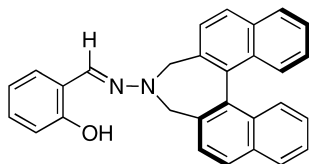


# Stereochemistry abstracts

Takayoshi Arai,\* Yoko Endo and Akira Yanagisawa

*Tetrahedron: Asymmetry 18 (2007) 165*



$C_{29}H_{22}N_2O$

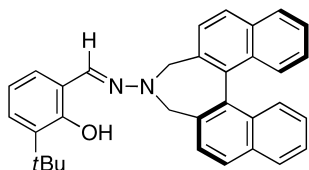
2-((*E*)-((*R*)-6,7-dihydro-5*H*-dinaphtho[2,1-*c*;1',2'-*e*]azepin-6-ylimino)methyl)phenol

$[\alpha]_D^{21} = +357.1$  ( $c$  0.38,  $CHCl_3$ )

Source of chirality: 2,2'-binaphthol

Takayoshi Arai,\* Yoko Endo and Akira Yanagisawa

*Tetrahedron: Asymmetry 18 (2007) 165*



$C_{33}H_{30}N_2O$

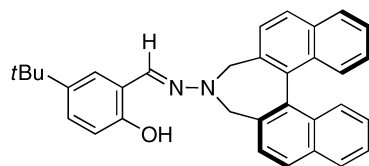
2-*tert*-Butyl-6-((*E*)-((*R*)-6,7-dihydro-5*H*-dinaphtho[2,1-*c*;1',2'-*e*]azepin-6-ylimino)methyl)phenol

$[\alpha]_D^{25} = +367.7$  ( $c$  0.58,  $CHCl_3$ )

Source of chirality: 2,2'-binaphthol

Takayoshi Arai,\* Yoko Endo and Akira Yanagisawa

*Tetrahedron: Asymmetry 18 (2007) 165*



$C_{33}H_{30}N_2O$

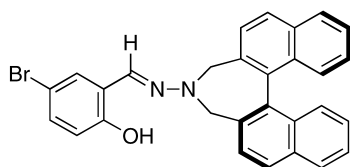
4-*tert*-Butyl-2-((*E*)-((*R*)-6,7-dihydro-5*H*-dinaphtho[2,1-*c*;1',2'-*e*]azepin-6-ylimino)methyl)phenol

$[\alpha]_D^{25} = +321.7$  ( $c$  0.80,  $CHCl_3$ )

Source of chirality: 2,2'-binaphthol

Takayoshi Arai,\* Yoko Endo and Akira Yanagisawa

*Tetrahedron: Asymmetry 18 (2007) 165*



$C_{29}H_{21}BrN_2O$

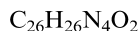
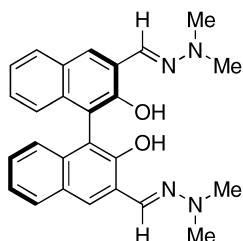
4-Bromo-2-((*E*)-((*R*)-6,7-dihydro-5*H*-dinaphtho[2,1-*c*;1',2'-*e*]azepin-6-ylimino)methyl)phenol

$[\alpha]_D^{25} = +399.6$  ( $c$  0.20,  $CHCl_3$ )

Source of chirality: 2,2'-binaphthol

Takayoshi Arai,\* Yoko Endo and Akira Yanagisawa

*Tetrahedron: Asymmetry 18 (2007) 165*



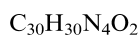
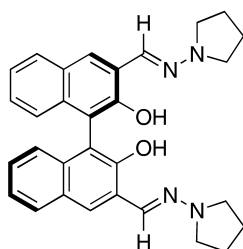
(*R*)-3,3'-Diformyl-2,2'-binaphthol bis-*N*-(dimethylamino)imine

$[\alpha]_D^{21} = -116.7$  (*c* 0.28,  $CHCl_3$ )

Source of chirality: 2,2'-binaphthol

Takayoshi Arai,\* Yoko Endo and Akira Yanagisawa

*Tetrahedron: Asymmetry 18 (2007) 165*



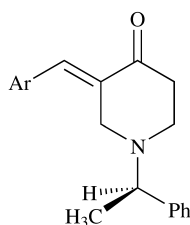
(*R*)-3,3'-Diformyl-2,2'-binaphthol bis-*N*-(pyrrolidinyl)imine

$[\alpha]_D^{21} = -128.1$  (*c* 0.13,  $CHCl_3$ )

Source of chirality: 2,2'-binaphthol

Raju Suresh Kumar, Subbu Perumal,\* Henri B. Kagan and Regis Guillot

*Tetrahedron: Asymmetry 18 (2007) 170*



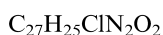
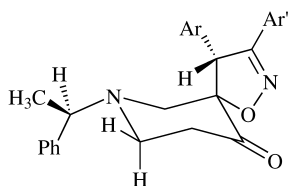
3-[(*E*)-(4-Chlorophenyl)methylidene]-1-[(*R*)-1-phenylethyl]tetrahydro-4(1H)-piperidinone

$[\alpha]_D = +19.3$  (*c* 0.21,  $CHCl_3$ )

Absolute configuration: (*R*)

Raju Suresh Kumar, Subbu Perumal,\* Henri B. Kagan and Regis Guillot

*Tetrahedron: Asymmetry 18 (2007) 170*



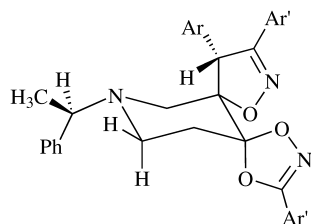
(4*R*,5*S*)-3-(4-Chlorophenyl)-4-phenyl-7-[(*R*)-1-phenylethyl]-1-oxa-2,7-diazaspiro[4.5]dec-2-en-10-one

$[\alpha]_D = -256.0$  (*c* 0.20,  $CHCl_3$ )

Absolute configuration: (4*R*,5*S*)

Raju Suresh Kumar, Subbu Perumal,\* Henri B. Kagan and Regis Guillot

*Tetrahedron: Asymmetry 18 (2007) 170*



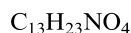
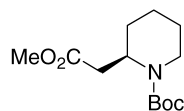
(4*R*,5*S*,10*S*)-10-(2-Chlorophenyl)-3,9-bis(4-chlorophenyl)-12-[(*R*)-1-phenylethyl]-1,4,7-trioxa-2,8,12-triazadispiro[4.0.4.4]tetradeca-2,8-diene

$[\alpha]_D = -50.0$  (*c* 0.10,  $CHCl_3$ )

Absolute configuration: (4*R*,5*S*,10*S*)

Arto Liljelblad, Hanna-Maija Kavenius, Petri Tähtinen and Liisa T. Kanerva\*

*Tetrahedron: Asymmetry 18 (2007) 181*



*N*-tert-Butoxycarbonyl-(*R*)-2-piperidylacetic acid methyl ester

Ee = 94%

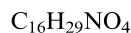
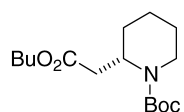
$[\alpha]_D^{20} = +9.9$  (*c* 4.54,  $CHCl_3$ )

Source of chirality: enzymatic resolution by lipase PS-C II from *Burkholderia cepacia*

Absolute configuration: (*R*)

Arto Liljelblad, Hanna-Maija Kavenius, Petri Tähtinen and Liisa T. Kanerva\*

*Tetrahedron: Asymmetry 18 (2007) 181*



*N*-tert-Butoxycarbonyl-(*S*)-2-piperidylacetic acid butyl ester

Ee = 99%

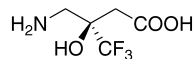
$[\alpha]_D^{20} = -5.4$  (*c* 1,  $CHCl_3$ )

Source of chirality: Enzymatic resolution by lipase PS-C II from *Burkholderia cepacia*

Absolute configuration: (*S*)

Elena N. Shaitanova, Igor I. Gerus,\* Michael Yu. Belik and Valery P. Kukhar

*Tetrahedron: Asymmetry 18 (2007) 192*



(3*R*)-4,4,4-Trifluoro-3-hydroxy-3-(aminomethyl)-butanoic acid

Ee >99.9%

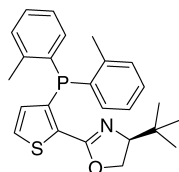
$[\alpha]_D^{25} = +32.2$  (*c* 0.8, 1%  $NH_4OH$  in  $H_2O$ )

Source of chirality: chiral resolution

Absolute configuration: (3*R*)

Anthony G. Coyne, Helge Müller-Bunz and Patrick J. Guiry\*

*Tetrahedron: Asymmetry 18 (2007) 199*



$C_{25}H_{28}NOPS$

(*S*)-4-*tert*-Butyl-2-[3-(di-*ortho*-tolylphosphino)-2-thienyl]-4,5-dihydro-1,3-oxazole

Ee = >99%

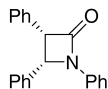
$[\alpha]_D^{20} = -107$  (*c* 0.1,  $CHCl_3$ )

Source of chirality: chiral amino alcohol

Absolute configuration: (*S*)

Anthony G. Coyne, Helge Müller-Bunz and Patrick J. Guiry\*

*Tetrahedron: Asymmetry 18 (2007) 199*



$C_{21}H_{17}NO$

(3*R*,4*R*)-1,3,4-Triphenyl-2-azetidinone

Ee = 37%

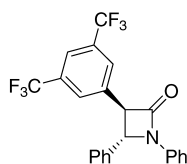
$[\alpha]_D^{20} = +13$  (*c* 0.1,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (3*R*,4*R*)

Anthony G. Coyne, Helge Müller-Bunz and Patrick J. Guiry\*

*Tetrahedron: Asymmetry 18 (2007) 199*



$C_{23}H_{15}F_6NO$

(3*R*,4*S*)-3-(3,5-Bis(trifluoromethyl)phenyl)-1,4-diphenylazetidin-2-one

Ee = 53%

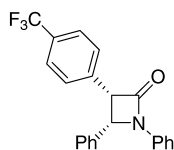
$[\alpha]_D^{20} = +19$  (*c* 0.1,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (3*R*,4*S*)

Anthony G. Coyne, Helge Müller-Bunz and Patrick J. Guiry\*

*Tetrahedron: Asymmetry 18 (2007) 199*



$C_{22}H_{16}F_3NO$

(3*R*,4*R*)-1,4-Diphenyl-3-(4-(trifluoromethyl)phenyl)azetidin-2-one

Ee = 29%

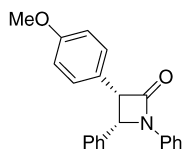
$[\alpha]_D^{20} = +3.2$  (*c* 0.2,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (3*R*,4*R*)

Anthony G. Coyne, Helge Müller-Bunz and Patrick J. Guiry\*

*Tetrahedron: Asymmetry 18 (2007) 199*



(3*R*,4*R*)-3-(4-Methoxyphenyl)-1,4-diphenylazetidin-2-one

Ee = 10%

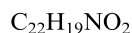
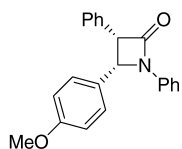
$[\alpha]_D^{20} = +6.1$  (*c* 0.1, CHCl<sub>3</sub>)

Source of chirality: asymmetric synthesis

Absolute configuration: (3*R*,4*R*)

Anthony G. Coyne, Helge Müller-Bunz and Patrick J. Guiry\*

*Tetrahedron: Asymmetry 18 (2007) 199*



(3*R*,4*R*)-4-(4-Methoxyphenyl)-1,3-diphenylazetidin-2-one

Ee = 32%

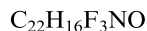
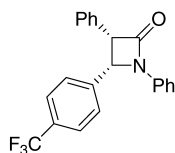
$[\alpha]_D^{20} = +6.8$  (*c* 0.2, CHCl<sub>3</sub>)

Source of chirality: asymmetric synthesis

Absolute configuration: (3*R*,4*R*)

Anthony G. Coyne, Helge Müller-Bunz and Patrick J. Guiry\*

*Tetrahedron: Asymmetry 18 (2007) 199*



(3*R*,4*R*)-1,3-Diphenyl-4-(4-(trifluoromethyl)phenyl)azetidin-2-one

Ee = 48%

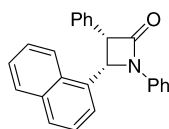
$[\alpha]_D^{20} = +2.8$  (*c* 0.2, CHCl<sub>3</sub>)

Source of chirality: asymmetric synthesis

Absolute configuration: (3*R*,4*R*)

Anthony G. Coyne, Helge Müller-Bunz and Patrick J. Guiry\*

*Tetrahedron: Asymmetry 18 (2007) 199*



(3*R*,4*R*)-4-(Naphthalen-1-yl)-1,3-diphenylazetidin-2-one

Ee = 26%

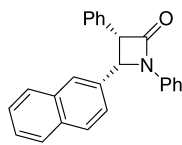
$[\alpha]_D^{20} = +4.2$  (*c* 0.2, CHCl<sub>3</sub>)

Source of chirality: asymmetric synthesis

Absolute configuration: (3*R*,4*R*)

Anthony G. Coyne, Helge Müller-Bunz and Patrick J. Guiry\*

*Tetrahedron: Asymmetry 18 (2007) 199*



$C_{25}H_{19}NO$

(3*R*,4*R*)-4-(Naphthalen-2-yl)-1,3-diphenylazetidin-2-one

Ee = 41%

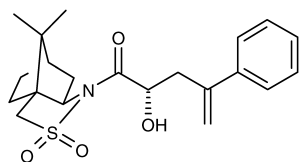
$[\alpha]_D^{20} = +9.1$  (*c* 0.2,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (3*R*,4*R*)

Piotr Kwiatkowski, Jacek Kwiatkowski, Jakub Majer and Janusz Jurczak\*

*Tetrahedron: Asymmetry 18 (2007) 215*



$C_{21}H_{27}NO_4S$

(2'*S*)-*N*-(2'-Hydroxy-4'-phenylpent-4'-enoyl)-(2*R*)-bornane-10,2-sultam

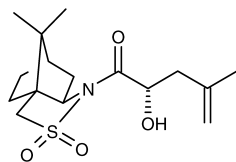
$[\alpha]_D^{24} = -85.7$  (*c* 1.5,  $CHCl_3$ )

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

Absolute configuration: (2'*S*)

Piotr Kwiatkowski, Jacek Kwiatkowski, Jakub Majer and Janusz Jurczak\*

*Tetrahedron: Asymmetry 18 (2007) 215*



$C_{16}H_{25}NO_4S$

(2'*S*)-*N*-(2'-Hydroxy-4'-methylpent-4'-enoyl)-(2*R*)-bornane-10,2-sultam

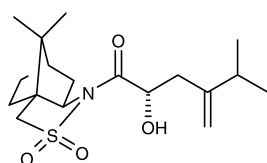
$[\alpha]_D^{24} = -114.9$  (*c* 1.5,  $CHCl_3$ )

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

Absolute configuration: (2'*S*)

Piotr Kwiatkowski, Jacek Kwiatkowski, Jakub Majer and Janusz Jurczak\*

*Tetrahedron: Asymmetry 18 (2007) 215*



$C_{18}H_{29}NO_4S$

(2'*S*)-*N*-(2'-Hydroxy-5'-methyl-4'-methylenehexanoyl)-(2*R*)-bornane-10,2-sultam

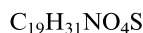
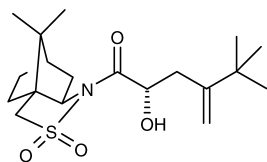
$[\alpha]_D^{24} = -108.8$  (*c* 0.5,  $CHCl_3$ )

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

Absolute configuration: (2'*S*)

Piotr Kwiatkowski, Jacek Kwiatkowski, Jakub Majer  
and Janusz Jurczak\*

*Tetrahedron: Asymmetry 18 (2007) 215*



(2'S)-N-(2'-Hydroxy-5',5'-dimethyl-4'-methylenhexanoyl)-(2R)-bornane-10,2-sultam

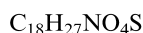
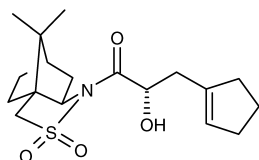
$[\alpha]_D^{24} = -93.4$  (*c* 0.4,  $CHCl_3$ )

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

Absolute configuration: (2'S)

Piotr Kwiatkowski, Jacek Kwiatkowski, Jakub Majer  
and Janusz Jurczak\*

*Tetrahedron: Asymmetry 18 (2007) 215*



(2'S)-N-[3'-(Cyclopent-1-enyl)-2'-hydroxypropionyl]-(2R)-bornane-10,2-sultam

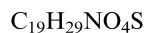
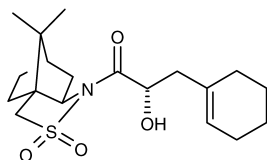
$[\alpha]_D^{24} = -100.7$  (*c* 1.2,  $CHCl_3$ )

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

Absolute configuration: (2'S)

Piotr Kwiatkowski, Jacek Kwiatkowski, Jakub Majer  
and Janusz Jurczak\*

*Tetrahedron: Asymmetry 18 (2007) 215*



(2'S)-N-[3'-(Cyclohex-1-enyl)-2'-hydroxypropionyl]-(2R)-bornane-10,2-sultam

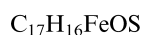
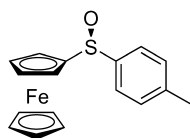
$[\alpha]_D^{24} = -106.1$  (*c* 1.5,  $CHCl_3$ )

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

Absolute configuration: (2'S)

Hui-Li Zhang, Xue-Long Hou,\* Li-Xin Dai\* and Zhi-Bin Luo

*Tetrahedron: Asymmetry 18 (2007) 224*



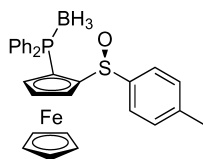
(S)-p-Tolylsulfinylferrocene

$[\alpha]_D^{20} = +314$  (*c* 0.525,  $CHCl_3$ )

Source of chirality: (–)-menthol

Hui-Li Zhang, Xue-Long Hou,\* Li-Xin Dai\* and Zhi-Bin Luo

*Tetrahedron: Asymmetry 18 (2007) 224*



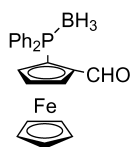
$C_{29}H_{28}BFeOPS$

(*S*<sub>Fc</sub>,*S*<sub>S</sub>)-1-*p*-Tolylsulfinyl-2-(diphenylphosphino)ferrocene borane complex

$[\alpha]_D^{20} = -533$  (*c* 0.545,  $CHCl_3$ )  
Source of chirality: (–)-menthol

Hui-Li Zhang, Xue-Long Hou,\* Li-Xin Dai\* and Zhi-Bin Luo

*Tetrahedron: Asymmetry 18 (2007) 224*



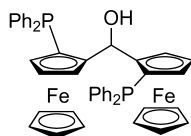
$C_{23}H_{22}BFeOPS$

(*R*)-2-Diphenylphosphino-ferrocenecarboxaldehyde borane complex

$[\alpha]_D^{20} = -556$  (*c* 0.2,  $CHCl_3$ )  
Source of chirality: (–)-menthol

Hui-Li Zhang, Xue-Long Hou,\* Li-Xin Dai\* and Zhi-Bin Luo

*Tetrahedron: Asymmetry 18 (2007) 224*



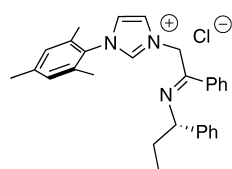
$C_{45}H_{38}Fe_2OP_2$

(*R,R*)-Bis[2-(diphenylphosphino)ferrocenyl]methanol

$[\alpha]_D^{20} = +400$  (*c* 0.215,  $CHCl_3$ )  
Source of chirality: (–)-menthol

Alexandre Flahaut, Sylvain Roland\* and Pierre Mangeney

*Tetrahedron: Asymmetry 18 (2007) 229*



$C_{29}H_{32}ClN_3$

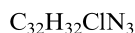
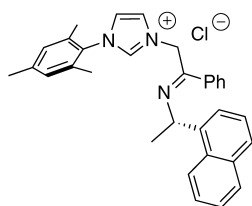
3-Mesityl-1-[2-{(S)-1(phenyl)propylimino}-2-phenyl ethyl]imidazolium chloride

$[\alpha]_D^{20} = -26$  (*c* 1.1,  $CHCl_3$ )  
Source of chirality: (*S*)-1(phenyl)propylamine  
Absolute configuration: (*S*)



Alexandre Flahaut, Sylvain Roland\* and Pierre Mangeney

*Tetrahedron: Asymmetry 18 (2007) 229*



3-Mesityl-1-[2-((S)-1-(1-naphthyl)ethylimino)-2-phenyl ethyl]imidazolium chloride

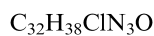
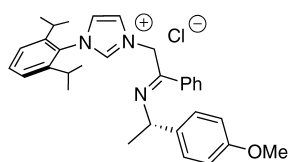
$[\alpha]_D^{20} = +97$  (c 1,  $CHCl_3$ )

Source of chirality: (S)-1-(1-naphthyl)ethylamine

Absolute configuration: (S)

Alexandre Flahaut, Sylvain Roland\* and Pierre Mangeney

*Tetrahedron: Asymmetry 18 (2007) 229*



3-(2,6-Diisopropylphenyl)-1-[2-((S)-1-(p-methoxyphenyl)ethylimino)-2-phenyl ethyl]imidazolium chloride

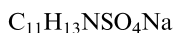
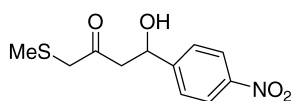
$[\alpha]_D^{20} = -18$  (c 1,  $CHCl_3$ )

Source of chirality: (S)-1-(4-methoxyphenyl)ethylamine

Absolute configuration: (S)

Xiao-Ying Xu, Yan-Zhao Wang, Lin-Feng Cun and Liu-Zhu Gong\*

*Tetrahedron: Asymmetry 18 (2007) 237*

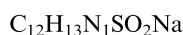
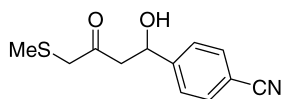


1-Methylthio-4-hydroxy-4-(4'-nitrophenyl)-butan-2-one

$[\alpha]_D = +39.4$  (c 0.5, DCM)

Xiao-Ying Xu, Yan-Zhao Wang, Lin-Feng Cun and Liu-Zhu Gong\*

*Tetrahedron: Asymmetry 18 (2007) 237*



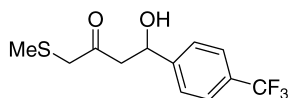
1-Methylthio-4-hydroxy-4-(4'-cyanophenyl)-butan-2-one

$[\alpha]_D = +43.2$  (c 0.225, DCM)

Xiao-Ying Xu, Yan-Zhao Wang, Lin-Feng Cun and Liu-Zhu Gong\*

*Tetrahedron: Asymmetry 18 (2007) 237*

$[\alpha]_D = +40.0$  (c 0.5, DCM)



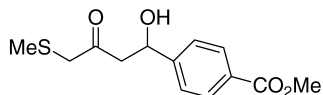
$C_{12}H_{13}SO_2F_3Na$

1-Methylthio-4-hydroxy-4-(4'-trifluoromethyl-phenyl)-butan-2-one

Xiao-Ying Xu, Yan-Zhao Wang, Lin-Feng Cun and Liu-Zhu Gong\*

*Tetrahedron: Asymmetry 18 (2007) 237*

$[\alpha]_D = +39.2$  (c 0.5, DCM)



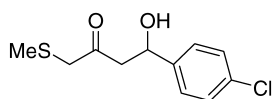
$C_{12}H_{13}SO_2F_3Na$

4-(4-Methylthio-1-hydroxy-3-oxo-butyl)-benzoic acid methyl ester

Xiao-Ying Xu, Yan-Zhao Wang, Lin-Feng Cun and Liu-Zhu Gong\*

*Tetrahedron: Asymmetry 18 (2007) 237*

$[\alpha]_D = +39.8$  (c 0.6, DCM)



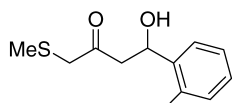
$C_{11}H_{13}ClO_2SNa$

1-Methylthio-4-hydroxy-4-(4'-chlorophenyl)-butan-2-one

Xiao-Ying Xu, Yan-Zhao Wang, Lin-Feng Cun and Liu-Zhu Gong\*

*Tetrahedron: Asymmetry 18 (2007) 237*

$[\alpha]_D = +42.5$  (c 0.44, DCM)



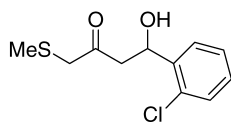
$C_{11}H_{13}SO_2FNa$

1-Methylthio-4-hydroxy-4-(2'-fluorophenyl)-butan-2-one

Xiao-Ying Xu, Yan-Zhao Wang, Lin-Feng Cun and Liu-Zhu Gong\*

*Tetrahedron: Asymmetry 18 (2007) 237*

$[\alpha]_{\text{D}} = +69.5$  (*c* 0.5, DCM)



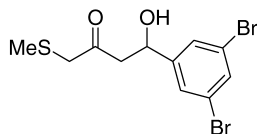
$\text{C}_{11}\text{H}_{13}\text{SO}_2\text{ClNa}$

1-Methylthio-4-hydroxy-4-(2'-chlorophenyl)-butan-2-one

Xiao-Ying Xu, Yan-Zhao Wang, Lin-Feng Cun and Liu-Zhu Gong\*

*Tetrahedron: Asymmetry 18 (2007) 237*

$[\alpha]_{\text{D}} = +32.0$  (*c* 0.5, DCM)



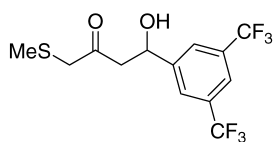
$\text{C}_{11}\text{H}_{12}\text{Br}_2\text{SO}_2\text{Na}$

1-Methylthio-4-hydroxy-4-(3',5'-dibromophenyl)-butan-2-one

Xiao-Ying Xu, Yan-Zhao Wang, Lin-Feng Cun and Liu-Zhu Gong\*

*Tetrahedron: Asymmetry 18 (2007) 237*

$[\alpha]_{\text{D}} = +29.0$  (*c* 0.5, DCM)



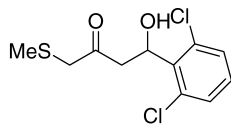
$\text{C}_{13}\text{H}_{12}\text{SO}_2\text{F}_6\text{Na}$

1-Methylthio-4-hydroxy-4-(3',5'-bis-trifluoromethyl-phenyl)-butan-2-one

Xiao-Ying Xu, Yan-Zhao Wang, Lin-Feng Cun and Liu-Zhu Gong\*

*Tetrahedron: Asymmetry 18 (2007) 237*

$[\alpha]_{\text{D}} = -23.9$  (*c* 0.64, DCM)



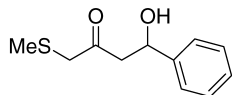
$\text{C}_{11}\text{H}_{12}\text{Cl}_2\text{SO}_2\text{Na}$

1-Methylthio-4-hydroxy-4-(2',6'-dichlorophenyl)-butan-2-one

Xiao-Ying Xu, Yan-Zhao Wang, Lin-Feng Cun and Liu-Zhu Gong\*

*Tetrahedron: Asymmetry 18 (2007) 237*

$[\alpha]_D = +15.2$  (c 0.5, DCM)



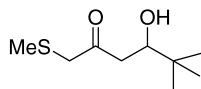
$C_{11}H_{14}SO_2Na$

1-Methylthio-4-hydroxy-4-phenyl-butan-2-one

Xiao-Ying Xu, Yan-Zhao Wang, Lin-Feng Cun and Liu-Zhu Gong\*

*Tetrahedron: Asymmetry 18 (2007) 237*

$[\alpha]_D = +59.0$  (c 0.71, DCM)



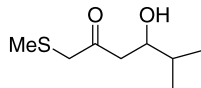
$C_9H_{18}SO_2Na$

1-Methylthio-4-hydroxy-5-(5'-dimethyl)-hexan-2-one

Xiao-Ying Xu, Yan-Zhao Wang, Lin-Feng Cun and Liu-Zhu Gong\*

*Tetrahedron: Asymmetry 18 (2007) 237*

$[\alpha]_D = +48.9$  (c 0.8, DCM)



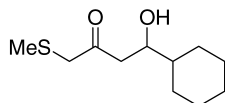
$C_8H_{16}SO_2Na$

1-Methylthio-4-hydroxy-5-methyl-hexan-2-one

Xiao-Ying Xu, Yan-Zhao Wang, Lin-Feng Cun and Liu-Zhu Gong\*

*Tetrahedron: Asymmetry 18 (2007) 237*

$[\alpha]_D = +42.8$  (c 0.5, DCM)

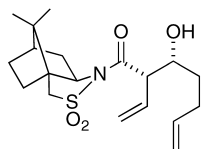


$C_{11}H_{20}SO_2Na$

1-Methylthio-4-(cyclohexyl)-4-hydroxy-2-butanone

Marisa Ciampini, Patrick Perlmutter\* and Keith Watson

*Tetrahedron: Asymmetry 18 (2007) 243*



$C_{19}H_{29}NO_4S$

(+)-(2*S*)-*N*-[(2*S*,3*R*)-2-(Ethenyl)-3-(hydroxy)-6-heptenyl]bornane-10,2-sultam

Ee, de >95% (NMR)

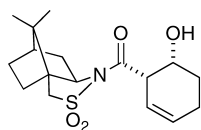
$[\alpha]_D^{24} = +95.35$  (c 1.30, chloroform)

Source of chirality: asymmetric synthesis

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

Marisa Ciampini, Patrick Perlmutter\* and Keith Watson

*Tetrahedron: Asymmetry 18 (2007) 243*



$C_{17}H_{25}NO_4S$

(+)-(2*S*)-*N*-[(1*R*,2*S*)-1-Hydroxy-3-cyclohexen-2-carbonyl]bornane-10,2-sultam

Ee, de >95% (NMR)

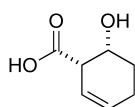
$[\alpha]_D^{24} = +270.0$  (c 0.70, chloroform)

Source of chirality: asymmetric synthesis

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

Marisa Ciampini, Patrick Perlmutter\* and Keith Watson

*Tetrahedron: Asymmetry 18 (2007) 243*



$C_7H_{10}O_3$

(+)-(1*S*,2*R*)-2-Hydroxy-5-cyclohexenecarboxylic acid

Ee, de >95% (NMR)

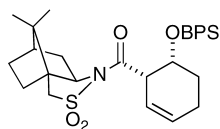
$[\alpha]_D^{22} = +95.45$  (c 4.00, chloroform)

Source of chirality: asymmetric synthesis

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

Marisa Ciampini, Patrick Perlmutter\* and Keith Watson

*Tetrahedron: Asymmetry 18 (2007) 243*



$C_{33}H_{43}NO_4SSi$

(+)-(2*S*)-*N*-[(1*R*,2*S*)-1-(((*tert*-Butyldiphenyl)silyl)oxy)-3-cyclohexen-2-carbonyl]bornane-10,2-sultam

Ee, de >95% (NMR)

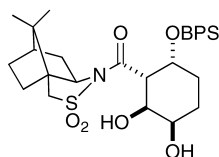
$[\alpha]_D^{22} = +81.0$  (c 0.20, chloroform)

Source of chirality: asymmetric synthesis

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

Marisa Ciampini, Patrick Perlmutter\* and Keith Watson

*Tetrahedron: Asymmetry 18 (2007) 243*



$C_{33}H_{45}NO_6SSi$

(+)-(2*S*)-*N*-[(1*R*,2*R*,3*S*,4*R*)-1-(((*tert*-Butyldiphenyl)silyl)oxy)-3,4-(dihydroxy)cyclo-hexan-2-carbonyl]bornane-10,2-sultam

Ee, de >95% (NMR)

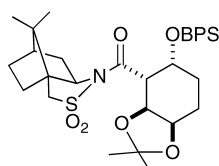
$[\alpha]_D^{22} = +5.4$  (*c* 0.73, chloroform)

Source of chirality: asymmetric synthesis

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

Marisa Ciampini, Patrick Perlmutter\* and Keith Watson

*Tetrahedron: Asymmetry 18 (2007) 243*



$C_{36}H_{49}NO_6SSi$

(+)-(2*S*)-*N*-[(3*aS*,4*S*,5*R*,7*aR*)-2,2-Dimethyl-5-(((*tert*-butyldiphenyl)silyl)oxy)hexahydro[1,3]benzodioxol-4-carbonyl]bornane-10,2-sultam

Ee, de >95% (NMR)

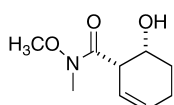
$[\alpha]_D^{24} = +8.2$  (*c* 1.00, chloroform)

Source of chirality: asymmetric synthesis

Absolute configuration: (3*aS*,4*S*,5*R*,7*aR*)

Marisa Ciampini, Patrick Perlmutter\* and Keith Watson

*Tetrahedron: Asymmetry 18 (2007) 243*



$C_9H_{15}NO_3$

(+)-(1*S*,2*R*)-2-(Hydroxy)-5-cyclohexenecarboxylic acid (*N*-methoxy-*N*-methyl)amide

Ee, de >95% (NMR)

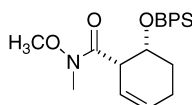
$[\alpha]_D^{23} = +108.94$  (*c* 7.50, chloroform)

Source of chirality: asymmetric synthesis

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

Marisa Ciampini, Patrick Perlmutter\* and Keith Watson

*Tetrahedron: Asymmetry 18 (2007) 243*



$C_{25}H_{33}NO_3Si$

(+)-(1*S*,2*R*)-2-(((*tert*-Butyldiphenyl)silyl)oxy)-5-cyclohexenecarboxylic acid (*N*-methoxy-*N*-methyl)amide

Ee, de >95% (NMR)

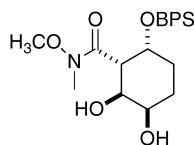
$[\alpha]_D^{24} = +83.6$  (*c* 1.95, chloroform)

Source of chirality: asymmetric synthesis

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

Marisa Ciampini, Patrick Perlmutter\* and Keith Watson

*Tetrahedron: Asymmetry 18 (2007) 243*



$C_{25}H_{35}NO_5Si$

(-)-(1*S*,2*S*,3*R*,6*R*)-2,3-(Dihydroxy)-6-(((*tert*-butyldiphenyl)silyl)oxy)cyclohexane-carboxylic acid (*N*-methoxy-*N*-methyl)amide

Ee, de >95% (NMR)

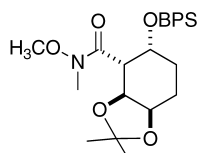
$[\alpha]_D^{24} = -17.95$  (c 2.00, chloroform)

Source of chirality: asymmetric synthesis

Absolute configuration: (1*S*,2*S*,3*R*,6*R*)

Marisa Ciampini, Patrick Perlmutter\* and Keith Watson

*Tetrahedron: Asymmetry 18 (2007) 243*



$C_{28}H_{39}NO_5Si$

(-)-(3*aS*,4*S*,5*R*,7*aR*)-5-(((*tert*-Butyldiphenyl)silyl)oxy)-2,2-dimethyl-hexahydro-[1,3]benzodioxol-4-carboxylic acid (*N*-methoxy-*N*-methyl)amide

Ee, de >95% (NMR)

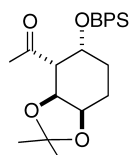
$[\alpha]_D^{24} = -84.1$  (c 1.00, chloroform)

Source of chirality: asymmetric synthesis

Absolute configuration: (3*aS*,4*S*,5*R*,7*aR*)

Marisa Ciampini, Patrick Perlmutter\* and Keith Watson

*Tetrahedron: Asymmetry 18 (2007) 243*



$C_{27}H_{36}O_4Si$

(-)-(3*aS*,4*S*,5*R*,7*aR*)-4-Acetyl-5-(((*tert*-butyldiphenyl)silyl)oxy)-2,2-dimethylhexahydro-[1,3]benzodioxole

Ee, de >95% (NMR)

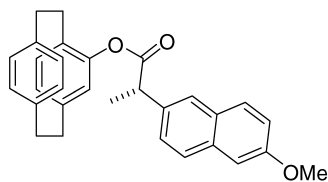
$[\alpha]_D^{25} = -74.9$  (c 1.25, chloroform)

Source of chirality: asymmetric synthesis

Absolute configuration: (3*aS*,4*S*,5*R*,7*aR*)

Tang-Zhi Zhang, Li-Xin Dai and Xue-Long Hou\*

*Tetrahedron: Asymmetry 18 (2007) 251*



$C_{30}H_{28}O_3$

(*S*,*S*<sub>p</sub>)-[2,2]Paracyclophan-4'yl 2-(6-methoxynaphthalen-2-yl)propanoate

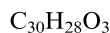
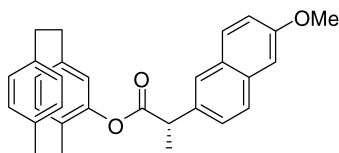
$[\alpha]_D^{20} = +48.5$  (c 0.58, CH<sub>2</sub>Cl<sub>2</sub>)

Source of chirality: (*S*)-naproxen acid

Absolute configuration: (*S*<sub>p</sub>,*S*)

Tang-Zhi Zhang, Li-Xin Dai and Xue-Long Hou\*

*Tetrahedron: Asymmetry 18 (2007) 251*



(*S,R\_p*)-[2,2]Paracyclophan-4'-yl 2-(6-methoxynaphthalen-2-yl)propanoate

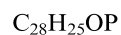
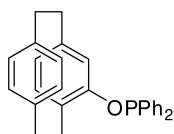
$[\alpha]_D^{20} = +31.9$  (*c* 1.05,  $CH_2Cl_2$ )

Source of chirality: (*S*)-naproxen acid

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

Tang-Zhi Zhang, Li-Xin Dai and Xue-Long Hou\*

*Tetrahedron: Asymmetry 18 (2007) 251*



(*R\_p*)-Diphenyl[2,2]paracyclophan-4-ylphosphinite

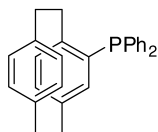
$[\alpha]_D^{20} = -24.1$  (*c* 1.05,  $CHCl_3$ )

Source of chirality: (*S*)-naproxen acid

Absolute configuration: (*R\_p*)

Tang-Zhi Zhang, Li-Xin Dai and Xue-Long Hou\*

*Tetrahedron: Asymmetry 18 (2007) 251*



(*S\_p*)-Diphenyl[2,2]paracyclophan-4-ylphosphine

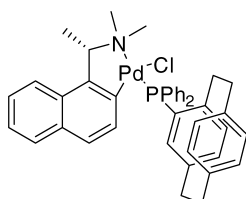
$[\alpha]_D^{20} = -15.1$  (*c* 1.0,  $CHCl_3$ )

Source of chirality: (*S*)-1-(naphthalen-1-yl)ethanamine

Absolute configuration: (*S\_p*)

Tang-Zhi Zhang, Li-Xin Dai and Xue-Long Hou\*

*Tetrahedron: Asymmetry 18 (2007) 251*



Chloro[(*S*)-dimethyl(1-(1-naphthyl)ethyl)aminato-*C,N*][(*R\_p*)-diphenyl[2,2]paracyclophan-4-yl]phosphine palladium(II)

$[\alpha]_D^{20} = -34.0$  (*c* 1.10,  $CHCl_3$ )

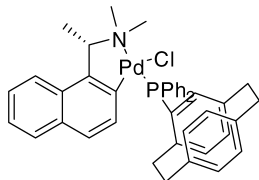
Source of chirality: (*S*)-1-(naphthalen-1-yl)ethanamine

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



Tang-Zhi Zhang, Li-Xin Dai and Xue-Long Hou\*

*Tetrahedron: Asymmetry 18 (2007) 251*



$C_{42}H_{41}ClNPPd$

Chloro[(*S*)-dimethyl(1-(1-naphthyl)ethyl)aminato-*C,N*][(*S<sub>p</sub>*)-diphenyl([2.2]paracyclophan-4-yl)phosphine]palladium(II)

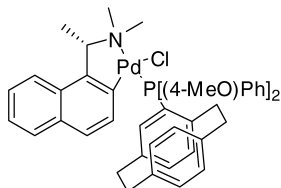
$[\alpha]_D^{20} = -163.9$  (*c* 0.6,  $CHCl_3$ )

Source of chirality: (*S*)-1-(naphthalen-1-yl)ethanamine

Absolute configuration: (*S<sub>p</sub>*,*S*)

Tang-Zhi Zhang, Li-Xin Dai and Xue-Long Hou\*

*Tetrahedron: Asymmetry 18 (2007) 251*



$C_{44}H_{45}ClNO_2PPd$

Chloro[(*S*)-dimethyl(1-(1-naphthyl)ethyl)aminato-*C,N*][(*R<sub>p</sub>*)-di(4'-methoxy)([2.2]paracyclophan-4-yl)phosphine]palladium(II)

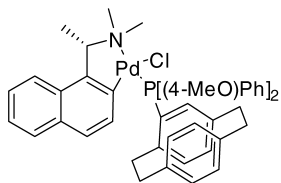
$[\alpha]_D^{20} = -30.2$  (*c* 0.78,  $CHCl_3$ )

Source of chirality: (*S*)-1-(naphthalen-1-yl)ethanamine

Absolute configuration: (*R<sub>p</sub>*,*S*)

Tang-Zhi Zhang, Li-Xin Dai and Xue-Long Hou\*

*Tetrahedron: Asymmetry 18 (2007) 251*



$C_{44}H_{45}ClNO_2PPd$

Chloro[(*S*)-dimethyl(1-(1-naphthyl)ethyl)aminato-*C,N*][(*S<sub>p</sub>*)-di(4'-methoxy)([2.2]paracyclophan-4-yl)phosphine]palladium(II)

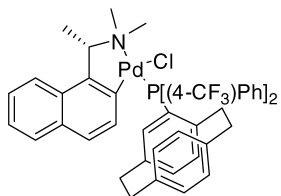
$[\alpha]_D^{20} = -238$  (*c* 0.97,  $CHCl_3$ )

Source of chirality: (*S*)-1-(naphthalen-1-yl)ethanamine

Absolute configuration: (*S<sub>p</sub>*,*S*)

Tang-Zhi Zhang, Li-Xin Dai and Xue-Long Hou\*

*Tetrahedron: Asymmetry 18 (2007) 251*



$C_{44}H_{39}ClF_6NPPd$

Chloro[(*S*)-dimethyl(1-(1-naphthyl)ethyl)aminato-*C,N*][(*R<sub>p</sub>*)-di(4'-trifluoromethyl)phenyl-([2.2]paracyclophan-4-yl)phosphine]palladium(II)

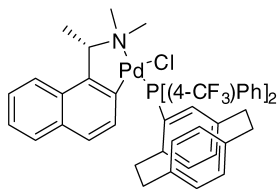
$[\alpha]_D^{20} = -5.1$  (*c* 1.0,  $CHCl_3$ )

Source of chirality: (*S*)-1-(naphthalen-1-yl)ethanamine

Absolute configuration: (*R<sub>p</sub>*,*S*)

Tang-Zhi Zhang, Li-Xin Dai and Xue-Long Hou\*

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Chloro[(S)-dimethyl(1-(1-naphthyl)ethyl)aminato-C,N][(S<sub>p</sub>)-di(4'-trifluoromethyl)phenyl-([2.2]paracyclophan-4-yl)phosphine]palladium(II)

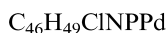
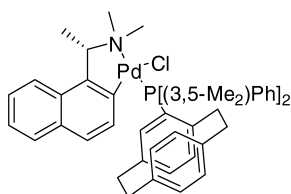
$$[\alpha]_D^{20} = -141.5 (c\ 1.14, CHCl_3)$$

Source of chirality: (S)-1-(naphthalen-1-yl)ethanamine

Absolute configuration: (S<sub>p</sub>,S)

Tang-Zhi Zhang, Li-Xin Dai and Xue-Long Hou\*

*Tetrahedron: Asymmetry 18 (2007) 251*



Chloro[(S)-dimethyl(1-(1-naphthyl)ethyl)aminato-C,N][(R<sub>p</sub>)-di(3',5'-dimethylphenyl)([2.2]paracyclophan-4-yl)phosphine]palladium(II)

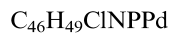
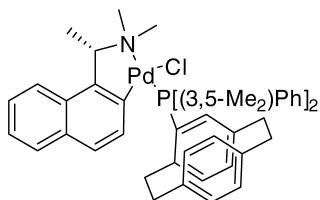
$$[\alpha]_D^{20} = -30.1 (c\ 0.56, CHCl_3)$$

Source of chirality: (S)-1-(naphthalen-1-yl)ethanamine

Absolute configuration: (R<sub>p</sub>,S)

Tang-Zhi Zhang, Li-Xin Dai and Xue-Long Hou\*

*Tetrahedron: Asymmetry 18 (2007) 251*



Chloro[(S)-dimethyl(1-(1-naphthyl)ethyl)aminato-C,N][(S<sub>p</sub>)-di(3',5'-dimethylphenyl)([2.2]paracyclophan-4-yl)phosphine]palladium(II)

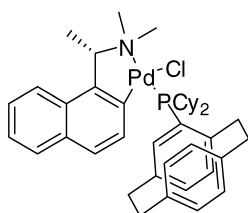
$$[\alpha]_D^{20} = -231.2 (c\ 0.82, CHCl_3)$$

Source of chirality: (S)-1-(naphthalen-1-yl)ethanamine

Absolute configuration: (S<sub>p</sub>,S)

Tang-Zhi Zhang, Li-Xin Dai and Xue-Long Hou\*

*Tetrahedron: Asymmetry 18 (2007) 251*



Chloro[(S)-dimethyl(1-(1-naphthyl)ethyl)aminato-C,N][(R<sub>p</sub>)-dicyclohexyl([2.2]paracyclophan-4-yl)phosphine]palladium(II)

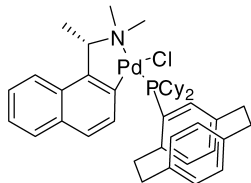
$$[\alpha]_D^{20} = +18.9 (c\ 0.80, CHCl_3)$$

Source of chirality: (S)-1-(naphthalen-1-yl)ethanamine

Absolute configuration: (R<sub>p</sub>,S)

Tang-Zhi Zhang, Li-Xin Dai and Xue-Long Hou\*

*Tetrahedron: Asymmetry 18 (2007) 251*



$C_{42}H_{53}ClNPPd$

Chloro[(*S*)-dimethyl(1-(1-naphthyl)ethyl)aminato-*C,N*][(*S<sub>p</sub>*)-dicyclohexyl([2.2]paracyclophan-4-yl)phosphine]palladium(II)

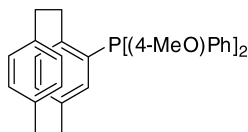
$[\alpha]_D^{20} = -22.5$  (*c* 0.82,  $CHCl_3$ )

Source of chirality: (*S*)-1-(naphthalen-1-yl)ethanamine

Absolute configuration: (*S<sub>p</sub>*,*S*)

Tang-Zhi Zhang, Li-Xin Dai and Xue-Long Hou\*

*Tetrahedron: Asymmetry 18 (2007) 251*



$C_{30}H_{29}O_2P$

(*S<sub>p</sub>*)-Di(4'-methoxyphenyl)([2.2]paracyclophan-4-yl)phosphine

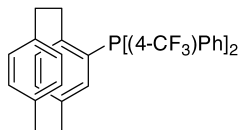
$[\alpha]_D^{20} = -37.6$  (*c* 0.18,  $CHCl_3$ )

Source of chirality: (*S*)-1-(naphthalen-1-yl)ethanamine

Absolute configuration: (*S<sub>p</sub>*)

Tang-Zhi Zhang, Li-Xin Dai and Xue-Long Hou\*

*Tetrahedron: Asymmetry 18 (2007) 251*



$C_{30}H_{23}F_6P$

(*S<sub>p</sub>*)-Di(4'-trifluoromethylphenyl)([2.2]paracyclophan-4-yl)phosphine

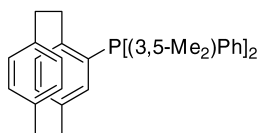
$[\alpha]_D^{20} = -11.2$  (*c* 0.27,  $CHCl_3$ )

Source of chirality: (*S*)-1-(naphthalen-1-yl)ethanamine

Absolute configuration: (*S<sub>p</sub>*)

Tang-Zhi Zhang, Li-Xin Dai and Xue-Long Hou\*

*Tetrahedron: Asymmetry 18 (2007) 251*



$C_{32}H_{33}P$

(*S<sub>p</sub>*)-Di(3',5'-dimethylphenyl)([2.2]paracyclophan-4-yl)phosphine

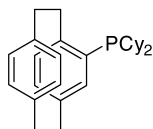
$[\alpha]_D^{20} = -12.6$  (*c* 0.40,  $CHCl_3$ )

Source of chirality: (*S*)-1-(naphthalen-1-yl)ethanamine

Absolute configuration: (*S<sub>p</sub>*)

Tang-Zhi Zhang, Li-Xin Dai and Xue-Long Hou\*

*Tetrahedron: Asymmetry 18 (2007) 251*



$C_{28}H_{37}P$

(*S<sub>p</sub>*)-Dicyclohexyl[2.2]paracyclophan-4-ylphosphine

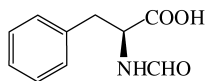
$[\alpha]_D^{20} = -44.6$  (*c* 0.20,  $CHCl_3$ )

Source of chirality: (*S*)-1-(naphthalen-1-yl)ethanamine

Absolute configuration: (*S<sub>p</sub>*)

Laura Berezki,\* Emese Pálovics, Petra Bombicz, György Pokol, Elemér Fogassy and Katalin Marthi

*Tetrahedron: Asymmetry 18 (2007) 260*



$C_{10}H_{11}NO_3$

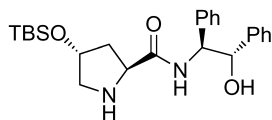
(*S*)-(+)-Formylphenylalanine

Optical purity = 92%

$[\alpha]_D^{20} = 69.1$  (*c* 2, ethanol)

Long He,\* Jun Jiang, Zhuo Tang, Xin Cui, Ai-Qiao Mi, Yao-Zhong Jiang and Liu-Zhu Gong\*

*Tetrahedron: Asymmetry 18 (2007) 265*



$C_{25}H_{37}N_2O_3Si$

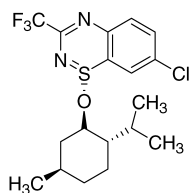
(2*S*,1'*S*,2'*S*)-Pyrrolidine-4-*trans*-TBS-protected hydroxy-2-carboxylic acid (2-hydroxy-1,2-diphenyl-ethyl)-amide

$[\alpha]_D^{20} = -17.2$  (*c* 0.5,  $CH_2Cl_2$ )

Source of chirality: asymmetric synthesis

Nadiia V. Briukhovetska, Nataliya P. Kolesnyk, Alexander M. Chernega, Sergiy A. Buth and Yuriy G. Shermolovich\*

*Tetrahedron: Asymmetry 18 (2007) 271*



$C_{18}H_{22}ClF_3N_2OS$

(*S*)-(-)-7-Chloro-1-[(1*R*,2*S*,5*R*)-(-)-2-isopropyl-5-methyl-cyclohexyloxy]-3-trifluoromethyl-1 $\lambda^4$ -benzo[1,2,4]thiadiazine

De = 100%

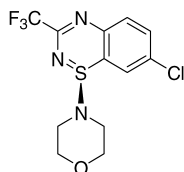
$[\alpha]_D^{20} = -857.5$  (*c* 0.9,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (*S<sub>S</sub>*)(1*R*,2*S*,5*R*)<sub>menthol</sub>

Nadiia V. Briukhovetska, Nataliya P. Kolesnyk, Alexander M. Chernega,  
Sergiy A. Buth and Yuriy G. Shermolovich\*

*Tetrahedron: Asymmetry 18 (2007) 271*



$C_{12}H_{11}ClF_3N_3OS$

(S)-(+)-7-Chloro-1-morpholin-4-yl-3-trifluoromethyl-1λ<sup>4</sup>-benzo[1,2,4]thiadiazine

Ee = 100%

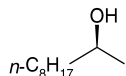
$[\alpha]_D^{20} = +1224$  (c 0.4,  $CHCl_3$ )

Source of chirality: asymmetric synthesis

Absolute configuration: (S)

Constance V. Voss, Christian C. Gruber and Wolfgang Kroutil\*

*Tetrahedron: Asymmetry 18 (2007) 276*



$C_{10}H_{22}O$

(S)-2-Decanol

Ee = 92%

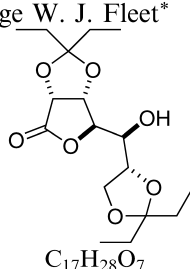
$[\alpha]_D^{20} = +9.8$  (c 1.00, EtOH)

Source of chirality: deracemisation, asymmetric synthesis

Absolute configuration: (S)

Anders E. Håkansson, Jeroen van Ameijde, Luisa Guglielmini,  
Graeme Horne, Robert J. Nash, Emma L. Evinson, Atsushi Kato and  
George W. J. Fleet\*

*Tetrahedron: Asymmetry 18 (2007) 282*



$C_{17}H_{28}O_7$

2,3:6,7-Di-O-diethylidene-D-glycero-L-talo-heptono-1,4-lactone

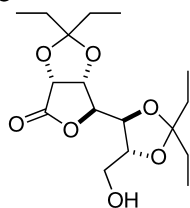
Ee = 100%

$[\alpha]_D^{21} = -28.4$  (c 1.93,  $CHCl_3$ )

Source of chirality: D-glycero-D-gulono-1,4-lactone as starting material

Anders E. Håkansson, Jeroen van Ameijde, Luisa Guglielmini,  
Graeme Horne, Robert J. Nash, Emma L. Evinson, Atsushi Kato and  
George W. J. Fleet\*

*Tetrahedron: Asymmetry 18 (2007) 282*



$C_{17}H_{28}O_7$

2,3:5,6-Di-O-diethylidene-D-glycero-L-talo-heptono-1,4-lactone

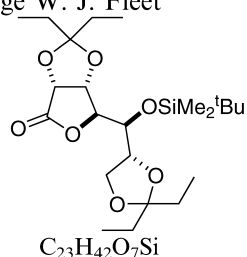
Ee = 100%

$[\alpha]_D^{22} = -62.6$  (c 1.60,  $CHCl_3$ )

Source of chirality: D-glycero-D-gulono-1,4-lactone as starting material

Anders E. Håkansson, Jeroen van Ameijde, Luisa Guglielmini, Graeme Horne, Robert J. Nash, Emma L. Evinson, Atsushi Kato and George W. J. Fleet\*

*Tetrahedron: Asymmetry 18 (2007) 282*



5-*O*-*tert*-Butyldimethylsilyl-2,3:6,7-di-*O*-diethylidene-*D*-glycero-*L*-talo-heptono-1,4-lactone

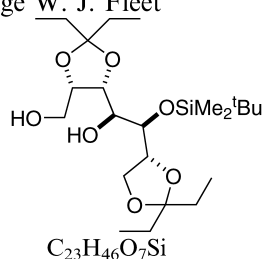
Ee = 100%

$[\alpha]_D^{21} = -14.6$  (*c* 2.5,  $CHCl_3$ )

Source of chirality: *D*-glycero-*D*-gulono-1,4-lactone as starting material

Anders E. Håkansson, Jeroen van Ameijde, Luisa Guglielmini, Graeme Horne, Robert J. Nash, Emma L. Evinson, Atsushi Kato and George W. J. Fleet\*

*Tetrahedron: Asymmetry 18 (2007) 282*



5-*O*-*tert*-Butyldimethylsilyl-2,3:6,7-di-*O*-diethylidene-*D*-glycero-*L*-talo-heptitol

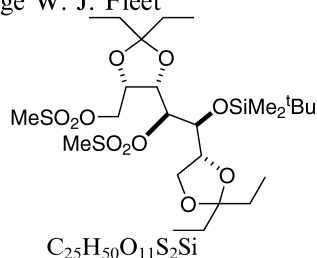
Ee = 100%

$[\alpha]_D^{21} = +24.1$  (*c* 3.1,  $CHCl_3$ )

Source of chirality: *D*-glycero-*D*-gulono-1,4-lactone as starting material

Anders E. Håkansson, Jeroen van Ameijde, Luisa Guglielmini, Graeme Horne, Robert J. Nash, Emma L. Evinson, Atsushi Kato and George W. J. Fleet\*

*Tetrahedron: Asymmetry 18 (2007) 282*



5-*O*-*tert*-Butyldimethylsilyl-2,3:6,7-di-*O*-diethylidene-1,4-di-*O*-methanesulfonyl-*D*-glycero-*L*-talo-heptitol

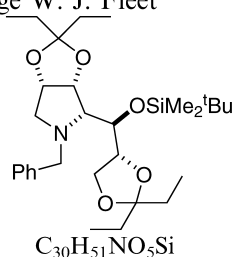
Ee = 100%

$[\alpha]_D^{20} = -44.2$  (*c* 0.85,  $CHCl_3$ )

Source of chirality: *D*-glycero-*D*-gulono-1,4-lactone as starting material

Anders E. Håkansson, Jeroen van Ameijde, Luisa Guglielmini, Graeme Horne, Robert J. Nash, Emma L. Evinson, Atsushi Kato and George W. J. Fleet\*

*Tetrahedron: Asymmetry 18 (2007) 282*



*N*-Benzyl 5-*O*-*tert*-butyl dimethylsilyl-1,4-dideoxy-2,3:6,7-di-*O*-diethylidene-1,4-imino-*D*-glycero-*L*-talo-heptitol

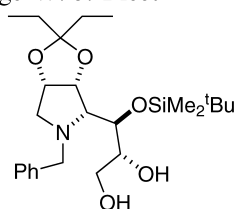
Ee = 100%

$[\alpha]_D^{20} = +20.4$  (*c* 0.85,  $CHCl_3$ )

Source of chirality: *D*-glycero-*D*-gulono-1,4-lactone as starting material

Anders E. Håkansson, Jeroen van Ameijde, Luisa Guglielmini, Graeme Horne, Robert J. Nash, Emma L. Evinson, Atsushi Kato and George W. J. Fleet\*

*Tetrahedron: Asymmetry 18 (2007) 282*



$C_{25}H_{43}NO_5Si$

*N*-Benzyl 5-*O*-*tert*-butyldimethylsilyl-1,4-dideoxy-2,3-*O*-diethylidene-1,4-imino-*D*-glycero-*L*-talo-heptitol

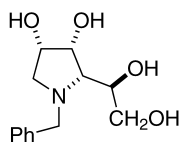
Ee = 100%

$[\alpha]_D^{23} = +35.1$  (*c* 1.05,  $CHCl_3$ )

Source of chirality: *D*-glycero-*D*-gulono-1,4-lactone as starting material

Anders E. Håkansson, Jeroen van Ameijde, Luisa Guglielmini, Graeme Horne, Robert J. Nash, Emma L. Evinson, Atsushi Kato and George W. J. Fleet\*

*Tetrahedron: Asymmetry 18 (2007) 282*



$C_{13}H_{19}NO_4$

*N*-Benzyl 1,4-dideoxy-1,4-imino-*L*-mannitol

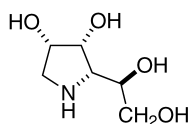
Ee = 100%

$[\alpha]_D^{21} = +37.7$  (*c* 1.20,  $H_2O$ )

Source of chirality: *D*-glycero-*D*-gulono-1,4-lactone as starting material

Anders E. Håkansson, Jeroen van Ameijde, Luisa Guglielmini, Graeme Horne, Robert J. Nash, Emma L. Evinson, Atsushi Kato and George W. J. Fleet\*

*Tetrahedron: Asymmetry 18 (2007) 282*



$C_6H_{13}NO_4$

*L*-DIM (1,4-dideoxy-1,4-imino-*L*-mannitol)

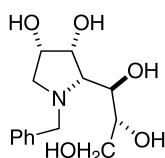
Ee = 100%

$[\alpha]_D^{21} = +10.3$  (*c* 1.20,  $H_2O$ )

Source of chirality: *D*-glycero-*D*-gulono-1,4-lactone as starting material

Anders E. Håkansson, Jeroen van Ameijde, Luisa Guglielmini, Graeme Horne, Robert J. Nash, Emma L. Evinson, Atsushi Kato and George W. J. Fleet\*

*Tetrahedron: Asymmetry 18 (2007) 282*



$C_{14}H_{21}NO_5$

*N*-Benzyl 1,4-imino-*D*-glycero-*L*-talo-heptitol

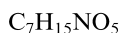
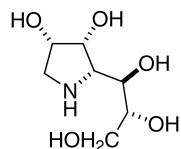
Ee = 100%

$[\alpha]_D^{21} = +12.7$  (*c* 2.04,  $MeOH$ )

Source of chirality: *D*-glycero-*D*-gulono-1,4-lactone as starting material

Anders E. Håkansson, Jeroen van Ameijde, Luisa Guglielmini, Graeme Horne, Robert J. Nash, Emma L. Evinson, Atsushi Kato and George W. J. Fleet\*

*Tetrahedron: Asymmetry 18 (2007) 282*



1,4-Imino-D-glycero-L-talo-heptitol

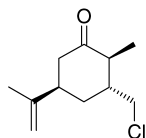
Ee = 100%

$[\alpha]_{\text{D}}^{23} = +9.5$  (c 1.70, H<sub>2</sub>O)

Source of chirality: D-glycero-D-gulono-1,4-lactone as starting material

Oleksandr O. Grygorenko, Nataliya A. Kopylova, Pavel K. Mikhailiuk, Anja Meißner and Igor V. Komarov\*

*Tetrahedron: Asymmetry 18 (2007) 290*



(2*S*,3*R*,5*R*)-3-(Chloromethyl)-5-isopropenyl-2-methylcyclohexanone

Ee = 100%

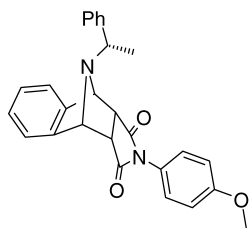
$[\alpha]_{\text{D}} = -18.8$  (c 0.41, MeOH)

Source of chirality: (*R*)-carvone

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

Oleksandr O. Grygorenko, Nataliya A. Kopylova, Pavel K. Mikhailiuk, Anja Meißner and Igor V. Komarov\*

*Tetrahedron: Asymmetry 18 (2007) 290*



(3*aR*,4*S*,9*R*,9*aS*)-2-(4-Methoxyphenyl)-10-[(1*R*)-1-phenylethyl]-3*a*,4,9,9*a*-tetrahydro-1*H*-4,9-epiminobenzo[*f*]isoindole-1,3-dione

Ee = 100%

$[\alpha]_{\text{D}} = +88.5$  (c 0.87, MeOH)

Source of chirality: (*R*)- $\alpha$ -phenylethylamine

Absolute configuration: (3*aR*,4*S*,9*R*,9*aS*,1'*R*)