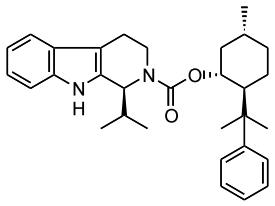
Riichiro Tsuji, Masako Nakagawa and Atsushi Nishida*

Tetrahedron: Asymmetry *14 (2003) 177*



E.e. = 100%

$[\alpha]_D^{26.5} = -31.7$ (*c* 1.85, $CHCl_3$)

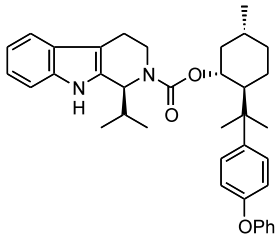
Source of chirality: synthesis from L-tryptophan

$C_{31}H_{40}N_2O_2$

(1*S*)-1-Isopropyl-1,3,4,9-tetrahydro-β-carboline-2-carboxylic acid (1*R*,2*S*,5*R*)-5-methyl-2-(1-methyl-1-phenylethyl)cyclohexyl ester

Riichiro Tsuji, Masako Nakagawa and Atsushi Nishida*

Tetrahedron: Asymmetry *14 (2003) 177*



E.e. = 100%

$[\alpha]_D^{26.5} = +57.7$ (*c* 1.01, $CHCl_3$)

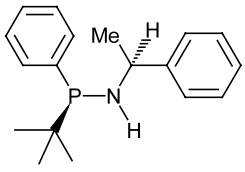
Source of chirality: synthesis from L-tryptophan

$C_{37}H_{44}N_2O_3$

(1*S*)-1-Isopropyl-1,3,4,9-tetrahydro-β-carboline-2-carboxylic acid (1*R*,2*S*,5*R*)-5-methyl-2-[1-methyl-1-(4-phenoxyphenyl)-ethyl]cyclohexyl ester

Oleg I. Kolodiazhnyi,* Evgenyi V. Gryshkun, Natalia V. Andrushko, Matthias Freytag, Peter G. Jones and Reinhard Schmutzler

Tetrahedron: Asymmetry *14 (2003) 181*



E.e. >98% (NMR)

$[\alpha]_D$ +120 (*c* 0.3, toluene)

Source of chirality: asymmetric synthesis with (−)-(*S*)-1-methylbenzylamines

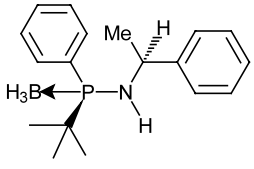
Absolute configuration: S_p

$C_{18}H_{24}NP$

(S_p,*S*)-*N*-(1-Methylbenzyl)amino-*t*-butylphenylphosphine

Oleg I. Kolodiazhnyi,* Evgenyi V. Gryshkun, Natalia V. Andrushko, Matthias Freytag, Peter G. Jones and Reinhard Schmutzler

Tetrahedron: Asymmetry *14 (2003) 181*



Mp 140–141°C

E.e. = ~98% (NMR)

$[\alpha]_D$ +24.5 (*c* 1, CH_2Cl_2)

Source of chirality: asymmetric synthesis with (−)-(*S*)-1-methylbenzylamines

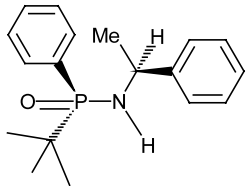
Absolute configuration: S_p

$C_{18}H_{27}BNP$

Borane complex of (S_p)-*N*-(1-methylbenzyl)amino-*t*-butylphenylphosphine **3**

Oleg I. Kolodiazhnyi,* Evgenyi V. Gryshkun, Natalia V. Andrushko, Matthias Freytag, Peter G. Jones and Reinhard Schmutzler

Tetrahedron: Asymmetry *14 (2003) 181*



$C_{18}H_{24}NPO$

(R_p,*S*)-*N*-(1-Methylbenzyl)amino-*t*-butylphenylphosphine oxide

Mp 142–144°C (heptane)

E.e. >98% (NMR)

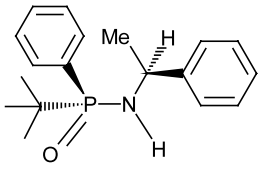
$[\alpha]_D^{20}$ −125.5 (*c* 1, ethanol)

Source of chirality: asymmetric synthesis with (−)-(*S*)-1-methylbenzylamines

Absolute configuration: R_p

Oleg I. Kolodiazhnyi,* Evgenyi V. Gryshkun, Natalia V. Andrushko, Matthias Freytag, Peter G. Jones and Reinhard Schmutzler

Tetrahedron: Asymmetry *14 (2003) 181*



$C_{18}H_{24}NPO$

(S_p,*S*)-*N*-(1-Methylbenzyl)amino-*t*-butylphenylphosphine oxide

Mp 171–172°C (ethyl acetate)

E.e. >98% (NMR)

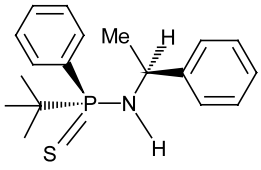
$[\alpha]_D^{20}$ −82.5 (*c* 1, ethanol)

Source of chirality: asymmetric synthesis with (−)-(*S*)-1-methylbenzylamines

Absolute configuration: S_p

Oleg I. Kolodiazhnyi,* Evgenyi V. Gryshkun, Natalia V. Andrushko, Matthias Freytag, Peter G. Jones and Reinhard Schmutzler

Tetrahedron: Asymmetry *14 (2003) 181*



$C_{18}H_{24}NPS$

(S_p,*S*)-*N*-(1-Methylbenzyl)amino-*t*-butylphenylthiophosphine sulfide

Mp 105–106°C (hexane)

E.e. >98% (NMR)

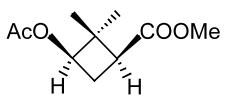
$[\alpha]_D$ −66 (*c* 2.5, ethanol)

Source of chirality: asymmetric synthesis with (−)-(*S*)-1-methylbenzylamines

Absolute configuration: S_p

Pablo D. Rouge, Albertina G. Moglioni,* Graciela Y. Moltrasio and Rosa M. Ortuño*

Tetrahedron: Asymmetry *14 (2003) 193*



$C_{10}H_{16}O_4$

Methyl (1*S*,3*R*)-3-acetoxy-2,2-dimethylcyclobutanecarboxylate

E.e. = 95%

$[\alpha]_D = 52.62$ (*c* 1.40, $CHCl_3$)

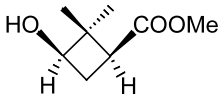
Source of chirality: (−)-*S*-verbenone

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

Pablo D. Rouge, Albertina G. Moglioni,* Graciela Y. Moltrasio and Rosa M. Ortuño*

Tetrahedron: Asymmetry *14 (2003) 193*

E.e. = 95%
$[\alpha]_D = 18.06$ (*c* 5.36, MeOH)
Source of chirality: (–)-*S*-verbenone
Absolute configuration: 1*S*,3*R*



$C_8H_{14}O_3$

Methyl (1*S*,3*R*)-3-hydroxy-2,2-dimethylcyclobutanecarboxylate

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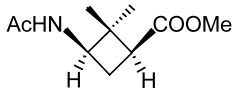
Pablo D. Rouge, Albertina G. Moglioni,* Graciela Y. Moltrasio and Rosa M. Ortuño*

Tetrahedron: Asymmetry *14 (2003) 193*

E.e. = 95%
$[\alpha]_D = 139.40$ (*c* 1.03, MeOH)
Source of chirality: (–)-*S*-verbenone
Absolute configuration: 1*S*,3*R*



$C_{10}H_{17}NO_3$

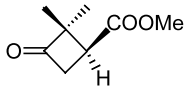
Methyl (1*S*,3*R*)-3-acetylamino-2,2-dimethylcyclobutanecarboxylate

---

Pablo D. Rouge, Albertina G. Moglioni,* Graciela Y. Moltrasio and Rosa M. Ortuño*

Tetrahedron: Asymmetry *14 (2003) 193*

E.e. = 95%
$[\alpha]_D = 15.65$ (*c* 1.15, MeOH)
Source of chirality: (–)-*S*-verbenone
Absolute configuration: 3*S*



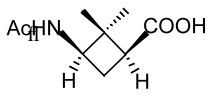
$C_8H_{13}O_3$

(*S*)-3-Carbomethoxy-2,2-dimethylcyclobutanone

Pablo D. Rouge, Albertina G. Moglioni,* Graciela Y. Moltrasio and Rosa M. Ortuño*

Tetrahedron: Asymmetry *14 (2003) 193*

E.e. = 95%
$[\alpha]_D = 38.28$ (*c* 2.14, MeOH)
Source of chirality: (–)-*S*-verbenone
Absolute configuration: 1*S*,3*R*



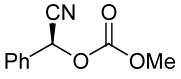
$C_9H_{15}NO_3$

(1*S*,3*R*)-3-Acetylamino-2,2-dimethyl-1-cyclobutylcarboxylic acid

Jesús Casas, Alejandro Baeza, José M. Sansano, Carmen Nájera* and José M. Saá*

Tetrahedron: Asymmetry *14 (2003) 197*

E.e. = 78%
$[\alpha]_D^{25} = -10.2$ (*c* 1.8, $CHCl_3$)
Source of chirality: (*R*)-BINOLAM
Absolute configuration: (*S*)



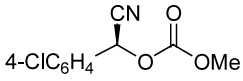
$C_{10}H_9NO_3$

Carbonic acid, (*S*)-1-cyano-1-phenylmethyl methyl ester

Jesús Casas, Alejandro Baeza, José M. Sansano, Carmen Nájera* and José M. Saá*

Tetrahedron: Asymmetry *14 (2003) 197*

E.e. = 68%
$[\alpha]_D^{25} = +3.5$ (*c* 1.1, $CHCl_3$)
Source of chirality: (*R*)-BINOLAM
Absolute configuration: (*S*)



$C_{10}H_8ClNO_3$

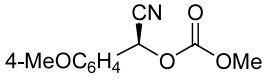
Carbonic acid, (*S*)-1-cyano-1-(4-chlorophenyl)methyl methyl ester

---

Jesús Casas, Alejandro Baeza, José M. Sansano, Carmen Nájera* and José M. Saá*

Tetrahedron: Asymmetry *14 (2003) 197*

E.e. = 78%
$[\alpha]_D^{25} = +24.7$ (*c* 2, $CHCl_3$)
Source of chirality: (*R*)-BINOLAM
Absolute configuration: (*S*)



$C_{11}H_{11}NO_4$

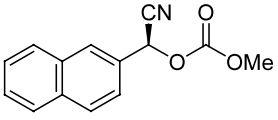
Carbonic acid, (*S*)-1-cyano-1-(4-methoxyphenyl)methyl methyl ester

---

Jesús Casas, Alejandro Baeza, José M. Sansano, Carmen Nájera* and José M. Saá*

Tetrahedron: Asymmetry *14 (2003) 197*

E.e. = 70%
$[\alpha]_D^{25} = -9.3$ (*c* 2, $CHCl_3$)
Source of chirality: (*R*)-BINOLAM
Absolute configuration: (*S*)



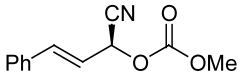
$C_{14}H_{11}NO_3$

Carconic acid, (*S*)-1-cyano-1-(2-naphthyl)methyl methyl ester

Jesús Casas, Alejandro Baeza, José M. Sansano, Carmen Nájera* and José M. Saá*

Tetrahedron: Asymmetry *14 (2003) 197*

E.e. = 60%
$[\alpha]_D^{25} = +11.6$ (*c* 1, $CHCl_3$)
Source of chirality: (*R*)-BINOLAM
Absolute configuration: (*S*)



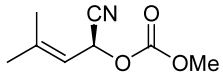
$C_{12}H_{11}NO_3$

Carbonic acid, (1*S*)-(2*E*)-1-cyano-3-phenyl-2-propenyl methyl ester

Jesús Casas, Alejandro Baeza, José M. Sansano, Carmen Nájera* and José M. Saá*

Tetrahedron: Asymmetry *14 (2003) 197*

E.e. = 82%
$[\alpha]_D^{25} = +26.5$ (*c* 0.88, $CHCl_3$)
Source of chirality: (*R*)-BINOLAM
Absolute configuration: (*S*)



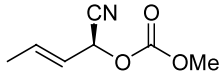
$C_8H_{11}NO_3$

Carbonic acid, (*S*)-1-cyano-3-methyl-2-butenyl methyl ester

Jesús Casas, Alejandro Baeza, José M. Sansano, Carmen Nájera* and José M. Saá*

Tetrahedron: Asymmetry *14 (2003) 197*

E.e. = 54%
$[\alpha]_D^{25} = +9.2$ (*c* 2, $CHCl_3$)
Source of chirality: (*R*)-BINOLAM
Absolute configuration: (*S*)



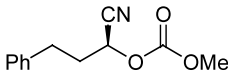
$C_7H_9NO_3$

Carbonic acid, (1*S*)-(2*E*)-1-cyano-2-butenyl methyl ester

Jesús Casas, Alejandro Baeza, José M. Sansano, Carmen Nájera* and José M. Saá*

Tetrahedron: Asymmetry *14 (2003) 197*

E.e. = 58%
$[\alpha]_D^{25} = -15.0$ (*c* 4, $CHCl_3$)
Source of chirality: (*R*)-BINOLAM
Absolute configuration: (*S*)



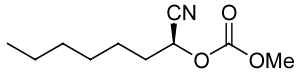
$C_{12}H_{13}NO_3$

Carbonic acid, (1*S*)-(2*E*)-1-cyano-3-phenylbutyl methyl ester

Jesús Casas, Alejandro Baeza, José M. Sansano, Carmen Nájera* and José M. Saá*

Tetrahedron: Asymmetry *14 (2003) 197*

E.e. = 68%
$[\alpha]_D^{25} = -44$ (*c* 2, $CHCl_3$)
Source of chirality: (*R*)-BINOLAM
Absolute configuration: (*S*)

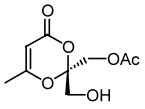


$C_{10}H_{17}NO_3$
Carbonic acid, (*S*)-1-cyanoheptyl methyl ester

Masayuki Murakami, Hiroshi Kamaya, Chikara Kaneko and Masayuki Sato*

Tetrahedron: Asymmetry *14 (2003) 201*

E.e. = 98%
$[\alpha]_D^{26} = +20.2$ (*c* 1.14, $CHCl_3$)
Source of chirality: lipase catalyst
Absolute configuration: *R*

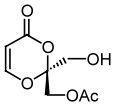


$C_9H_{12}O_6$
(*R*)-[2-(Hydroxymethyl)-6-methyl-4-*oxo*-4*H*-1,3-dioxin-2-yl]methyl acetate

Masayuki Murakami, Hiroshi Kamaya, Chikara Kaneko and Masayuki Sato*

Tetrahedron: Asymmetry *14 (2003) 201*

E.e. = 98%
$[\alpha]_D^{26} = +15.5$ (*c* 1.07, $CHCl_3$)
Source of chirality: lipase catalyst
Absolute configuration: *S*

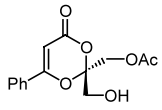


$C_8H_{10}O_6$
(*S*)-[2-(Hydroxymethyl)-4-*oxo*-4*H*-1,3-dioxin-2-yl]methyl acetate

Masayuki Murakami, Hiroshi Kamaya, Chikara Kaneko and Masayuki Sato*

Tetrahedron: Asymmetry *14 (2003) 201*

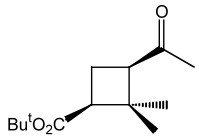
E.e. = 98%
$[\alpha]_D^{26} = +51.9$ (*c* 1.07, $CHCl_3$)
Source of chirality: lipase catalyst
Absolute configuration: *R*



$C_{14}H_{14}O_6$
(*R*)-[2-(Hydroxymethyl)-4-*oxo*-6-phenyl-4*H*-1,3-dioxin-2-yl]methyl acetate

Gemma P. Aguado, Albertina G. Moglioni and Rosa M. Ortuño*

Tetrahedron: Asymmetry *14 (2003) 217*



E.e. 95%
$[\alpha]_D$ −40.6 (*c* 0.64, MeOH)
Source of chirality: (−)-*S*-verbenone
Absolute configuration: 1*S*,3*R*

$C_{13}H_{22}O_3$

tert-Butyl (1*S*,3*R*)-3-acetyl-2,2-dimethylcyclobutane-1-carboxylate

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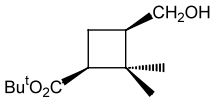
Gemma P. Aguado, Albertina G. Moglioni and Rosa M. Ortuño*

Tetrahedron: Asymmetry *14 (2003) 217*



E.e. 95%
$[\alpha]_D$ +11.4 (*c* 0.88, MeOH)
Source of chirality: (−)-*S*-verbenone
Absolute configuration: 1*S*,3*R*

$C_{12}H_{22}O_3$

tert-Butyl (1*S*,3*R*)-3-hydroxymethyl-2,2-dimethylcyclobutane-1-carboxylate

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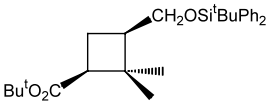
Gemma P. Aguado, Albertina G. Moglioni and Rosa M. Ortuño*

Tetrahedron: Asymmetry *14 (2003) 217*



E.e. 95%
$[\alpha]_D$ +5.7 (*c* 0.53, MeOH)
Source of chirality: (−)-*S*-verbenone
Absolute configuration: 1*S*,3*R*

$C_{28}H_{40}O_3Si$

tert-Butyl (1*S*,3*R*)-3-*tert*-butyldiphenylsilyloxymethyl-2,2-dimethylcyclobutane-1-carboxylate

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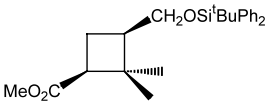
Gemma P. Aguado, Albertina G. Moglioni and Rosa M. Ortuño*

Tetrahedron: Asymmetry *14 (2003) 217*



E.e. 95%
$[\alpha]_D$ +6.8 (*c* 0.73, MeOH)
Source of chirality: (−)-*S*-verbenone
Absolute configuration: 1*S*,3*R*

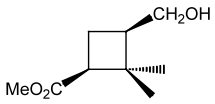
$C_{25}H_{34}O_3Si$

Methyl (1*S*,3*R*)-3-*tert*-butyldiphenylsilyloxymethyl-2,2-dimethylcyclobutane-1-carboxylate

Gemma P. Aguado, Albertina G. Moglioni and Rosa M. Ortuño*

Tetrahedron: Asymmetry *14 (2003) 217*

E.e. 95%
$[\alpha]_D$ +9.8 (*c* 0.41, MeOH)
Source of chirality: (–)-*S*-verbenone
Absolute configuration: 1*S*,3*R*



$C_9H_{16}O_3$

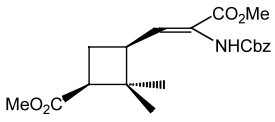
Methyl (1*S*,3*R*)-3-hydroxymethyl-2,2-dimethylcyclobutane-1-carboxylate

---

Gemma P. Aguado, Albertina G. Moglioni and Rosa M. Ortuño*

Tetrahedron: Asymmetry *14 (2003) 217*

E.e. 95%
$[\alpha]_D$ +6.9 (*c* 0.87, MeOH)
Source of chirality: (–)-*S*-verbenone
Absolute configuration: 1′*S*,3′*S*



$C_{20}H_{25}NO_6$

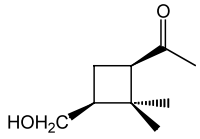
Methyl (1′*S*,3′*S*)-2-*N*-benzyloxycarbonylamino-3-(3′-methoxycarbonyl-2′,2′-dimethylcyclobutyl)-(*Z*)-2-propenoate

---

Gemma P. Aguado, Albertina G. Moglioni and Rosa M. Ortuño*

Tetrahedron: Asymmetry *14 (2003) 217*

E.e. 95%
$[\alpha]_D$ −41.9 (*c* 1.33, MeOH)
Source of chirality: (–)-*S*-verbenone
Absolute configuration: 1*R*,3*S*



$C_9H_{16}O_2$

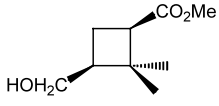
(1*R*,3*S*)-3-Hydroxymethyl-2,2-dimethylcyclobutyl methyl ketone

---

Gemma P. Aguado, Albertina G. Moglioni and Rosa M. Ortuño*

Tetrahedron: Asymmetry *14 (2003) 217*

E.e. 95%
$[\alpha]_D$ −9.2 (*c* 0.87, MeOH)
Source of chirality: (–)-*S*-verbenone
Absolute configuration: 1*R*,3*S*

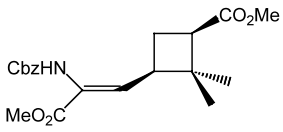


$C_9H_{16}O_3$

Methyl (1*R*,3*S*)-3-hydroxymethyl-2,2-dimethylcyclobutane-1-carboxylate

Gemma P. Aguado, Albertina G. Moglioni and Rosa M. Ortuño*

Tetrahedron: Asymmetry *14 (2003) 217*



E.e. 95%

$[\alpha]_D$ −6.9 (*c* 0.86, MeOH)

Source of chirality: (−)-*S*-verbenone

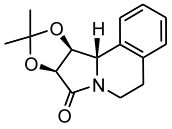
Absolute configuration: 1′*R*,3′*R*

$C_{20}H_{25}NO_6$

Methyl (1′*R*,3′*R*)-2-*N*-benzyloxycarbonylamino-3-(3′-methoxycarbonyl-2′,2′-dimethylcyclobutyl)-(*Z*)-2-propenoate

Zbigniew Kałuża* and Danuta Mostowicz

Tetrahedron: Asymmetry *14 (2003) 225*



Ee = 100%

$[\alpha]_D$ = +133.8 (*c* 1, CH_2Cl_2)

Source of chirality: asymmetric synthesis from D-mannose

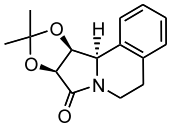
Absolute configuration: (7a*S*,10a*S*,10b*S*)

$C_{15}H_{17}O_3N$

(7a*S*,10a*S*,10b*S*)-9,9-Dimethyl-5,7a,10a,10b-tetrahydro-6*H*-8,10-dioxa-6a-azapentaleno[1,2-*a*]naphtalen-7-one

Zbigniew Kałuża* and Danuta Mostowicz

Tetrahedron: Asymmetry *14 (2003) 225*



Ee = 100%

$[\alpha]_D$ = −241.6 (*c* 1, CH_2Cl_2)

Source of chirality: asymmetric synthesis from D-mannose

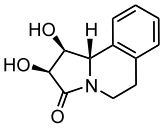
Absolute configuration: (7a*S*,10a*S*,10b*R*)

$C_{15}H_{17}O_3N$

(7a*S*,10a*S*,10b*R*)-9,9-Dimethyl-5,7a,10a,10b-tetrahydro-6*H*-8,10-dioxa-6a-azapentaleno[1,2-*a*]naphtalen-7-one

Zbigniew Kałuża* and Danuta Mostowicz

Tetrahedron: Asymmetry *14 (2003) 225*



Ee = 100%

$[\alpha]_D$ = +95 (*c* 1.1, DMSO)

Source of chirality: asymmetric synthesis from D-mannose

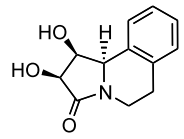
Absolute configuration: (1*S*,2*S*,10b*S*)

$C_{12}H_{13}O_3N$

(1*S*,2*S*,10b*S*)-1,2-Dihydroxy-1,2,3,5,6,10b-hexahydropyrrolo[2,1-*a*]isoquinolin-3-one

Zbigniew Kałuża* and Danuta Mostowicz

Tetrahedron: Asymmetry *14 (2003) 225*



$C_{12}H_{13}O_3N$

(1*S*,2*S*,10b*R*)-1,2-Dihydroxy-1,2,3,5,6,10b-hexahydropyrrolo[2,1-*a*]isoquinolin-3-one

Ee = 100%

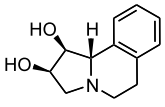
$[\alpha]_D = -316$ (*c* 1.0, DMSO)

Source of chirality: asymmetric synthesis from D-mannose

Absolute configuration: (1*S*,2*S*,10b*R*)

Zbigniew Kałuża* and Danuta Mostowicz

Tetrahedron: Asymmetry *14 (2003) 225*



$C_{12}H_{13}O_3N$

(1*S*,2*R*,10b*S*)-1,2-Dihydroxy-1,2,3,5,6,10b-hexahydropyrrolo[2,1-*a*]isoquinoline

Ee = 100%

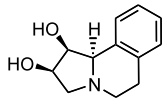
$[\alpha]_D = +13$ (*c* 0.8, CH_2Cl_2)

Source of chirality: asymmetric synthesis from D-mannose

Absolute configuration: (1*S*,2*R*,10b*S*)

Zbigniew Kałuża* and Danuta Mostowicz

Tetrahedron: Asymmetry *14 (2003) 225*



$C_{12}H_{15}O_2N$

(1*S*,2*R*,10b*R*)-1,2-Dihydroxy-1,2,3,5,6,10b-hexahydropyrrolo[2,1-*a*]isoquinoline

Ee = 100%

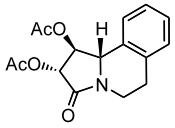
$[\alpha]_D = -206$ (*c* 1.3, CH_2Cl_2)

Source of chirality: asymmetric synthesis from D-mannose

Absolute configuration: (1*S*,2*R*,10b*R*)

Zbigniew Kałuża* and Danuta Mostowicz

Tetrahedron: Asymmetry *14 (2003) 225*



$C_{16}H_{17}O_5N$

(1*S*,2*R*,10b*S*)-1,2-Dihydroxy-1,2,3,5,6,10b-hexahydropyrrolo[2,1-*a*]isoquinolin-3-one

Ee = 100%

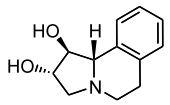
$[\alpha]_D = +90$ (*c* 1.0, CH_2Cl_2)

Source of chirality: asymmetric synthesis from L-tartaric acid

Absolute configuration: (1*S*,2*R*,10b*S*)

Zbigniew Kałuża* and Danuta Mostowicz

Tetrahedron: Asymmetry *14 (2003) 225*



$C_{12}H_{15}O_2N$

(1*S*,2*S*,10b*S*)-1,2-Dihydroxy-1,2,3,5,6,10b-hexahydropyrrolo[2,1-*a*]isoquinoline

Ee = 100%

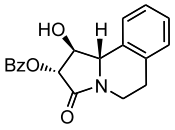
$[\alpha]_D = +55$ (*c* 1.0, CH_2Cl_2)

Source of chirality: asymmetric synthesis from L-tartaric acid

Absolute configuration: (1*S*,2*R*,10b*S*)

Zbigniew Kałuża* and Danuta Mostowicz

Tetrahedron: Asymmetry *14 (2003) 225*



$C_{19}H_{17}O_4N$

(1*S*,2*R*,10b*S*)-2-Benzoyloxy-1-hydroxy-1,2,3,5,6,10b-hexahydropyrrolo[2,1-*a*]isoquinolin-3-one

Ee = 100%

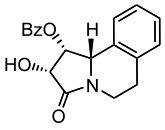
$[\alpha]_D = +87$ (*c* 1.7, CH_2Cl_2)

Source of chirality: asymmetric synthesis from L-tartaric acid

Absolute configuration: (1*S*,2*R*,10b*S*)

Zbigniew Kałuża* and Danuta Mostowicz

Tetrahedron: Asymmetry *14 (2003) 225*



$C_{19}H_{17}O_4N$

(1*R*,2*R*,10b*S*)-1-Benzoyloxy-2-hydroxy-1,2,3,5,6,10b-hexahydropyrrolo[2,1-*a*]isoquinolin-3-one

Ee = 100%

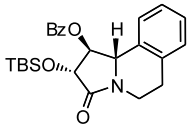
$[\alpha]_D = +239$ (*c* 0.5, CH_2Cl_2)

Source of chirality: asymmetric synthesis from L-tartaric acid

Absolute configuration: (1*R*,2*R*,10b*S*)

Zbigniew Kałuża* and Danuta Mostowicz

Tetrahedron: Asymmetry *14 (2003) 225*



$C_{25}H_{31}O_4NSi$

(1*S*,2*R*,10b*S*)-1-Benzoyloxy-2-(*tert*-butyldimethylsilanyloxy)-1,2,3,5,6,10b-hexahydropyrrolo[2,1-*a*]isoquinolin-3-one

Ee = 100%

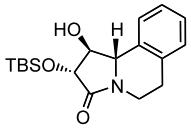
$[\alpha]_D = +104$ (*c* 1.0, CH_2Cl_2)

Source of chirality: asymmetric synthesis from L-tartaric acid

Absolute configuration: (1*S*,2*R*,10b*S*)

Zbigniew Kałuża* and Danuta Mostowicz

Tetrahedron: Asymmetry *14 (2003) 225*



$C_{18}H_{27}O_3NSi$

(1*S*,2*R*,10b*S*)-2-(*tert*-Butyldimethylsilanyloxy)-1-hydroxy-1,2,3,5,6,10b-hexahydropyrrolo[2,1-*a*]isoquinolin-3-one

Ee = 100%

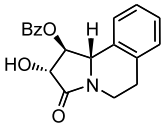
$[\alpha]_D = +194$ (*c* 1.0, CH_2Cl_2)

Source of chirality: asymmetric synthesis from L-tartaric acid

Absolute configuration: (1*S*,2*R*,10b*S*)

Zbigniew Kałuża* and Danuta Mostowicz

Tetrahedron: Asymmetry *14 (2003) 225*



$C_{19}H_{17}O_4N$

(1*S*,2*R*,10b*S*)-1-Benzoyloxy-2-hydroxy-1,2,3,5,6,10b-hexahydropyrrolo[2,1-*a*]isoquinolin-3-one

Ee = 100%

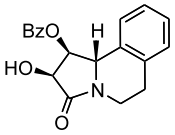
$[\alpha]_D = -43$ (*c* 1.1, CH_2Cl_2)

Source of chirality: asymmetric synthesis from L-tartaric acid

Absolute configuration: (1*S*,2*R*,10b*S*)

Zbigniew Kałuża* and Danuta Mostowicz

Tetrahedron: Asymmetry *14 (2003) 225*



$C_{19}H_{17}O_4N$

(1*S*,2*S*,10b*S*)-2-Benzoyloxy-1-hydroxy-1,2,3,5,6,10b-hexahydropyrrolo[2,1-*a*]isoquinolin-3-one

Ee = 100%

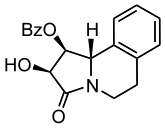
$[\alpha]_D = +42$ (*c* 1.0, CH_2Cl_2)

Source of chirality: asymmetric synthesis from L-tartaric acid

Absolute configuration: (1*S*,2*S*,10b*S*)

Zbigniew Kałuża* and Danuta Mostowicz

Tetrahedron: Asymmetry *14 (2003) 225*



$C_{19}H_{17}O_4N$

(1*S*,2*S*,10b*S*)-1-Benzoyloxy-2-hydroxy-1,2,3,5,6,10b-hexahydropyrrolo[2,1-*a*]isoquinolin-3-one

Ee = 100%

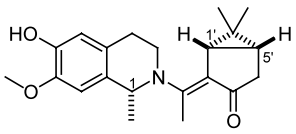
$[\alpha]_D = -93$ (*c* 1.1, CH_2Cl_2)

Source of chirality: asymmetric synthesis from L-tartaric acid

Absolute configuration: (1*S*,2*R*,10b*S*)

Sergey A. Popov, Yuri V. Gatilov, Tatjana V. Rybalova and Alexey V. Tkachev*

Tetrahedron: Asymmetry *14 (2003) 233*



D.e. ≥90%
$[\alpha]_{578}$ −725 (*c* 0.26, $CHCl_3$)
Mp 158–165°C (MeO-*t*-Bu, dec.)
Source of chirality: (+)-3-carene
Absolute configuration: 1*S*,1′*S*,5′*R*

$C_{21}H_{27}NO_3$

(1*S*,5*R*)-2-[(*E*)-1-((1*S*)-6-Hydroxy-7-methoxy-1-methyl-3,4-dihydro-1*H*-isoquinolin-2-yl)ethylidene]-6,6-dimethylbicyclo[3.1.0]hexan-3-one

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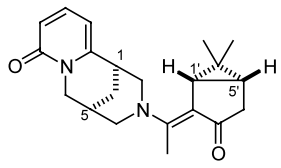
Sergey A. Popov, Yuri V. Gatilov, Tatjana V. Rybalova and Alexey V. Tkachev*

Tetrahedron: Asymmetry *14 (2003) 233*



D.e. ≥98%
$[\alpha]_{578}$ −1470 (*c* 0.23, $CHCl_3$)
Mp 207–209°C ($MeCN–CHCl_3$, dec.)
Source of chirality: (+)-3-carene, cytizine
Absolute configuration: 1*R*,5*S*,1′*S*,5′*R*

$C_{21}H_{26}N_2O_2$

3-[(*E*)-1-((1*S*,5*R*)-6,6-Dimethyl-3-oxobicyclo[3.1.0]hex-2-ylidene)ethyl]-(1*R*,5*S*)-1,2,3,4,5,6-hexahydro-1,5-methanopyrido[1,2-*a*]-[1,5]diazocin-8-one

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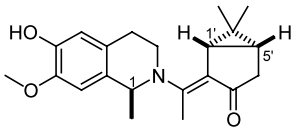
Sergey A. Popov, Yuri V. Gatilov, Tatjana V. Rybalova and Alexey V. Tkachev*

Tetrahedron: Asymmetry *14 (2003) 233*



D.e. ≥90%
$[\alpha]_{578}$ −934 (*c* 1.13, $CHCl_3$)
Mp 163–165°C (MeO-*t*-Bu, dec.)
Source of chirality: (+)-3-carene
Absolute configuration: 1*R*,1′*S*,5′*R*

$C_{21}H_{27}NO_3$

(1*S*,5*R*)-2-[(*E*)-1-((1*R*)-6-Hydroxy-7-methoxy-1-methyl-3,4-dihydro-1*H*-isoquinolin-2-yl)ethylidene]-6,6-dimethylbicyclo[3.1.0]hexan-3-one

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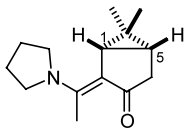
Sergey A. Popov, Yuri V. Gatilov, Tatjana V. Rybalova and Alexey V. Tkachev*

Tetrahedron: Asymmetry *14 (2003) 233*



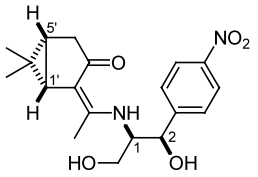
D.e. ≥98%
$[\alpha]_{578}$ −1020 (*c* 1.1, $CHCl_3$)
Mp 76–77°C (hexane–MeO-*t*-Bu, dec.)
Source of chirality: (+)-3-carene
Absolute configuration: 1*S*,5*R*

$C_{14}H_{21}NO$

(1*S*,5*R*)-6,6-Dimethyl-2-((*E*)-1-pyrrolidin-1-ylethylidene)bicyclo[3.1.0]hexan-3-one

Sergey A. Popov, Yuri V. Gatilov, Tatjana V. Rybalova and Alexey V. Tkachev*

Tetrahedron: Asymmetry *14 (2003) 233*



D.e. ≥95%
$[\alpha]_{578}$ +642 (*c* 0.33, $CHCl_3$)
Mp 177–183°C (MeCN, dec.)
Source of chirality: (+)-3-carene
Absolute configuration: 1*R*,2*R*,1′*S*,5′*R*

$C_{19}H_{24}N_2O_5$

(1*S*,5*R*)-2-{(*Z*)-1-[(1*R*,2*R*)-2-Hydroxy-1-hydroxymethyl-2-(4-nitrophenyl)ethylamino]ethylidene}-6,6-dimethylbicyclo[3.1.0]hexan-3-one

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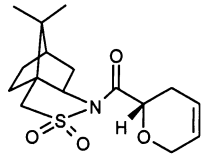
Małgorzata Kosior, Małgorzata Malinowska, Julita Jóźwik, Jean-Claude Caille and Janusz Jurczak*

Tetrahedron: Asymmetry *14 (2003) 239*



De = 100%
$[\alpha]_D^{20} = -193.3$ (*c* 1, $CHCl_3$)
Source of chirality: (2*R*)-bornano-10,2-sultam
Absolute configuration: 2*R*,2′*S*

$C_{16}H_{23}NSO_4$

N-[(2′*S*)-3,6-Dihydro-2*H*-pyran-2-ylcarbonyl]-(2*R*)-bornano-10,2-sultam

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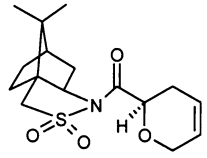
Małgorzata Kosior, Małgorzata Malinowska, Julita Jóźwik, Jean-Claude Caille and Janusz Jurczak*

Tetrahedron: Asymmetry *14 (2003) 239*



De = 100%
$[\alpha]_D^{20} = -32$ (*c* 1, $CHCl_3$)
Source of chirality: (2*R*)-bornano-10,2-sultam
Absolute configuration: 2*R*,2′*R*

$C_{16}H_{23}NSO_4$

N-[(2′*R*)-3,6-Dihydro-2*H*-pyran-2-ylcarbonyl]-(2*R*)-bornano-10,2-sultam

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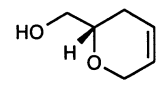
Małgorzata Kosior, Małgorzata Malinowska, Julita Jóźwik, Jean-Claude Caille and Janusz Jurczak*

Tetrahedron: Asymmetry *14 (2003) 239*



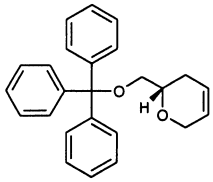
Ee = 100%
$[\alpha]_D^{20} = -147.4$ (*c* 1.02, $CDCl_3$)
Source of chirality: (2*R*)-bornano-10,2-sultam
Absolute configuration: 2*S*

$C_6H_{10}O_2$

(2*S*)-(3,6-Dihydro-2*H*-pyran-2-yl)methanol

Małgorzata Kosior, Małgorzata Malinowska, Julita Jóźwik, Jean-Claude Caille and Janusz Jurczak*

Tetrahedron: Asymmetry *14 (2003) 239*



$C_{25}H_{24}O_2$

(2*S*)-2-(Triphenylmethoxymethyl)-3,6-dihydro-2*H*-pyran

Ee = 100%

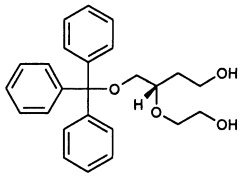
$[\alpha]_D^{21} = -74.2$ (*c* 1, $CDCl_3$)

Source of chirality: (2*R*)-bornano-10,2-sultam

Absolute configuration: 2*S*

Małgorzata Kosior, Małgorzata Malinowska, Julita Jóźwik, Jean-Claude Caille and Janusz Jurczak*

Tetrahedron: Asymmetry *14 (2003) 239*



$C_{25}H_{28}O_4$

(2*S*)-3-(2-Hydroxyethoxy)-4-(triphenylmethoxy)-1-butanol

Ee = 100%

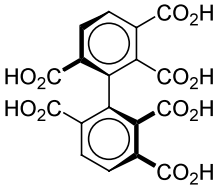
$[\alpha]_D^{21} = -20.7$ (*c* 1.01, $CDCl_3$)

Source of chirality: (2*R*)-bornano-10,2-sultam

Absolute configuration: 2*S*

Petr Holý, Petr Sehnal, Miloš Tichý, Jiří Závada* and Ivana Císařová

Tetrahedron: Asymmetry *14 (2003) 245*



$C_{18}H_{10}O_{12}$

(*S*)-1,1′-Biphenyl-2,2′,3,3′,6,6′-hexacarboxylic acid

Ee = 100%

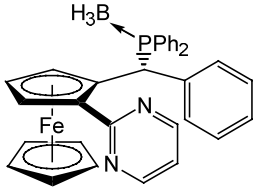
$[\alpha]_D^{20} = -127.9$ (*c* 0.4, 0.1 M NaOH)

Source of chirality: (*S*)-3,3′,6,6′-tetramethyl-1,1′-biphenyl-2,2′-dicarboxylic acid

Absolute configuration: *S*

Ralf J. Kloetzing, Matthias Lotz and Paul Knochel*

Tetrahedron: Asymmetry *14 (2003) 255*



$C_{33}H_{30}BFeN_2P$

(R_{Fc})-1-(2-Pyrimidyl)-2-(α-(*R*)-(diphenylphosphino)phenylmethyl)ferrocene borane complex

Ee >99%

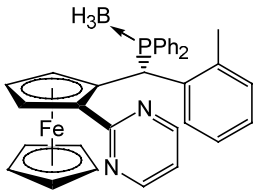
$[\alpha]_D^{20} = -161.8$ (*c* 0.88, $CHCl_3$)

Source of chirality: stereoselective synthesis

Absolute configuration: R_{Fc},*R*

Ralf J. Kloetzing, Matthias Lotz and Paul Knochel*

Tetrahedron: Asymmetry *14 (2003) 255*



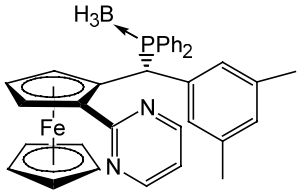
Ee >99%
$[\alpha]_D^{20} = -170.3$ (c 0.57, $CHCl_3$)
Source of chirality: stereoselective synthesis
Absolute configuration: R_{Fc},R

$C_{34}H_{32}BFeN_2P$

(R_{Fc})-1-(2-Pyrimidyl)-2-(α-(*R*)-(diphenylphosphino)(2-methylphenyl)methyl)ferrocene borane complex

Ralf J. Kloetzing, Matthias Lotz and Paul Knochel*

Tetrahedron: Asymmetry *14 (2003) 255*



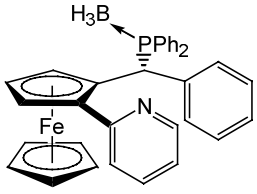
Ee >99%
$[\alpha]_D^{20} = -137.6$ (c 0.58, $CHCl_3$)
Source of chirality: stereoselective synthesis
Absolute configuration: R_{Fc},R

$C_{35}H_{34}BFeN_2P$

(R_{Fc})-1-(2-Pyrimidyl)-2-(α-(*R*)-(diphenylphosphino)(3,5-dimethylphenyl)methyl)ferrocene borane complex

Ralf J. Kloetzing, Matthias Lotz and Paul Knochel*

Tetrahedron: Asymmetry *14 (2003) 255*



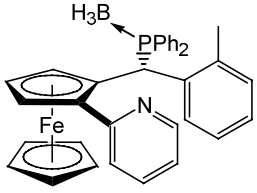
Ee >99%
$[\alpha]_D^{20} = -19.6$ (c 0.55, $CHCl_3$)
Source of chirality: stereoselective synthesis
Absolute configuration: R_{Fc},R

$C_{34}H_{31}BFeNP$

(R_{Fc})-1-(2-Pyridyl)-2-(α-(*R*)-(diphenylphosphino)phenylmethyl)ferrocene borane complex

Ralf J. Kloetzing, Matthias Lotz and Paul Knochel*

Tetrahedron: Asymmetry *14 (2003) 255*



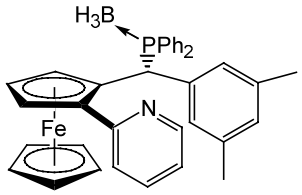
Ee >99%
$[\alpha]_D^{20} = -55.9$ (c 0.57, $CHCl_3$)
Source of chirality: stereoselective synthesis
Absolute configuration: R_{Fc},R

$C_{35}H_{33}BFeNP$

(R_{Fc})-1-(2-Pyridyl)-2-(α-(*R*)-(diphenylphosphino)(2-methylphenyl)methyl)ferrocene borane complex

Ralf J. Kloetzing, Matthias Lotz and Paul Knochel*

Tetrahedron: Asymmetry *14 (2003) 255*



Ee >99%

$[\alpha]_D^{20} = -3.6$ (*c* 1.17, $CHCl_3$)

Source of chirality: stereoselective synthesis

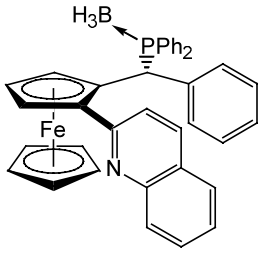
Absolute configuration: R_{Fc},R

$C_{36}H_{35}BFeNP$

(R_{Fc})-1-(2-Pyridyl)-2-(α-(*R*)-(diphenylphosphino)(3,5-dimethylphenyl)methyl)ferrocene borane complex

Ralf J. Kloetzing, Matthias Lotz and Paul Knochel*

Tetrahedron: Asymmetry *14 (2003) 255*



Ee >99%

$[\alpha]_D^{20} = +636.0$ (*c* 0.60, $CHCl_3$)

Source of chirality: stereoselective synthesis

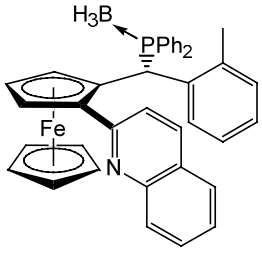
Absolute configuration: R_{Fc},R

$C_{38}H_{33}BFeNP$

(R_{Fc})-1-(2-Quinolyl)-2-(α-(*R*)-(diphenylphosphino)phenylmethyl)ferrocene borane complex

Ralf J. Kloetzing, Matthias Lotz and Paul Knochel*

Tetrahedron: Asymmetry *14 (2003) 255*



Ee >99%

$[\alpha]_D^{20} = +676.7$ (*c* 0.62, $CHCl_3$)

Source of chirality: stereoselective synthesis

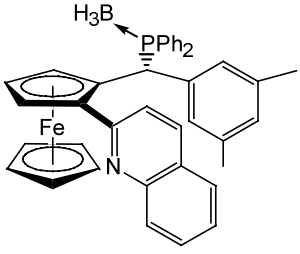
Absolute configuration: R_{Fc},R

$C_{39}H_{35}BFeNP$

(R_{Fc})-1-(2-Quinolyl)-2-(α-(*R*)-(diphenylphosphino)(2-methylphenyl)methyl)ferrocene borane complex

Ralf J. Kloetzing, Matthias Lotz and Paul Knochel*

Tetrahedron: Asymmetry *14 (2003) 255*



Ee >99%

$[\alpha]_D^{20} = +618.4$ (*c* 0.63, $CHCl_3$)

Source of chirality: stereoselective synthesis

Absolute configuration: R_{Fc},R

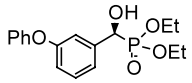
$C_{40}H_{37}BFeNP$

(R_{Fc})-1-(2-Quinolyl)-2-(α-(*R*)-(diphenylphosphino)(3,5-dimethylphenyl)methyl)ferrocene borane complex

Danielle Skropeta* and Richard R. Schmidt

Tetrahedron: Asymmetry *14 (2003) 265*

Ee = 86%
$[\alpha]_D = -19$ (*c* 1.0, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: *S*

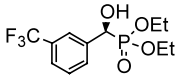


$C_{17}H_{21}O_5P$
Diethyl (*S*)-α-hydroxy(*m*-phenoxy)benzylphosphonate

Danielle Skropeta* and Richard R. Schmidt

Tetrahedron: Asymmetry *14 (2003) 265*

Ee = 98%
$[\alpha]_D = -27$ (*c* 2.4, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: *S*

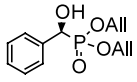


$C_{12}H_{16}F_3O_4P$
Diethyl (*S*)-α-hydroxy(*m*-trifluoro)benzylphosphonate

Danielle Skropeta* and Richard R. Schmidt

Tetrahedron: Asymmetry *14 (2003) 265*

Ee = 96%
$[\alpha]_D = -29$ (*c* 1.0, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: *S*

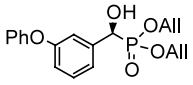


$C_{13}H_{17}O_4P$
Diallyl (*S*)-α-hydroxybenzylphosphonate

Danielle Skropeta* and Richard R. Schmidt

Tetrahedron: Asymmetry *14 (2003) 265*

Ee = 98%
$[\alpha]_D = -16$ (*c* 0.9, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: *S*

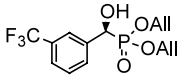


$C_{19}H_{21}O_5P$
Diallyl (*S*)-α-hydroxy(*m*-phenoxy)benzylphosphonate

Danielle Skropeta* and Richard R. Schmidt

Tetrahedron: Asymmetry *14 (2003) 265*

Ee = 96%
$[\alpha]_D = -27$ (*c* 2.8, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: *S*

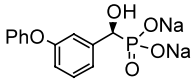


$C_{14}H_{16}F_3O_4P$
Diallyl (*S*)-α-hydroxy(*m*-trifluoro)benzylphosphonate

Danielle Skropeta* and Richard R. Schmidt

Tetrahedron: Asymmetry *14 (2003) 265*

Ee = 94%
$[\alpha]_D = -22$ (*c* 0.2, H_2O)
Source of chirality: asymmetric synthesis
Absolute configuration: *S*

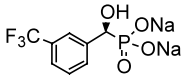


$C_{13}H_{11}Na_2O_5P$
Disodium (*S*)-α-hydroxy(*m*-phenoxy)benzylphosphonate

Danielle Skropeta* and Richard R. Schmidt

Tetrahedron: Asymmetry *14 (2003) 265*

Ee >98%
$[\alpha]_D = -16$ (*c* 1.1, 75% aq. acetone)
Source of chirality: asymmetric synthesis
Absolute configuration: *S*

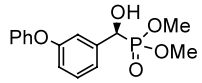


$C_8H_6F_3Na_2O_4P$
Disodium (*S*)-α-hydroxy(*m*-trifluoro)benzylphosphonate

Danielle Skropeta* and Richard R. Schmidt

Tetrahedron: Asymmetry *14 (2003) 265*

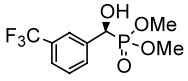
Ee = 94%
$[\alpha]_D = -39$ (*c* 0.9, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: *S*



$C_{15}H_{17}O_5P$
Dimethyl (*S*)-α-hydroxy(*m*-phenoxy)benzylphosphonate

Danielle Skropeta* and Richard R. Schmidt

Tetrahedron: Asymmetry *14 (2003) 265*



$C_{10}H_{12}F_3O_4P$

Dimethyl (*S*)-α-hydroxy(*m*-trifluoro)benzylphosphonate

Ee >98%

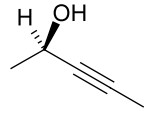
$[\alpha]_D = -37$ (*c* 0.6, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Wolfgang Stampfer, Birgit Kosjek, Kurt Faber and Wolfgang Kroutil*

Tetrahedron: Asymmetry *14 (2003) 275*



C_5H_8O

(*R*)-3-Pentyn-2-ol

E.e. = 64%

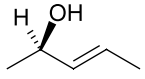
$[\alpha]_D^{20} = +19.8$ (*c* 1, Et_2O)

Source of chirality: biocatalytic oxidative kinetic resolution

Absolute configuration: *R*

Wolfgang Stampfer, Birgit Kosjek, Kurt Faber and Wolfgang Kroutil*

Tetrahedron: Asymmetry *14 (2003) 275*



$C_5H_{10}O$

(*R*)-(*E*)-3-Penten-2-ol

E.e. >99%

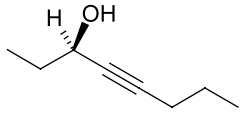
$[\alpha]_D^{20} = +7.1$ (*c* 10, $CHCl_3$)

Source of chirality: biocatalytic oxidative kinetic resolution

Absolute configuration: *R*

Wolfgang Stampfer, Birgit Kosjek, Kurt Faber and Wolfgang Kroutil*

Tetrahedron: Asymmetry *14 (2003) 275*



$C_8H_{16}O$

(*R*)-4-Octyn-3-ol

E.e. = 84%

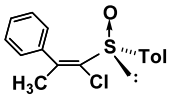
$[\alpha]_D^{21} = +11.0$ (*c* 0.79, Et_2O)

Source of chirality: biocatalytic oxidative kinetic resolution

Absolute configuration: *R*

Tsuyoshi Satoh,* Masaaki Yoshida, Yasuhiro Takahashi and Hiroyuki Ota

Tetrahedron: Asymmetry *14 (2003) 281*



$C_{17}H_{17}ClOS$

(R_S)-(*E*)-1-Chloro-2-phenyl-1-(*p*-tolylsulfinyl)-1-propene

Ee = over 99%

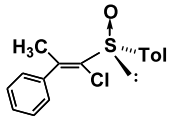
$[\alpha]_D^{21} = +280.5$ (*c* 0.40, acetone)

Source of chirality: (*R*)-(−)-chloromethyl *p*-tolyl sulfoxide

Absolute configuration: *R*

Tsuyoshi Satoh,* Masaaki Yoshida, Yasuhiro Takahashi and Hiroyuki Ota

Tetrahedron: Asymmetry *14 (2003) 281*



$C_{17}H_{17}ClO_S$

(R_S)-(*Z*)-1-Chloro-2-phenyl-1-(*p*-tolylsulfinyl)-1-propene

Ee = over 99%

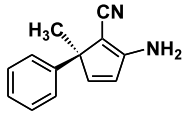
$[\alpha]_D^{27} = -9.3$ (*c* 0.20, acetone)

Source of chirality: (*R*)-(−)-chloromethyl *p*-tolyl sulfoxide

Absolute configuration: *R*

Tsuyoshi Satoh,* Masaaki Yoshida, Yasuhiro Takahashi and Hiroyuki Ota

Tetrahedron: Asymmetry *14 (2003) 281*



$C_{13}H_{12}N_2$

(*S*)-(−)-2-Amino-1-cyano-5-methyl-5-phenyl-1,3-cyclopentadiene

Ee = over 99%

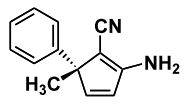
$[\alpha]_D^{21} = -428.5$ (*c* 0.40, acetone)

Source of chirality: (*R*)-(−)-chloromethyl *p*-tolyl sulfoxide

Absolute configuration: *S*

Tsuyoshi Satoh,* Masaaki Yoshida, Yasuhiro Takahashi and Hiroyuki Ota

Tetrahedron: Asymmetry *14 (2003) 281*



$C_{13}H_{12}N_2$

(*R*)-(+)-2-Amino-1-cyano-5-methyl-5-phenyl-1,3-cyclopentadiene

Ee = 98.1%

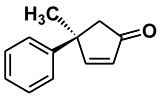
$[\alpha]_D^{31} = +418.8$ (*c* 0.40, acetone)

Source of chirality: (*R*)-(−)-chloromethyl *p*-tolyl sulfoxide

Absolute configuration: *R*

Tsuyoshi Satoh,* Masaaki Yoshida, Yasuhiro Takahashi and Hiroyuki Ota

Tetrahedron: Asymmetry *14 (2003) 281*



$C_{12}H_{12}O$

(*S*)-4-Methyl-4-phenyl-2-cyclopentenone

Ee = over 99%

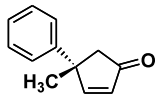
$[\alpha]_D^{27} = -119.0$ (*c* 0.40, toluene)

Source of chirality: (*R*)-(−)-chloromethyl *p*-tolyl sulfoxide

Absolute configuration: *S*

Tsuyoshi Satoh,* Masaaki Yoshida, Yasuhiro Takahashi and Hiroyuki Ota

Tetrahedron: Asymmetry *14 (2003) 281*



$C_{12}H_{12}O$

(*R*)-4-Methyl-4-phenyl-2-cyclopentenone

Ee = 94.4%

$[\alpha]_D^{32} = +115.1$ (*c* 0.30, toluene)

Source of chirality: (*R*)-(−)-chloromethyl *p*-tolyl sulfoxide

Absolute configuration: *R*

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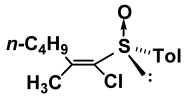
Tetrahedron: Asymmetry *14 (2003) 281*



$C_{14}H_{19}ClOS$

(R_S)-(*E*)-1-Chloro-2-methyl-1-(*p*-tolylsulfinyl)-1-hexene

Ee = over 99%

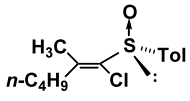
$[\alpha]_D^{24} = +187.6$ (*c* 0.40, acetone)

Source of chirality: (*R*)-(−)-chloromethyl *p*-tolyl sulfoxide

Absolute configuration: *R*

Tsuyoshi Satoh,* Masaaki Yoshida, Yasuhiro Takahashi and Hiroyuki Ota

Tetrahedron: Asymmetry *14 (2003) 281*



$C_{14}H_{19}ClOS$

(R_S)-(*Z*)-1-Chloro-2-methyl-1-(*p*-tolylsulfinyl)-1-hexene

Ee = over 99%

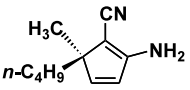
$[\alpha]_D^{27} = +133.4$ (*c* 0.40, acetone)

Source of chirality: (*R*)-(−)-chloromethyl *p*-tolyl sulfoxide

Absolute configuration: *R*

Tsuyoshi Satoh,* Masaaki Yoshida, Yasuhiro Takahashi and Hiroyuki Ota

Tetrahedron: Asymmetry *14 (2003) 281*



$C_{11}H_{16}N_2$

(*R*)-2-Amino-5-butyl-1-cyano-5-methyl-1,3-cyclopentadiene

Ee = over 99%

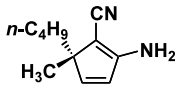
$[\alpha]_D^{29} = -176.5$ (*c* 0.40, acetone)

Source of chirality: (*R*)-(−)-chloromethyl *p*-tolyl sulfoxide

Absolute configuration: *R*

Tsuyoshi Satoh,* Masaaki Yoshida, Yasuhiro Takahashi and Hiroyuki Ota

Tetrahedron: Asymmetry *14 (2003) 281*



$C_{11}H_{16}N_2$

(*S*)-2-Amino-5-butyl-1-cyano-5-methyl-1,3-cyclopentadiene

Ee = over 99%

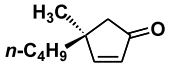
$[\alpha]_D^{28} = +172.7$ (*c* 0.40, acetone)

Source of chirality: (*R*)-(−)-chloromethyl *p*-tolyl sulfoxide

Absolute configuration: *S*

Tsuyoshi Satoh,* Masaaki Yoshida, Yasuhiro Takahashi and Hiroyuki Ota

Tetrahedron: Asymmetry *14 (2003) 281*



$C_{10}H_{16}O$

(*S*)-4-Butyl-4-methyl-2-cyclopentenone

Ee = over 99%

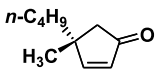
$[\alpha]_D^{32} = -43.1$ (*c* 0.40, toluene)

Source of chirality: (*R*)-(−)-chloromethyl *p*-tolyl sulfoxide

Absolute configuration: *S*

Tsuyoshi Satoh,* Masaaki Yoshida, Yasuhiro Takahashi and Hiroyuki Ota

Tetrahedron: Asymmetry *14 (2003) 281*



$C_{10}H_{16}O$

(*R*)-4-Butyl-4-methyl-2-cyclopentenone

Ee = over 99%

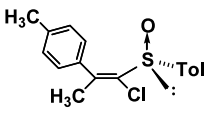
$[\alpha]_D^{30} = +41.6$ (*c* 0.35, toluene)

Source of chirality: (*R*)-(−)-chloromethyl *p*-tolyl sulfoxide

Absolute configuration: *R*

Tsuyoshi Satoh,* Masaaki Yoshida, Yasuhiro Takahashi and Hiroyuki Ota

Tetrahedron: Asymmetry *14 (2003) 281*



$C_{17}H_{17}ClOS$

(R_S)-(*E*)-1-Chloro-2-(4-methylphenyl)-1-(*p*-tolylsulfinyl)-1-propene

Ee = over 99%

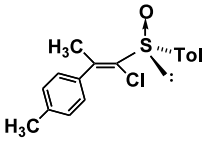
$[\alpha]_D^{21} = +369$ (*c* 0.60, acetone)

Source of chirality: (*R*)-(−)-chloromethyl *p*-tolylsulfoxide

Absolute configuration: *R*

Tsuyoshi Satoh,* Masaaki Yoshida, Yasuhiro Takahashi and Hiroyuki Ota

Tetrahedron: Asymmetry *14 (2003) 281*



$C_{17}H_{17}ClOS$

(R_S)-(*Z*)-1-Chloro-2-(4-methylphenyl)-1-(*p*-tolylsulfinyl)-1-propene

Ee = over 99%

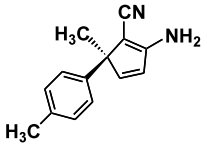
$[\alpha]_D^{21} = -18.8$ (*c* 0.40, acetone)

Source of chirality: (*R*)-(−)-chloromethyl *p*-tolylsulfoxide

Absolute configuration: *R*

Tsuyoshi Satoh,* Masaaki Yoshida, Yasuhiro Takahashi and Hiroyuki Ota

Tetrahedron: Asymmetry *14 (2003) 281*



$C_{14}H_{14}N_2$

(*S*)-(−)-2-Amino-1-cyano-5-methyl-5-(4-methylphenyl)-1,3-cyclopentadiene

Ee = over 99%

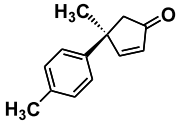
$[\alpha]_D^{20} = -373.6$ (*c* 0.40, acetone)

Source of chirality: (*R*)-(−)-chloromethyl *p*-tolylsulfoxide

Absolute configuration: *S*

Tsuyoshi Satoh,* Masaaki Yoshida, Yasuhiro Takahashi and Hiroyuki Ota

Tetrahedron: Asymmetry *14 (2003) 281*



$C_{13}H_{14}O$

(*S*)-4-Methyl-4-(4-methylphenyl)-2-cyclopentenone

Ee = over 99%

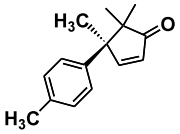
$[\alpha]_D^{27} = -134.3$ (*c* 0.46, toluene)

Source of chirality: (*R*)-(−)-chloromethyl *p*-tolylsulfoxide

Absolute configuration: *S*

Tsuyoshi Satoh,* Masaaki Yoshida, Yasuhiro Takahashi and Hiroyuki Ota

Tetrahedron: Asymmetry *14 (2003) 281*



$C_{15}H_{18}O$

(*S*)-4,5,5,-Trimethyl-4-(4-methylphenyl)-2-cyclopentenone

Ee = over 99%

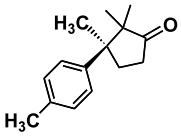
$[\alpha]_D^{27} = +35.6$ (*c* 0.40, acetone)

Source of chirality: (*R*)-(−)-chloromethyl *p*-tolylsulfoxide

Absolute configuration: *S*

Tsuyoshi Satoh,* Masaaki Yoshida, Yasuhiro Takahashi and Hiroyuki Ota

Tetrahedron: Asymmetry *14 (2003) 281*



$C_{15}H_{20}O$

(*S*)-(+)-α-Cuparenone

Ee = over 99%

$[\alpha]_D^{28} = +172.5$ (*c* 0.49, $CHCl_3$)

Source of chirality: (*R*)-(−)-chloromethyl *p*-tolylsulfoxide

Absolute configuration: *S*