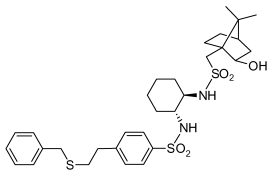
Vicente J. Forrat, Diego J. Ramón* and Miguel Yus*

Tetrahedron: Asymmetry *19 (2008) 537*



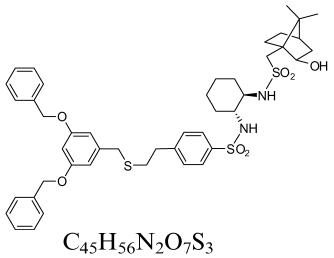
Ee = 100%
$[\alpha]_D^{25} = +13.8$ (*c* 1.1 $CHCl_3$)
Source of chirality: (+)-10-camphorsulfonyl chloride and (−)-diaminocyclohexane

$C_{31}H_{46}N_2O_6S_3$

N-{2-(2-Hydroxy-7,7-dimethylbicyclo[2.2.1]hept-1-ylmethanesulfonylamino)cyclohexyl}-4-(2-benzylsulfanylethyl)benzenesulfonamide

Vicente J. Forrat, Diego J. Ramón* and Miguel Yus*

Tetrahedron: Asymmetry *19 (2008) 537*



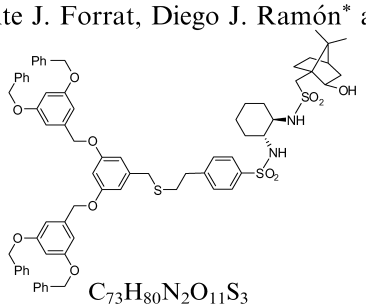
Ee = 100%
$[\alpha]_D^{25} = +14.0$ (*c* 1.1 $CHCl_3$)
Source of chirality: (+)-10-camphorsulfonyl chloride and (−)-diaminocyclohexane

$C_{45}H_{56}N_2O_7S_3$

N-{2-(2-Hydroxy-7,7-dimethylbicyclo[2.2.1]hept-1-ylmethanesulfonylamino)cyclohexyl}-4-[2-(3,5-bisbenzyloxybenzylsulfanylethyl)benzenesulfonamide

Vicente J. Forrat, Diego J. Ramón* and Miguel Yus*

Tetrahedron: Asymmetry *19 (2008) 537*



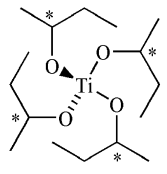
Ee = 100%
$[\alpha]_D^{25} = +4.5$ (*c* 1.1 $CHCl_3$)
Source of chirality: (+)-10-camphorsulfonyl chloride and (−)-diaminocyclohexane

$C_{73}H_{80}N_2O_{11}S_3$

N-{2-(2-Hydroxy-7,7-dimethylbicyclo[2.2.1]hept-1-ylmethanesulfonylamino)cyclohexyl}-4-{2-[3,5-bis(3,5-bisbenzyloxy-benzyloxy)benzylsulfanylethyl)benzenesulfonamide

Samantha N. MacMillan, Kaysia T. Ludford and Joseph M. Tanski*

Tetrahedron: Asymmetry *19 (2008) 543*



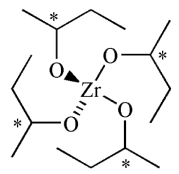
$[\alpha]_D^{24} = -83.1$ (*c* 1.0, C_6H_6)
Absolute configuration: (*R*)

$C_{16}H_{36}O_4Ti$

Titanium(IV) tetra-(*R*)-(−)-*sec*-butoxide

Samantha N. MacMillan, Kaysia T. Ludford and Joseph M. Tanski*

Tetrahedron: Asymmetry *19 (2008) 543*

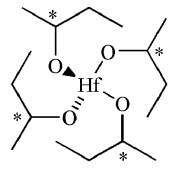


$[\alpha]_D^{24} = -20.9$ (*c* 1.0, C_6H_6)
Absolute configuration: (*R*)

$C_{16}H_{36}O_4Zr$
Zirconium(IV) tetra-(*R*)-(−)-*sec*-butoxide

Samantha N. MacMillan, Kaysia T. Ludford and Joseph M. Tanski*

Tetrahedron: Asymmetry *19 (2008) 543*

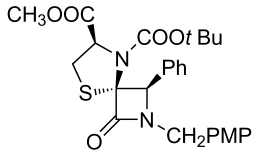


$[\alpha]_D^{24} = -11.75$ (*c* 1.0, C_6H_6)
Absolute configuration: (*R*)

$C_{16}H_{36}O_4Hf$
Hafnium(IV) tetra-(*R*)-(−)-*sec*-butoxide

Giuseppe Cremonesi, Piero Dalla Croce, Francesco Fontana and Concetta La Rosa*

Tetrahedron: Asymmetry *19 (2008) 554*

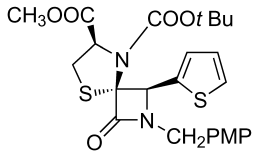


De >98% [NMR]
$[\alpha]_D^{20} = -154.8$ (*c* 0.64, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (3*R*,4*R*,7*R*)

$C_{26}H_{30}N_2O_6S$
(3*R*,4*R*,7*R*)-2-(4-Methoxy-benzyl)-1-oxo-3-phenyl-5-thia-2,8-diazaspiro[3.4]octane-7,8-dicarboxylic acid 8-*tert*-butyl ester 7-methyl ester

Giuseppe Cremonesi, Piero Dalla Croce, Francesco Fontana and Concetta La Rosa*

Tetrahedron: Asymmetry *19 (2008) 554*

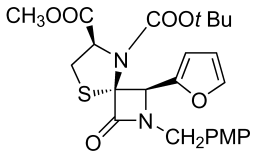


De >98% [NMR]
$[\alpha]_{20}^{D} = -176.6$ (*c* 0.56, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (3*S*,4*R*,7*R*)

$C_{24}H_{28}N_2O_6S_2$
(3*S*,4*R*,7*R*)-2-(4-Methoxy-benzyl)-1-oxo-3-thiophen-2-yl-5-thia-2,8-diazaspiro[3.4]octane-7,8-dicarboxylic acid 8-*tert*-butyl ester 7-methyl ester

Giuseppe Cremonesi, Piero Dalla Croce, Francesco Fontana and Concetta La Rosa*

Tetrahedron: Asymmetry *19 (2008) 554*



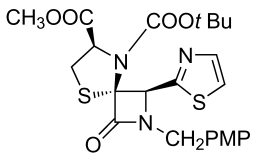
De >98% [NMR]
$[\alpha]_D^{20} = -80.1$ (c 0.14, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*R*,4*R*,7*R*)

$C_{24}H_{28}N_2O_7S$

(1*R*,4*R*,7*R*)-1-Furan-2-yl-2-(4-methoxy-benzyl)-3-oxo-5-thia-2,8-diazaspiro[3.4]octane-7,8-dicarboxylic acid 8-*tert*-butyl ester 7-methyl ester

Giuseppe Cremonesi, Piero Dalla Croce, Francesco Fontana and Concetta La Rosa*

Tetrahedron: Asymmetry *19 (2008) 554*



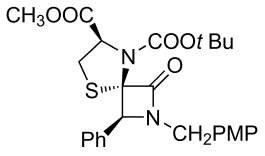
De >98% [NMR]
$[\alpha]_D^{20} = -149.1$ (c 0.83, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (3*S*,4*R*,7*R*)

$C_{23}H_{27}N_3O_6S_2$

(3*S*,4*R*,7*R*)-2-(4-Methoxy-benzyl)-1-oxo-3-thiazol-2-yl-5-thia-2,8-diazaspiro[3.4]octane-7,8-dicarboxylic acid 8-*tert*-butyl ester 7-methyl ester

Giuseppe Cremonesi, Piero Dalla Croce, Francesco Fontana and Concetta La Rosa*

Tetrahedron: Asymmetry *19 (2008) 554*



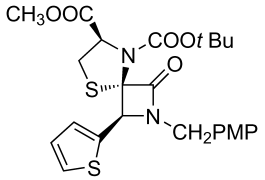
De >98% [NMR]
$[\alpha]_D^{20} = +46.9$ (c 0.71, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (3*S*,4*S*,7*R*)

$C_{26}H_{30}N_2O_6S$

(3*S*,4*S*,7*R*)-2-(4-Methoxy-benzyl)-1-oxo-3-phenyl-5-thia-2,8-diazaspiro[3.4]octane-7,8-dicarboxylic acid 8-*tert*-butyl ester 7-methyl ester

Giuseppe Cremonesi, Piero Dalla Croce, Francesco Fontana and Concetta La Rosa*

Tetrahedron: Asymmetry *19 (2008) 554*



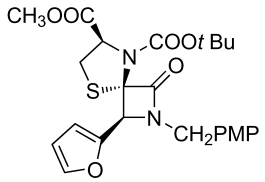
De >98% [NMR]
$[\alpha]_D^{20} = +50.5$ (c 0.92, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (3*R*,4*S*,7*R*)

$C_{24}H_{28}N_2O_6S_2$

(3*R*,4*S*,7*R*)-2-(4-Methoxy-benzyl)-1-oxo-3-phenyl-5-thia-2,8-diazaspiro[3.4]octane-7,8-dicarboxylic acid 8-*tert*-butyl ester 7-methyl ester

Giuseppe Cremonesi, Piero Dalla Croce, Francesco Fontana and Concetta La Rosa*

Tetrahedron: Asymmetry *19 (2008) 554*



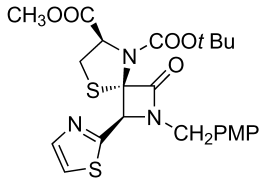
De >98% [NMR]
$[\alpha]_D^{20} = +15.0$ (*c* 1.02, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*S*,4*S*,7*R*)

$C_{24}H_{28}N_2O_7S$

(1*S*,4*S*,7*R*)-1-Furan-2-yl-2-(4-methoxy-benzyl)-3-oxo-5-thia-2,8-diazaspiro[3.4]octane-7,8-dicarboxylic acid 8-*tert*-butyl ester 7-methyl ester

Giuseppe Cremonesi, Piero Dalla Croce, Francesco Fontana and Concetta La Rosa*

Tetrahedron: Asymmetry *19 (2008) 554*



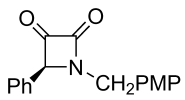
De >98% [NMR]
$[\alpha]_D^{20} = +35.1$ (*c* 0.79, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (3*R*,4*S*,7*R*)

$C_{23}H_{27}N_3O_6S_2$

(3*R*,4*S*,7*R*)-2-(4-Methoxy-benzyl)-1-oxo-3-thiazol-2-yl-5-thia-2,8-diazaspiro[3.4]octane-7,8-dicarboxylic acid 8-*tert*-butyl ester 7-methyl ester

Giuseppe Cremonesi, Piero Dalla Croce, Francesco Fontana and Concetta La Rosa*

Tetrahedron: Asymmetry *19 (2008) 554*



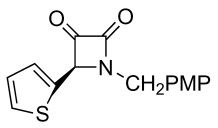
Ee >98% [^{1}H NMR with (+) Eu(hfc)$_3$]
$[\alpha]_D^{20} = +17.5$ (*c* 0.64, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (4*S*)

$C_{17}H_{15}NO_3$

(*S*)-1-(4-Methoxy-benzyl)-4-phenyl-azetidine-2,3-dione

Giuseppe Cremonesi, Piero Dalla Croce, Francesco Fontana and Concetta La Rosa*

Tetrahedron: Asymmetry *19 (2008) 554*



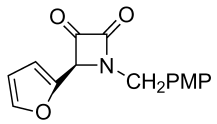
Ee >98% [^{1}H NMR with (+) Eu(hfc)$_3$]
$[\alpha]_D^{20} = +84.9$ (*c* 0.17, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (4*R*)

$C_{15}H_{13}NO_3S$

(*R*)-1-(4-Methoxy-benzyl)-4-thiophen-2-yl-azetidine-2,3-dione

Giuseppe Cremonesi, Piero Dalla Croce, Francesco Fontana and Concetta La Rosa*

Tetrahedron: Asymmetry *19 (2008) 554*



$C_{15}H_{13}NO_4$

(*S*)-4-Furan-2-yl-1-(4-methoxy-benzyl)-azetidine-2,3-dione

Ee >98% [^{1}H NMR with (+) Eu(hfc)$_3$]

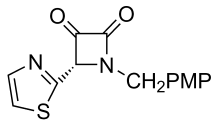
$[\alpha]_D^{20} = +38.4$ (*c* 0.42, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: (4*S*)

Giuseppe Cremonesi, Piero Dalla Croce, Francesco Fontana and Concetta La Rosa*

Tetrahedron: Asymmetry *19 (2008) 554*



$C_{14}H_{12}N_2O_3S$

(*S*)-1-(4-Methoxy-benzyl)-4-thiazol-2-yl-azetidine-2,3-dione

Ee >98% [^{1}H NMR with (+) Eu(hfc)$_3$]

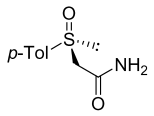
$[\alpha]_D^{20} = -20.7$ (*c* 0.52, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: (4*S*)

Piotr Kiełbasiński,* Michał Rachwalski, Marian Mikołajczyk and Floris P. J. T. Rutjes*

Tetrahedron: Asymmetry *19 (2008) 562*



$C_9H_{11}NO_2S$

p-Toluenesulfinylacetamide

Ee = 95%

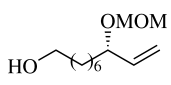
$[\alpha]_D = -230.0$ (*c* 1, MeOH)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: (*S*) (comparative CD analysis and chemical correlation)

Kagita Veera Babu and Gangavaram V. M. Sharma*

Tetrahedron: Asymmetry *19 (2008) 577*



$C_{12}H_{24}O_3$

(8*S*)-8-(Methoxymethoxy)-9-decen-1-ol

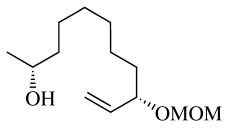
$[\alpha]_D = -148.2$ (*c* 0.25, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (8*S*)

Kagita Veera Babu and Gangavaram V. M. Sharma*

Tetrahedron: Asymmetry *19 (2008) 577*

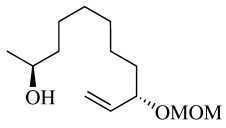


$C_{13}H_{26}O_3$
(2*R*,9*S*)-9-(Methoxymethoxy)-10-undecen-2-ol

$[\alpha]_D = -177.6$ (*c* 0.25, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (2*R*,9*S*)

Kagita Veera Babu and Gangavaram V. M. Sharma*

Tetrahedron: Asymmetry *19 (2008) 577*

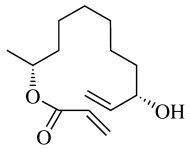


$C_{13}H_{26}O_3$
(2*S*,9*S*)-9-(Methoxymethoxy)-10-undecen-2-ol

$[\alpha]_D = -2.6$ (*c* 0.25, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (2*S*,9*S*)

Kagita Veera Babu and Gangavaram V. M. Sharma*

Tetrahedron: Asymmetry *19 (2008) 577*

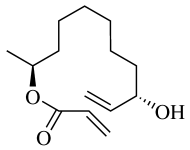


$C_{14}H_{24}O_3$
(1*R*,8*S*)-8-Hydroxy-1-methyl-9-decenyl acrylate

$[\alpha]_D = +11.5$ (*c* 0.25, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*R*,8*S*)

Kagita Veera Babu and Gangavaram V. M. Sharma*

Tetrahedron: Asymmetry *19 (2008) 577*

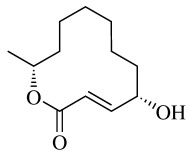


$C_{14}H_{24}O_3$
(1*S*,8*S*)-8-Hydroxy-1-methyl-9-decenyl acrylate

$[\alpha]_D = -12.7$ (*c* 0.25, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*S*,8*S*)

Kagita Veera Babu and Gangavaram V. M. Sharma*

Tetrahedron: Asymmetry *19 (2008) 577*



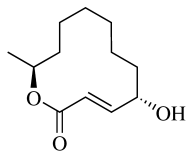
$C_{12}H_{20}O_3$

Patulolide C

$[\alpha]_D = +6.0$ (c 0.25, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (4*S*,11*R*)

Kagita Veera Babu and Gangavaram V. M. Sharma*

Tetrahedron: Asymmetry *19 (2008) 577*



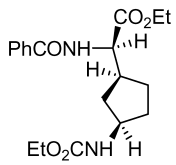
$C_{12}H_{20}O_3$

11-Epipatulolide C

$[\alpha]_D = +3.6$ (c 0.25, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (4*S*,11*S*)

Maria Luisa Gelmi, Francesca Clerici, Raffaella Gandolfi and Sara Pellegrino*

Tetrahedron: Asymmetry *19 (2008) 584*



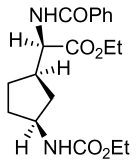
$C_{19}H_{26}N_2O_5$

Ethyl (1′*S*,3′*R*,2*R*)-2-benzoylamino-(3′-ethoxycarbonylamino-cyclopentyl)-acetate

$[\alpha]_D^{25} = -5.3$ (c 0.3, $CHCl_3$)
Source of chirality: enzymatic resolution
Absolute configuration: (1′*S*,3′*R*,2*R*)

Maria Luisa Gelmi, Francesca Clerici, Raffaella Gandolfi and Sara Pellegrino*

Tetrahedron: Asymmetry *19 (2008) 584*



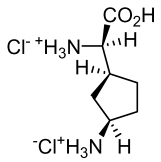
$C_{19}H_{26}N_2O_5$

Ethyl (1′*R*,3′*S*,2*R*)-2-benzoylamino-(3′-ethoxycarbonylamino-cyclopentyl)-acetate

$[\alpha]_D^{25} = -21.2$ (c 0.3, $CHCl_3$)
Source of chirality: enzymatic resolution
Absolute configuration: (1′*R*,3′*S*,2*R*)

Maria Luisa Gelmi, Francesca Clerici, Raffaella Gandolfi and Sara Pellegrino*

Tetrahedron: Asymmetry *19 (2008) 584*



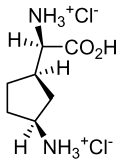
$[\alpha]_D^{25} = -17.7$ (c 1, MeOH)
Source of chirality: enzymatic resolution
Absolute configuration: (1′*S*,3′*R*,2*R*)

$C_7H_{16}Cl_2N_2O_2$

(1′*S*,3′*R*,2*R*)-2,3′-Diamino-cyclopentyl-acetic acid dihydrochloride

Maria Luisa Gelmi, Francesca Clerici, Raffaella Gandolfi and Sara Pellegrino*

Tetrahedron: Asymmetry *19 (2008) 584*



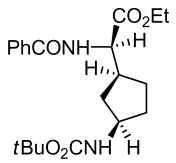
$[\alpha]_D^{25} = -15.2$ (c 1, MeOH)
Source of chirality: enzymatic resolution
Absolute configuration: (1′*R*,3′*S*,2*R*)

$C_7H_{16}Cl_2N_2O_2$

(1′*R*,3′*S*,2*R*)-2,3′-Diamino-cyclopentyl-acetic acid dihydrochloride

Maria Luisa Gelmi, Francesca Clerici, Raffaella Gandolfi and Sara Pellegrino*

Tetrahedron: Asymmetry *19 (2008) 584*



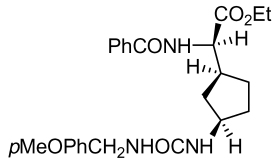
$[\alpha]_D^{25} = -10.3$ (c 1, $CHCl_3$)
Source of chirality: enzymatic resolution
Absolute configuration: (1′*S*,3′*R*,2*R*)

$C_{21}H_{30}N_2O_5$

Ethyl (1′*S*,3′*R*,2*R*)-2-benzoylamino-(3′-*t*-butoxycarbonylamino-cyclopentyl)-acetate

Maria Luisa Gelmi, Francesca Clerici, Raffaella Gandolfi and Sara Pellegrino*

Tetrahedron: Asymmetry *19 (2008) 584*



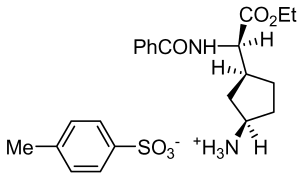
$[\alpha]_D^{25} = -6.9$ (c 0.4, DMSO)
Source of chirality: enzymatic resolution
Absolute configuration: (1′*S*,3′*R*,2*R*)

$C_{25}H_{31}N_3O_5$

Ethyl (1′*S*,3′*R*,2*R*)-2-benzoylamino-[3′-(*N*′-*p*methoxybenzyl)ureydo-cyclopentyl]-acetate

Maria Luisa Gelmi, Francesca Clerici, Raffaella Gandolfi and Sara Pellegrino*

Tetrahedron: Asymmetry *19 (2008) 584*



$C_{23}H_{30}N_2O_6S$

Ethyl (1′*S*,3′*R*,2*R*)-2-benzoylamino-(3′-amino-cyclopentyl)-acetate *p*-toluensulfonate

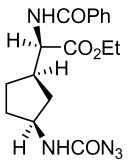
$[\alpha]_D^{25} = +8.9$ (*c* 0.4, DMSO)

Source of chirality: enzymatic resolution

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

Maria Luisa Gelmi, Francesca Clerici, Raffaella Gandolfi and Sara Pellegrino*

Tetrahedron: Asymmetry *19 (2008) 584*



$C_{17}H_{21}N_5O_4$

Ethyl (1′*R*,3′*S*,2*R*)-benzoylamino-(3′-carbamoyl-cyclopentyl)-acetate

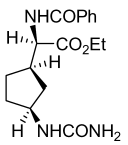
$[\alpha]_D^{25} = +3.0$ (*c* 1, $CHCl_3$)

Source of chirality: enzymatic resolution

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

Maria Luisa Gelmi, Francesca Clerici, Raffaella Gandolfi and Sara Pellegrino*

Tetrahedron: Asymmetry *19 (2008) 584*



$C_{17}H_{23}N_3O_4$

Ethyl (1′*R*,3′*S*,2*R*)-benzoylamino-(3′-ureydo-cyclopentyl)-acetate

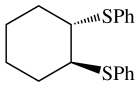
$[\alpha]_D^{25} = -10.2$ (*c* 1, MeOH)

Source of chirality: enzymatic resolution

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

Elżbieta Wojaczyńska and Jacek Skarżewski*

Tetrahedron: Asymmetry *19 (2008) 593*



$C_{18}H_{20}S_2$

(+)-(1*S*,2*S*)-1,2-Bis(phenylsulfenyl)cyclohexane

De >98% (by ^1H NMR)

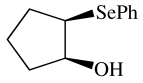
$[\alpha]_D^{20} = +120.0$ (*c* 2.20, CH_2Cl_2) >95% ee

Source of chirality: stereoselective nucleophilic substitution

Absolute configuration: (1*S*,2*S*) (by chemical correlation)

Elżbieta Wojaczyńska and Jacek Skarżewski*

Tetrahedron: Asymmetry *19 (2008) 593*



$C_{11}H_{14}OSe$

(+)-(1*S*,2*R*)-2-Phenylselenylcyclopentanol

De >98% (by ^1H NMR)

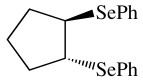
$[\alpha]_D^{20} = +49.3$ (*c* 1.52, CH_2Cl_2) >95% ee

Source of chirality: stereoselective nucleophilic substitution

Absolute configuration: (1*S*,2*R*) (by chemical correlation)

Elżbieta Wojaczyńska and Jacek Skarżewski*

Tetrahedron: Asymmetry *19 (2008) 593*



$C_{17}H_{18}Se_2$

(−)-(1*R*,2*R*)-1,2-Bis(phenylselenyl)cyclopentane

De >98% (by ^1H NMR)

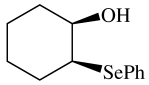
$[\alpha]_D^{20} = -18.0$ (*c* 1.00, CH_2Cl_2) >95% ee

Source of chirality: stereoselective nucleophilic substitution

Absolute configuration: (1*R*,2*R*) (by chemical correlation)

Elżbieta Wojaczyńska and Jacek Skarżewski*

Tetrahedron: Asymmetry *19 (2008) 593*



$C_{12}H_{16}OSe$

(−)-(1*R*,2*S*)-2-Phenylselenylcyclohexanol

De >98% (by ^1H NMR)

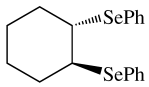
$[\alpha]_D^{20} = -8.3$ (*c* 1.08, CH_2Cl_2) >95% ee

Source of chirality: stereoselective nucleophilic substitution

Absolute configuration: (1*R*,2*S*) (by chemical correlation)

Elżbieta Wojaczyńska and Jacek Skarżewski*

Tetrahedron: Asymmetry *19 (2008) 593*



$C_{18}H_{20}Se_2$

(+)-(1*S*,2*S*)-1,2-Bis(phenylselenyl)cyclohexane

De >98% (by ^1H NMR)

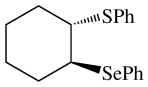
$[\alpha]_D^{20} = +90.8$ (*c* 0.98, CH_2Cl_2) >95% ee

Source of chirality: stereoselective nucleophilic substitution

Absolute configuration: (1*S*,2*S*) (by chemical correlation)

Elżbieta Wojaczyńska and Jacek Skarżewski*

Tetrahedron: Asymmetry *19 (2008) 593*



$C_{18}H_{20}SSe$

(+)-(1*S*,2*S*)-1-Phenylsulfenyl-2-phenylselenylcyclohexane

De >98% (by ^{1}H NMR)

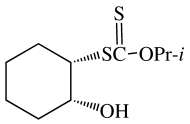
$[\alpha]_D = +100.0$ (*c* 0.91,CH_2Cl_2) >95% ee

Source of chirality: stereoselective nucleophilic substitution

Absolute configuration: (1*S*,2*S*) (by chemical correlation)

Elżbieta Wojaczyńska and Jacek Skarżewski*

Tetrahedron: Asymmetry *19 (2008) 593*



$C_{10}H_{18}O_2S_2$

(−)-(1*S*,2*R*) *O*-Isopropyl-*S*-(2-hydroxycyclohexyl) dithiocarbonate

De >98% (by ^{1}H NMR)

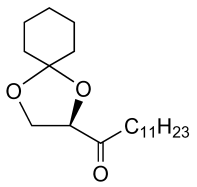
$[\alpha]_D = -27.9$ (*c* 1.02, CH_2Cl_2) >95% ee

Source of chirality: stereoselective nucleophilic substitution

Absolute configuration: (1*S*,2*R*) (by chemical correlation)

Prasad Vichare and Angshuman Chattopadhyay*

Tetrahedron: Asymmetry *19 (2008) 598*



$C_{20}H_{36}O_3$

(2*R*)-1,2-*O*-Cyclohexylidene tetradedacane-1,2-dihydroxy-3-one

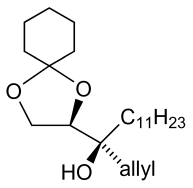
$[\alpha]_D^{22} = +22.2$ (*c* 0.12, $CHCl_3$)

Source of chirality: (2*R*)-2,3-cyclohexylideneglyceraldehyde

Absolute configuration: (2*R*)

Prasad Vichare and Angshuman Chattopadhyay*

Tetrahedron: Asymmetry *19 (2008) 598*



$C_{23}H_{42}O_3$

(2*R*,3*R*)-1,2-*O*-Cyclohexylidene-3-undecyl-hex-5-en-1,2,3-triol

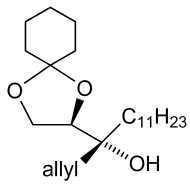
$[\alpha]_D^{22} = +11.6$ (*c* 0.8, $CHCl_3$)

Source of chirality: (2*R*-2,3-cyclohexylideneglyceraldehyde

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

Prasad Vichare and Angshuman Chattopadhyay*

Tetrahedron: Asymmetry *19 (2008) 598*



$C_{23}H_{42}O_3$

(2*R*,3*S*)-1,2-*O*-Cyclohexylidene-3-undecyl-hex-5-en-1,2,3-triol

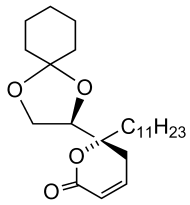
$[\alpha]_D^{22} = -5.3$ (*c* 0.9, $CHCl_3$)

source of chirality: (2*R*)-2,3-cyclohexylideneglycer-aldehyde

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

Prasad Vichare and Angshuman Chattopadhyay*

Tetrahedron: Asymmetry *19 (2008) 598*



$C_{22}H_{40}O_4$

(5*R*)-5[(2′*R*)-1′,2′-*O*-Cyclohexylidene dihydroxyethyl]-hexadec-2-en-5-olide

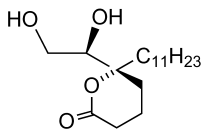
$[\alpha]_D^{22} = +2.7$ (*c* 1.0, $CHCl_3$)

Source of chirality: (2*R*)-2,3-cyclohexylideneglycer-aldehyde

Absolute configuration: (5*R*,2′*R*)

Prasad Vichare and Angshuman Chattopadhyay*

Tetrahedron: Asymmetry *19 (2008) 598*



$C_{18}H_{34}O_4$

(5*R*)-5[(2′*R*)-Dihydroxyethyl]-5-hexadecanolide

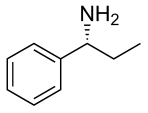
$[\alpha]_D^{22} = -12.1$ (*c* 1.1, $CHCI_3$)

Source of chirality: (2*R*)-2,3-cyclohexylideneglycer-aldehyde

Absolute configuration: (5*R*,2′*R*)

Raquel Almansa, David Guijarro* and Miguel Yus*

Tetrahedron: Asymmetry *19 (2008) 603*



$C_9H_{13}N$

1-Phenylpropan-1-amine

Ee = 90%

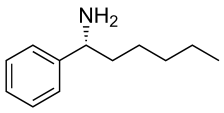
$[\alpha]_D^{20} = +11.9$ (*c* 1.1, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Raquel Almansa, David Guijarro* and Miguel Yus*

Tetrahedron: Asymmetry *19 (2008) 603*



$C_{12}H_{19}N$

1-Phenylhexan-1-amine

Ee = 92%

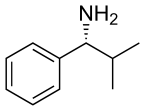
$[\alpha]_D^{20} = +4.0$ (*c* 1.6, EtOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Raquel Almansa, David Guijarro* and Miguel Yus*

Tetrahedron: Asymmetry *19 (2008) 603*



$C_{10}H_{15}N$

2-Methyl-1-phenylpropan-1-amine

Ee = 88%

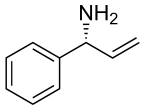
$[\alpha]_D^{20} = +6.4$ (*c* 0.6, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Raquel Almansa, David Guijarro* and Miguel Yus*

Tetrahedron: Asymmetry *19 (2008) 603*



$C_9H_{11}N$

1-Phenylprop-2-en-1-amine

Ee = 90%

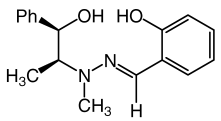
$[\alpha]_D^{20} = +9.3$ (*c* 1, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Raleigh W. Parrott II, Delvis D. Dore, Seshanand P. Chandrashekar, Jeromy T. Bentley, Brittany S. Morgan and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *19 (2008) 607*



$C_{17}H_{20}N_2O_2$

2-[(*E*)-(2-((1*R*,2*S*)-1-Hydroxy-1-phenyl-2-propyl)-2-methylhydrazono)methyl]phenol

Yellow oil

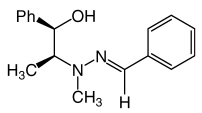
$[\alpha]_D^{26} = +233.6$ (*c* 0.62, $CHCl_3$)

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

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

Raleigh W. Parrott II, Delvis D. Dore, Seshanand P. Chandrashekar, Jeromy T. Bentley, Brittany S. Morgan and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *19 (2008) 607*

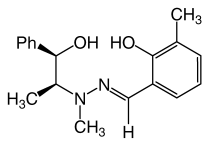


White solid, Mp = 51–53 °C
$[\alpha]_D^{26} = +140.2$ (*c* 0.71, $CHCl_3$)
Source of chirality: (1*R*,2*S*)-ephedrine
Absolute Configuration: (1*R*,2*S*)

$C_{17}H_{20}N_2O$
(1*R*,2*S*)-2-[(*E*)-2-Benzylidene-1-methylhydrazinyl]-1-phenylpropan-1-ol

Raleigh W. Parrott II, Delvis D. Dore, Seshanand P. Chandrashekar, Jeromy T. Bentley, Brittany S. Morgan and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *19 (2008) 607*

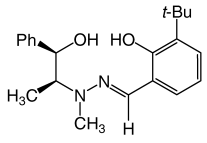


Clear oil
$[\alpha]_D^{25} = +219.7$ (*c* 0.72, $CHCl_3$)
Source of chirality: (1*R*,2*S*)-ephedrine
Absolute Configuration: (1*R*,2*S*)

$C_{18}H_{22}N_2O_2$
2-[(*E*)-(2-((1*R*,2*S*)-1-Hydroxy-1-phenyl-2-propyl)-2-methylhydrazono)methyl]-6-methyl phenol

Raleigh W. Parrott II, Delvis D. Dore, Seshanand P. Chandrashekar, Jeromy T. Bentley, Brittany S. Morgan and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *19 (2008) 607*

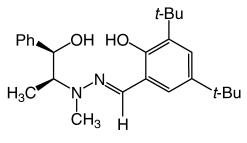


Yellow solid, Mp = 100–101 °C
$[\alpha]_D^{25} = +191.9$ (*c* 0.62, $CHCl_3$)
Source of chirality: (1*R*,2*S*)-ephedrine
Absolute Configuration: (1*R*,2*S*)

$C_{21}H_{28}N_2O_2$
2-*tert*-Butyl-6-((*E*)-(2-((1*R*,2*S*)-1-hydroxy-1-phenyl-2-propyl)-2-methylhydrazono)methyl)phenol

Raleigh W. Parrott II, Delvis D. Dore, Seshanand P. Chandrashekar, Jeromy T. Bentley, Brittany S. Morgan and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *19 (2008) 607*

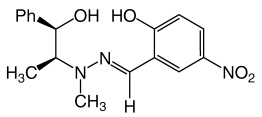


Clear oil
$[\alpha]_D^{25} = +111.3$ (*c* 0.80, $CHCl_3$)
Source of chirality: (1*R*,2*S*)-ephedrine
Absolute Configuration: (1*R*,2*S*)

$C_{25}H_{36}N_2O_2$
2,4-Di-*tert*-butyl-6-((*E*)-(2-((1*R*,2*S*)-1-hydroxy-1-phenyl-2-propyl)-2-methylhydrazono)methyl)phenol

Raleigh W. Parrott II, Delvis D. Dore, Seshanand P. Chandrashekar, Jeromy T. Bentley, Brittany S. Morgan and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *19 (2008) 607*



Orange solid, Mp = 147–149 °C
$[\alpha]_D^{25} = +180.4$ (*c* 0.60, $CHCl_3$)
Source of chirality: (1*R*,2*S*)-ephedrine
Absolute Configuration: (1*R*,2*S*)

$C_{25}H_{35}NO_2$

2-((*E*)-(2-((1*R*,2*S*)-1-Hydroxy-1-phenyl-2-propyl)-2-methylhydrazono)methyl)-4-nitrophenol

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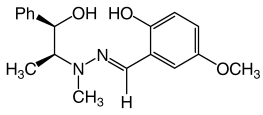
Raleigh W. Parrott II, Delvis D. Dore, Seshanand P. Chandrashekar, Jeromy T. Bentley, Brittany S. Morgan and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *19 (2008) 607*



Clear oil
$[\alpha]_D^{25} = +175.8$ (*c* 0.59, $CHCl_3$)
Source of chirality: (1*R*,2*S*)-ephedrine
Absolute Configuration: (1*R*,2*S*)

$C_{18}H_{22}N_2O_3$

2-((*E*)-(2-((1*R*,2*S*)-1-Hydroxy-1-phenyl-2-propyl)-2-methylhydrazono)methyl)-4-methoxyphenol

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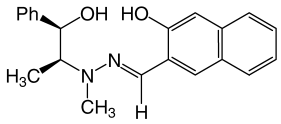
Raleigh W. Parrott II, Delvis D. Dore, Seshanand P. Chandrashekar, Jeromy T. Bentley, Brittany S. Morgan and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *19 (2008) 607*



Dark yellow solid, Mp = 123–125 °C
$[\alpha]_D^{25} = +192.8$ (*c* 0.63, $CHCl_3$)
Source of chirality: (1*R*,2*S*)-ephedrine
Absolute Configuration: (1*R*,2*S*)

$C_{21}H_{22}N_2O_2$

1-((*E*)-(2-((1*R*,2*S*)-1-Hydroxy-1-phenyl-2-propyl)-2-methylhydrazono)methyl)naphthalen-2-ol

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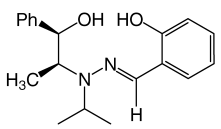
Raleigh W. Parrott, II, Delvis D. Dore, Seshanand P. Chandrashekar, Jeromy T. Bentley, Brittany S. Morgan and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *19 (2008) 607*



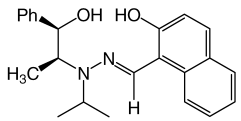
Yellow oil
$[\alpha]_D^{25} = +314.4$ (*c* 0.70, $CHCl_3$)
Source of chirality: (1*R*,2*S*)-norephedrine
Absolute Configuration: (1*R*,2*S*)

$C_{19}H_{24}N_2O_2$

2-((*E*)-(2-((1*R*,2*S*)-1-Hydroxy-1-phenyl-2-propyl)-2-isopropylhydrazono)methyl)phenol

Raleigh W. Parrott, II, Delvis D. Dore, Seshanand P. Chandrashekar, Jeromy T. Bentley, Brittany S. Morgan and Shawn R. Hitchcock*

Tetrahedron: Asymmetry *19 (2008) 607*



Yellow oil
$[\alpha]_D^{25} = +196.6$ (*c* 0.63, $CHCl_3$)
Source of chirality: (1*R*,2*S*)-norephedrine
Absolute Configuration: (1*R*,2*S*)

$C_{23}H_{26}N_2O_2$

1-((*E*)-(2-((1*R*,2*S*)-1-Hydroxy-1-phenyl-2-propyl)-2-isopropylhydrazono)methyl)naphthalene-2-ol

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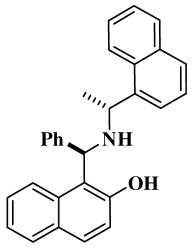
István Szatmári, Reijo Sillanpää and Ferenc Fülöp*

Tetrahedron: Asymmetry *19 (2008) 612*



Ee = >99%
$[\alpha]_D^{20} = -351.5$ (*c* 0.5, $CHCl_3$)
Source of chirality: (*R*)-(+)-1-(1-naphthyl)ethylamine
Absolute configuration: (1*R*,1′*R*)

$C_{29}H_{25}NO$

1-[(*R*)-Phenyl-1′(*R*)-(1-naphthyl)ethylaminomethyl]-2-naphthol

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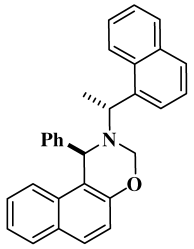
István Szatmári, Reijo Sillanpää and Ferenc Fülöp*

Tetrahedron: Asymmetry *19 (2008) 612*



Ee = >99%
$[\alpha]_D^{20} = -218.3$ (*c* 0.5, $CHCl_3$)
Source of chirality: 1-[(*R*)-phenyl-1′(*R*)-(1-naphthyl)-ethylaminomethyl]-2-naphthol
Absolute configuration: (1*R*,1′*R*)

$C_{30}H_{25}NO$

(1*R*)-1-Phenyl-2-[(1′*R*)-1′-(1-naphthylethyl)]-2,3-dihydro-1*H*-naphth[1,2-*e*][1,3]oxazine

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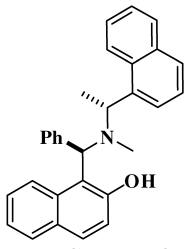
István Szatmári, Reijo Sillanpää and Ferenc Fülöp*

Tetrahedron: Asymmetry *19 (2008) 612*



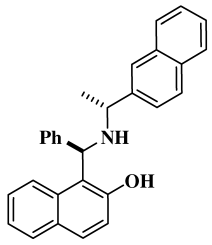
Ee = >99%
$[\alpha]_D^{20} = -399.4$ (*c* 0.5, $CHCl_3$)
Source of chirality: (1*R*)-1-phenyl-2-[(1′*R*)-1′-(1-naphthylethyl)]-2,3-dihydro-1*H*-naphth[1,2-*e*][1,3]oxazine
Absolute configuration: (1*R*,1′*R*)

$C_{30}H_{27}NO$

N-Methyl-1-[(*R*)-Phenyl-1′(*R*)-(1-naphthyl)ethylaminomethyl]-2-naphthol

István Szatmári, Reijo Sillanpää and Ferenc Fülöp*

Tetrahedron: Asymmetry *19 (2008) 612*



$C_{29}H_{25}NO$

1-[(*R*)-Phenyl-1′(*R*)-(2-naphthyl)ethylaminomethyl]-2-naphthol

Ee = >99%

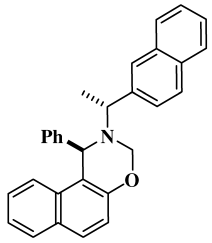
$[\alpha]_D^{20} = -236.0$ (*c* 0.5, $CHCl_3$)

Source of chirality: (*R*)-(+)-1-(2-naphthyl)ethylamine

Absolute configuration: (1*R*,1′*R*)

István Szatmári, Reijo Sillanpää and Ferenc Fülöp*

Tetrahedron: Asymmetry *19 (2008) 612*



$C_{30}H_{25}NO$

(1*R*)-1-Phenyl-2-[(1′*R*)-1′-(2-naphthylethyl)]-2,3-dihydro-1*H*-naphth[1,2-*e*][1,3]oxazine

Ee = >99%

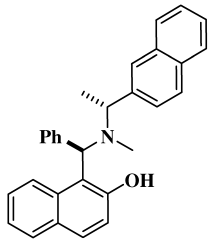
$[\alpha]_D^{20} = -143.0$ (*c* 0.5, $CHCl_3$)

Source of chirality: 1-[(*R*)-phenyl-1′(*R*)-(2-naphthyl)-ethylaminomethyl]-2-naphthol

Absolute configuration: (1*R*,1′*R*)

István Szatmári, Reijo Sillanpää and Ferenc Fülöp*

Tetrahedron: Asymmetry *19 (2008) 612*



$C_{30}H_{27}NO$

N-Methyl-1-[(*R*)-Phenyl-1′(*R*)-(2-naphthyl)ethylaminomethyl]-2-naphthol

Ee = >99%

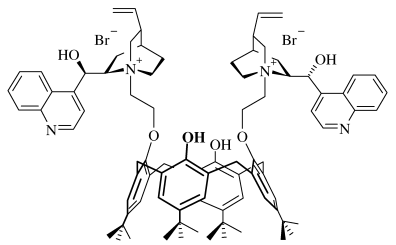
$[\alpha]_D^{20} = -255.0$ (*c* 0.5, $CHCl_3$)

Source of chirality: (1*R*)-1-phenyl-2-[(1′*R*)-1′-(2-naphthylethyl)]-2,3-dihydro-1*H*-naphth[1,2-*e*][1,3]oxazine

Absolute configuration: (1*R*,1′*R*)

Selahattin Bozkurt, Mustafa Durmaz, Mustafa Yilmaz and Abdulkadir Sirit*

Tetrahedron: Asymmetry *19 (2008) 618*



$C_{86}H_{106}N_4O_6Br_2$

25,27-Bis[(cinchonidine-yl)ethoxy]-26,28-dihydroxy-5,11,17,23-tetra(*tert*-butyl)calix[4]arene dibromide

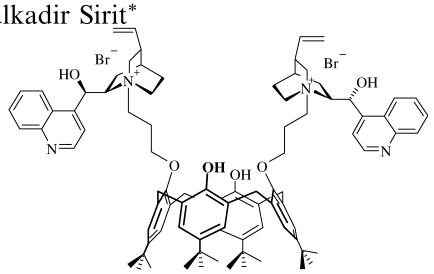
$[\alpha]_D^{25} = -25$ (*c* 0.2, MeOH)

Source of chirality: (−)-cinchonidine

Absolute configuration: (*R*,*R*)

Selahattin Bozkurt, Mustafa Durmaz, Mustafa Yilmaz and Abdulkadir Sirit*

Tetrahedron: Asymmetry *19 (2008) 618*



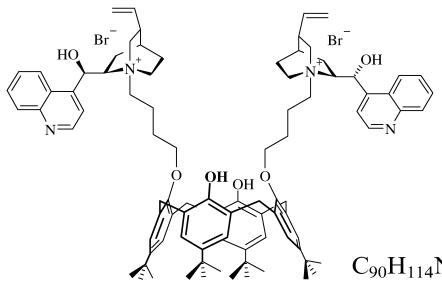
$[\alpha]_D^{25} = -28$ (*c* 0.2, MeOH)
Source of chirality: (−)-cinchonidine
Absolute configuration: (*R*,*R*)

$C_{88}H_{110}N_4O_6Br_2$

25,27-Bis[(cinchonidine-yl)propoxy]-26,28-dihydroxy-5,11,17,23-tetra(*tert*-butyl)calix[4]arene dibromide

Selahattin Bozkurt, Mustafa Durmaz, Mustafa Yilmaz and Abdulkadir Sirit*

Tetrahedron: Asymmetry *19 (2008) 618*



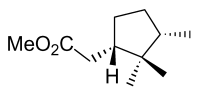
$[\alpha]_D^{25} = -35$ (*c* 0.2, MeOH)
Source of chirality: (−)-cinchonidine
Absolute configuration: (*R*,*R*)

$C_{90}H_{114}N_4O_6Br_2$

25,27-Bis[(cinchonidine-yl)butoxy]-26,28-dihydroxy-5,11,17,23-tetra(*tert*-butyl)calix[4]arene dibromide

Adusumilli Srikrishna,* Baire Beeraiah and R. Ramesh Babu

Tetrahedron: Asymmetry *19 (2008) 624*



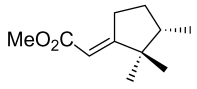
$[\alpha]_D^{23} = -9.0$ (*c* 3.8, $CHCl_3$)
Source of chirality: campholenaldehyde
Absolute configuration: (1*S*,3*S*)

$C_{11}H_{20}O_2$

Methyl 2-[(1*S*,3*S*)-2,2,3-trimethylcyclopent-1-yl]acetate

Adusumilli Srikrishna,* Baire Beeraiah and R. Ramesh Babu

Tetrahedron: Asymmetry *19 (2008) 624*



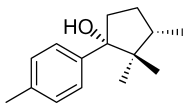
$[\alpha]_D^{24} = -7.5$ (*c* 4.6, $CHCl_3$)
Source of chirality: campholenaldehyde
Absolute configuration: (3*S*)

$C_{11}H_{28}O_2$

Methyl 2-[(3*S*)-2,2,3-trimethylcyclopent-1-ylidene]acetate

Adusumilli Srikrishna,* Baire Beeraiah and R. Ramesh Babu

Tetrahedron: Asymmetry *19 (2008) 624*



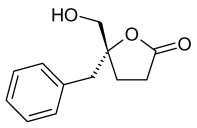
$C_{15}H_{22}O$

(1*R*,3*S*)1-[4-Methylphenyl]-2,2,3-trimethylcyclopentan-1-ol

$[\alpha]_D^{23} = +10.7$ (*c* 1.4, $CHCl_3$)
Source of chirality: campholenaldehyde
Absolute configuration: (1*R*,3*S*)

Artur Jõgi, Marit Ilves, Anne Paju, Tõnis Pehk, Tiiu Kailas, Aleksander-Mati Müürisepp and Margus Lopp*

Tetrahedron: Asymmetry *19 (2008) 628*



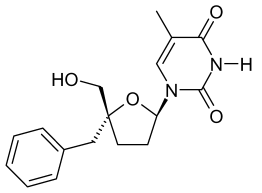
$C_{12}H_{14}O_3$

(*R*)-5-Benzyl-5-hydroxymethyl-dihydro-furan-2(3*H*)-one

$[\alpha]_D^{23} = +62.8$ (*c* 3.0, $CHCl_3$)
Source of chirality: asymmetric oxidation
Absolute configuration: (*R*)

Artur Jõgi, Marit Ilves, Anne Paju, Tõnis Pehk, Tiiu Kailas, Aleksander-Mati Müürisepp and Margus Lopp*

Tetrahedron: Asymmetry *19 (2008) 628*



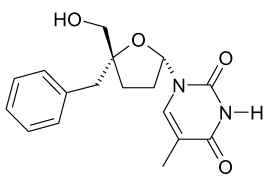
$C_{17}H_{20}N_2O_4$

1-(5-Benzyl-5-hydroxymethyl-tetrahydro-furan-2-yl)-5-methyl-1*H*-pyrimidine-2,4-dione

$[\alpha]_D^{23} = +23.5$ (*c* 1.0, MeOH)
Source of chirality: asymmetric oxidation
Absolute configuration: (2*R*,5*R*)

Artur Jõgi, Marit Ilves, Anne Paju, Tõnis Pehk, Tiiu Kailas, Aleksander-Mati Müürisepp and Margus Lopp*

Tetrahedron: Asymmetry *19 (2008) 628*



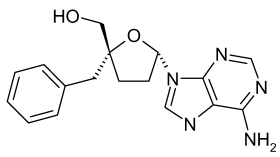
$C_{17}H_{20}N_2O_4$

1-(5-Benzyl-5-hydroxymethyl-tetrahydro-furan-2-yl)-5-methyl-1*H*-pyrimidine-2,4-dione

$[\alpha]_D^{24} = +61.6$ (*c* 1.0, MeOH)
Source of chirality: asymmetric oxidation
Absolute configuration: (2*S*,5*R*)

Artur Jõgi, Marit Ilves, Anne Paju, Tõnis Pehk, Tiiu Kailas, Aleksander-Mati Müürisepp and Margus Lopp*

Tetrahedron: Asymmetry *19 (2008) 628*



$C_{17}H_{19}N_5O_2$

5-[(6-Amino-9*H*-purin-9-yl)-2-benzyltetrahydro-furan-2-yl]methanol

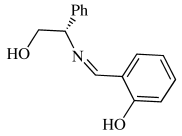
$[\alpha]_D^{22} = +6.6$ (*c* 4.0, DMSO)

Source of chirality: asymmetric oxidation

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

Mehmet Çolak and Nadir Demirel*

Tetrahedron: Asymmetry *19 (2008) 635*



$C_{15}H_{15}NO_2$

2-((Z)-{[(1*S*)-2-Hydroxy-1-phenylethyl]imino{methyl)phenol

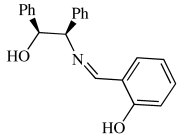
$[\alpha]_D^{20} = +99.3$ (*c* 2, CH_2Cl_2)

Source of chirality: (*S*)-(+)-phenylglycinol

Absolute configuration: (*S*)

Mehmet Çolak and Nadir Demirel*

Tetrahedron: Asymmetry *19 (2008) 635*



$C_{21}H_{19}NO_2$

2-((Z)-{[(1*R*,2S)-2-Hydroxy-1,2-diphenylethyl]imino{methyl)phenol

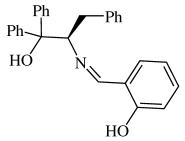
$[\alpha]_D^{20} = -11.4$ (*c* 2, CH_2Cl_2)

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

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

Mehmet Çolak and Nadir Demirel*

Tetrahedron: Asymmetry *19 (2008) 635*



$C_{28}H_{25}NO_2$

2-((Z)-{[(1*R*,)1-Benzyl-2-hydroxy-2,2-diphenylethyl]imino}methyl)phenol

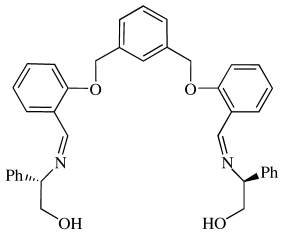
$[\alpha]_D^{20} = +169.4$ (*c* 2, CH_2Cl_2)

Source of chirality: 1,1,3-triphenyl-(*R*)-(+)-2-amino propanol

Absolute configuration: (*R*)

Mehmet Çolak and Nadir Demirel*

Tetrahedron: Asymmetry *19 (2008) 635*



$C_{38}H_{36}N_2O_4$

1,3-Bis-(2*S*)-2-{[(1Z)-(2-methoxyphenyl)methylene]amino}-2-phenylethanol

$[\alpha]_D^{20} = +40.2$ (*c* 2, CH_2Cl_2)

Source of chirality: (*S*)-(+)-phenylglycinol

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