = +101.7$ (*c* 1.45, $CHCl_3$)
Source of chirality: catalytic enantioselective cyclopropanation
Absolute configuration: unknown

Naka Koyata, Tsuyoshi Miura, Yoko Akaiwa, Hisashi Sasaki, Rie Sato, Takuya Nagai, Hirohisa Fujimori, Takuya Noguchi, Masayuki Kirihara, Nobuyuki Imai *

Tetrahedron: Asymmetry *20 (2009) 2065*



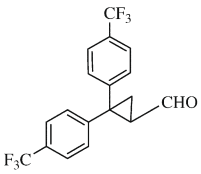
$C_{20}H_{16}F_6N_2$

2-(2,2-Bis(4-trifluoromethylphenyl)cyclopropyl)imidazoline

Ee = 74%
$[\alpha]_D^{23} = +68.6$ (*c* 1.18, MeOH)
Source of chirality: catalytic enantioselective cyclopropanation
Absolute configuration: unknown

Naka Koyata, Tsuyoshi Miura, Yoko Akaiwa, Hisashi Sasaki, Rie Sato, Takuya Nagai, Hirohisa Fujimori, Takuya Noguchi, Masayuki Kirihara, Nobuyuki Imai *

Tetrahedron: Asymmetry *20 (2009) 2065*



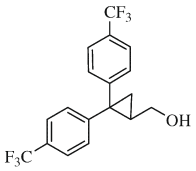
$C_{18}H_{12}F_6O$

2,2-Bis(4-trifluoromethylphenyl)cyclopropanecarboxaldehyde

Ee = 73%
$[\alpha]_D^{27} = +86.4$ (*c* 1.43, $CHCl_3$)
Source of chirality: catalytic enantioselective cyclopropanation
Absolute configuration: unknown

Naka Koyata, Tsuyoshi Miura, Yoko Akaiwa, Hisashi Sasaki, Rie Sato, Takuya Nagai, Hirohisa Fujimori, Takuya Noguchi, Masayuki Kirihara, Nobuyuki Imai *

Tetrahedron: Asymmetry *20 (2009) 2065*



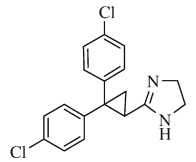
$C_{18}H_{14}F_6O$

2,2-Bis(4-trifluoromethylphenyl)cyclopropylmethanol

Ee = 73%
$[\alpha]_D^{24} = +80.0$ (*c* 1.41, $CHCl_3$)
Source of chirality: catalytic enantioselective cyclopropanation
Absolute configuration: unknown

Naka Koyata, Tsuyoshi Miura, Yoko Akaiwa, Hisashi Sasaki, Rie Sato, Takuya Nagai, Hirohisa Fujimori, Takuya Noguchi, Masayuki Kirihara, Nobuyuki Imai *

Tetrahedron: Asymmetry *20 (2009) 2065*



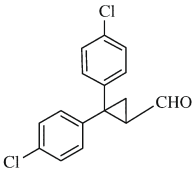
$C_{18}H_{16}Cl_2N_2$

2-(2,2-Bis(4-chlorophenyl)cyclopropyl)imidazoline

Ee = 71%
$[\alpha]_D^{24} = +86.0$ (*c* 0.97, MeOH)
Source of chirality: catalytic enantioselective cyclopropanation
Absolute configuration: unknown

Naka Koyata, Tsuyoshi Miura, Yoko Akaiwa, Hisashi Sasaki, Rie Sato, Takuya Nagai, Hirohisa Fujimori, Takuya Noguchi, Masayuki Kirihara, Nobuyuki Imai *

Tetrahedron: Asymmetry *20 (2009) 2065*



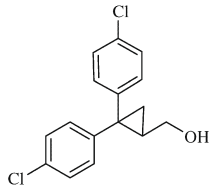
$C_{16}H_{12}Cl_2O$

2,2-Bis(4-chlorophenyl)cyclopropanecarboxaldehyde

Ee = 72%
$[\alpha]_D^{27} = +95.0$ (*c* 0.65, $CHCl_3$)
Source of chirality: catalytic enantioselective cyclopropanation
Absolute configuration: unknown

Naka Koyata, Tsuyoshi Miura, Yoko Akaiwa, Hisashi Sasaki, Rie Sato, Takuya Nagai, Hirohisa Fujimori, Takuya Noguchi, Masayuki Kirihara, Nobuyuki Imai *

Tetrahedron: Asymmetry *20 (2009) 2065*



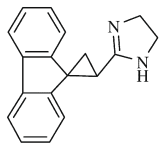
$C_{16}H_{14}Cl_2O$

2,2-Bis(4-chlorophenyl)cyclopropylmethanol

Ee = 72%
$[\alpha]_D^{24} = +100.4$ (*c* 0.78, $CHCl_3$)
Source of chirality: catalytic enantioselective cyclopropanation
Absolute configuration: unknown

Naka Koyata, Tsuyoshi Miura, Yoko Akaiwa, Hisashi Sasaki, Rie Sato, Takuya Nagai, Hirohisa Fujimori, Takuya Noguchi, Masayuki Kirihara, Nobuyuki Imai *

Tetrahedron: Asymmetry *20 (2009) 2065*



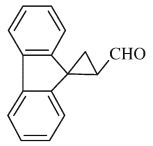
$C_{18}H_{16}N_2$

2-(2,2-Fluorenylcyclopropyl)imidazoline

Ee = 58%
$[\alpha]_D^{27} = +186.4$ (*c* 0.34, $CHCl_3$)
Source of chirality: catalytic enantioselective cyclopropanation
Absolute configuration: unknown

Naka Koyata, Tsuyoshi Miura, Yoko Akaiwa, Hisashi Sasaki, Rie Sato, Takuya Nagai, Hirohisa Fujimori, Takuya Noguchi, Masayuki Kirihara, Nobuyuki Imai *

Tetrahedron: Asymmetry *20 (2009) 2065*



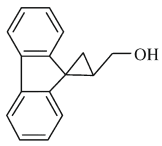
$C_{16}H_{12}O$

2,2-Fluorenylcyclopropanecarboxaldehyde

Ee = 60%
$[\alpha]_D^{27} = +125.5$ (*c* 0.99, $CHCl_3$)
Source of chirality: catalytic enantioselective cyclopropanation
Absolute configuration: unknown

Naka Koyata, Tsuyoshi Miura, Yoko Akaiwa, Hisashi Sasaki, Rie Sato, Takuya Nagai, Hirohisa Fujimori, Takuya Noguchi, Masayuki Kirihara, Nobuyuki Imai *

Tetrahedron: Asymmetry *20 (2009) 2065*



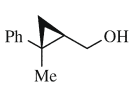
$C_{16}H_{14}O$

2,2-Fluorenylcyclopropylmethanol

Ee = 60%
$[\alpha]_D^{24} = +12.5$ (*c* 1.12, $CHCl_3$)
Source of chirality: catalytic enantioselective cyclopropanation
Absolute configuration: unknown

Naka Koyata, Tsuyoshi Miura, Yoko Akaiwa, Hisashi Sasaki, Rie Sato, Takuya Nagai, Hirohisa Fujimori, Takuya Noguchi, Masayuki Kirihara, Nobuyuki Imai *

Tetrahedron: Asymmetry *20 (2009) 2065*



$C_{11}H_{14}O$

(1*S*,2*S*)-2-Methyl-2-phenylcyclopropylmethanol

Ee = 38%
$[\alpha]_D^{24} = +24.1$ (*c* 1.01, $CHCl_3$)
Source of chirality: catalytic enantioselective cyclopropanation
Absolute configuration: (1*S*,2*S*)

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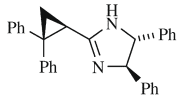

$C_{30}H_{26}N_2$

(4*R*,5*R*,1′*R*)-2-(2,2-Diphenylcyclopropyl)-4,5-diphenyl-2-imidazoline

Ee = 98%
$[\alpha]_D^{27} = +152.5$ (*c* 1.00, MeOH)
Source of chirality: catalytic enantioselective cyclopropanation
Absolute configuration: (4*R*,5*R*,1′*R*)

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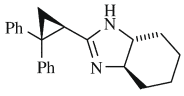

$C_{22}H_{24}N_2$

(4*R*,5*R*,1′*R*)-2-(2,2-Diphenylcyclopropyl)-4,5-cyclohexanimidazoline

Ee = 98%
$[\alpha]_D^{27} = +177.1$ (*c* 0.71, MeOH)
Source of chirality: catalytic enantioselective cyclopropanation
Absolute configuration: (4*R*,5*R*,1′*R*)