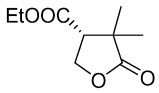
Sonia Coriani *, Cristina Forzato *, Giada Furlan, Patrizia Nitti, Giuliana Pitacco, Magnus Ringholm, Kenneth Ruud

Tetrahedron: Asymmetry *20 (2009) 1459*



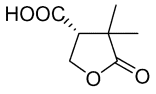
$C_9H_{14}O_4$

Ethyl (*R*)-(+)-4,4-dimethyl-5-oxo-tetrahydrofuran-3-carboxylate

Ee = 94% (by chiral HRGC)
$[\alpha]_D^{25} = +16.7$ (*c* 0.40, MeOH)
$\Delta\varepsilon_{213}$ = +1.02 (MeOH)
Source of chirality: enzymatic resolution
Absolute configuration: (*R*)

Sonia Coriani *, Cristina Forzato *, Giada Furlan, Patrizia Nitti, Giuliana Pitacco, Magnus Ringholm, Kenneth Ruud

Tetrahedron: Asymmetry *20 (2009) 1459*



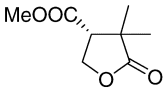
$C_7H_{10}O_4$

(*R*)-(+)-4,4-Dimethyl-5-oxo-tetrahydrofuran-3-carboxylic acid

Ee = 94% (by chiral HRGC)
$[\alpha]_D^{25} = +12.9$ (*c* 0.31, MeOH)
$\Delta\varepsilon_{214}$ = +0.85 (MeOH)
Source of chirality: enzymatic resolution
Absolute configuration: (*R*)

Sonia Coriani *, Cristina Forzato *, Giada Furlan, Patrizia Nitti, Giuliana Pitacco, Magnus Ringholm, Kenneth Ruud

Tetrahedron: Asymmetry *20 (2009) 1459*



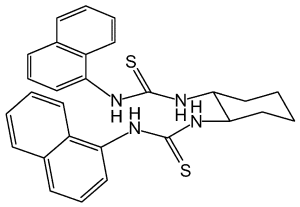
$C_8H_{12}O_4$

Methyl (*R*)-(+)-4,4-dimethyl-5-oxo-tetrahydrofuran-3-carboxylate

Ee = 94% (by chiral HRGC)
$[\alpha]_D^{25} = +20.4$ (*c* 0.25, MeOH)
$\Delta\varepsilon_{213}$ = +0.80 (MeOH)
Source of chirality: enzymatic resolution
Absolute configuration: (*R*)

Ana M. Costero *, Ursula Llaosa, Salvador Gil, Margarita Parra, Manuel Colera

Tetrahedron: Asymmetry *20 (2009) 1468*



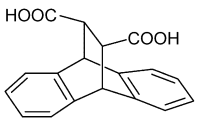
$C_{28}H_{28}N_4S_2$

(1*R*,2*R*)-1,2-Bis-(3-(naphthalen-1-yl)thioureido)cyclohexane

Ee = 99%
$[\alpha]_D^{20} = +0.40$ (*c* 0.022M, DMSO)
Source of chirality: (1*R*,2*R*)-1,2-diaminocyclohexane
Absolute configuration: (1*R*,2*R*)

Aleksandra Wasilewska, Maria J. Milewska, Maria Gdaniec, Tadeusz Połoński *

Tetrahedron: Asymmetry *20 (2009) 1472*



Ee >97%
$[\alpha]_D^{22} = -9.2$ (*c* 4, MeOH)
Source of chirality: resolution
Absolute configuration: (11*S*,12*S*)

$C_{18}H_{14}O_4$
(11*S*,12*S*)-9,10-Dihydro-9,10-ethanoanthracene-11,12-dicarboxylic acid

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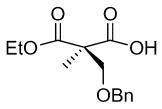
Douglas S. Masterson *, Dale A. Rosado Jr., Cassie Nabors

Tetrahedron: Asymmetry *20 (2009) 1476*



$[\alpha]_D^{21.8} = +7.7$ (*c* 0.208, MeOH)
Source of chirality: asymmetric synthesis
Absolute configuration: (2*R*)

$C_{14}H_{18}O_5$
(*R*)-2-(4-(Benzyloxymethyl)-3-ethoxy-2-methyl-3-oxopropanoic acid

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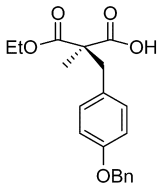
Tetrahedron: Asymmetry *20 (2009) 1476*



$[\alpha]_D^{22} = -1.0$ (*c* 0.066, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (2*R*)

$C_{20}H_{22}O_5$
(*R*)-2-(4-(Benzyloxy)benzyl)-3-ethoxy-2-methyl-3-oxopropanoic acid

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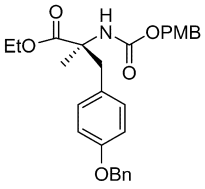
Douglas S. Masterson *, Dale A. Rosado Jr., Cassie Nabors

Tetrahedron: Asymmetry *20 (2009) 1476*

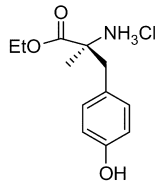


$[\alpha]_D^{17.8} = +24.2$ (*c* 0.07, CH_2Cl_2).
Source of chirality: asymmetric synthesis
Absolute configuration: (1*S*)

$C_{28}H_{31}NO_6$
(*S*)-Ethyl-3-(benzyloxy)-2-((4-methoxybenzyloxy)carbonylamino)-2-methylpropanoate

Douglas S. Masterson *, Dale A. Rosado Jr., Cassie Nabors

Tetrahedron: Asymmetry *20 (2009) 1476*



$C_{12}H_{17}NO_3$

(*S*)-α-Methyl tyrosine ethyl ester

$[\alpha]_{obs}^{21.7} = -0.10$ (*c* 1.2 M HCl)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*S*)

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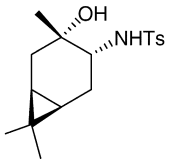
Tetrahedron: Asymmetry *20 (2009) 1487*



$C_{17}H_{25}NO_3S$

N-((1*R*,3*R*,4*S*,6*S*)-(+)-4-Hydroxy-4,7,7-trimethyl-bicyclo[4.1.0]heptan-3-yl)-4-methylbenzenesulfonamide

Ee = 99%
$[\alpha]_D^{20} = +34.5$ (*c* 1.5, $CHCl_3$)
Source of chirality: (+)-3-carene
Absolute configuration: (1*R*,3*R*,4*S*,6*S*)

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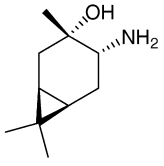
Tetrahedron: Asymmetry *20 (2009) 1487*



$C_{10}H_{19}NO$

(1*S*,3*S*,4*R*,6*R*)-(+)-4-Amino-3,7,7-trimethyl-bicyclo[4.1.0]heptan-3-ol

Ee = 99%
$[\alpha]_D^{20} = +12.5$ (*c* 3.2, $CHCl_3$)
Source of chirality: (+)-3-carene
Absolute configuration: (1*S*,3*S*,4*R*,6*R*)

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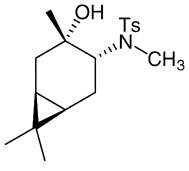
Tetrahedron: Asymmetry *20 (2009) 1487*



$C_{18}H_{27}NO_3S$

N-((1*R*,3*R*,4*S*,6*S*)-(+)-4-Hydroxy-4,7,7-trimethylbicyclo-[4.1.0]heptan-3-yl)-*N*-4-dimethylbenzenesulfonamide

Ee = 99%
$[\alpha]_D^{20} = +64.5$ (*c* 2.0, $CHCl_3$)
Source of chirality: (+)-3-carene
Absolute configuration: (1*R*,3*R*,4*S*,6*S*)

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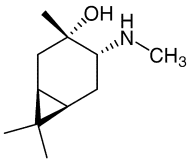
Tetrahedron: Asymmetry *20 (2009) 1487*



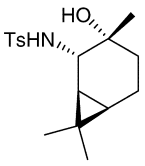
$C_{11}H_{21}NO$

Ee = 99%
$[\alpha]_D^{20} = -29.9$ (*c* 2.5, $CHCl_3$)
Source of chirality: (+)-3-carene
Absolute configuration: (1*S*,3*S*,4*R*,6*R*)

(1*S*,3*S*,4*R*,6*R*)- 3,7,7-Trimethyl-4-(methylamino)bicyclo-[4.1.0]heptan-3-ol

Krzysztof Z. Łączkowski *, Anna Kmieciak, Anna Kozakiewicz

Tetrahedron: Asymmetry *20 (2009) 1487*



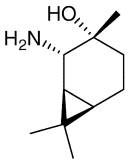
$C_{17}H_{25}NO_3S$

Ee = 99%
$[\alpha]_D^{20} = +48.7$ (*c* 1.5, $CHCl_3$)
Source of chirality: (+)-2-carene
Absolute configuration: (1*S*,2*S*,3*R*,6*R*)

N-((1*S*,2*S*,3*R*,6*R*)-(+)-3-Hydroxy-3,7,7-trimethylbicyclo-[4.1.0]heptan-2-yl)-4-methylbenzenesulfonamide

Krzysztof Z. Łączkowski *, Anna Kmieciak, Anna Kozakiewicz

Tetrahedron: Asymmetry *20 (2009) 1487*



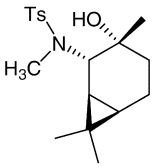
$C_{10}H_{19}NO$

Ee = 99%
$[\alpha]_D^{20} = -8.4$ (*c* 2.7, $CHCl_3$)
Source of chirality: (+)-2-carene
Absolute configuration: (1*S*,2*S*,3*R*,6*R*)

(1*S*,2*S*,3*R*,6*R*)-(−)-2-Amino-3,7,7-trimethylbicyclo[4.1.0]heptan-3-ol

Krzysztof Z. Łączkowski *, Anna Kmieciak, Anna Kozakiewicz

Tetrahedron: Asymmetry *20 (2009) 1487*



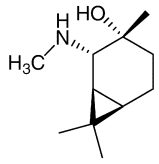
$C_{18}H_{27}NO_3S$

Ee = 99%
$[\alpha]_D^{20} = -51.0$ (*c* 1.45, $CHCl_3$)
Source of chirality: (+)-2-carene
Absolute configuration: (1*S*,2*S*,3*R*,6*R*)

N-((1*S*,2*S*,3*R*,6*R*)-3-Hydroxy-3,7,7-trimethylbicyclo[4.1.0]heptan-2-yl)-*N*-4-dimethylbenzenesulfonamide

Krzysztof Z. Łączkowski *, Anna Kmieciak, Anna Kozakiewicz

Tetrahedron: Asymmetry *20 (2009) 1487*



Ee = 99%
$[\alpha]_D^{20} = +36.4$ (*c* 2.15, $CHCl_3$)
Source of chirality: (+)-2-carene
Absolute configuration: (1*S*,2*S*,3*R*,6*R*)

$C_{11}H_{21}NO$

(1*S*,2*S*,3*R*,6*R*)-3,7,7-Trimethyl-2-(methylamino)bicyclo-[4.1.0]heptan-3-ol

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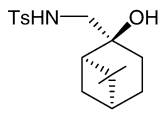
Tetrahedron: Asymmetry *20 (2009) 1487*



Ee = 99%
$[\alpha]_D^{20} = -19.0$ (*c* 1.5, $CHCl_3$)
Source of chirality: (−)-β-pinene
Absolute configuration: (1*R*,2*S*,5*S*)

$C_{17}H_{25}NO_3S$

N-(((1*R*,2*S*,5*S*)-(−)-2-Hydroxy-6,6-dimethylbicyclo[3.1.1]heptan-2-yl)methyl)-4-methylbenzenesulfonamide

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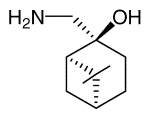
Tetrahedron: Asymmetry *20 (2009) 1487*



Ee = 99%
$[\alpha]_D^{20} = -51.3$ (*c* 2.6, $CHCl_3$)
Source of chirality: (−)-β-pinene
Absolute configuration: (1*R*,2*S*,5*S*)

$C_{10}H_{19}NO$

(1*R*,2*S*,5*S*)-(−)-2-(Aminomethyl)-6,6-dimethylbicyclo[3.1.1]heptan-2-ol

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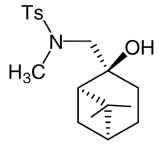
Krzysztof Z. Łączkowski *, Anna Kmieciak, Anna Kozakiewicz

Tetrahedron: Asymmetry *20 (2009) 1487*



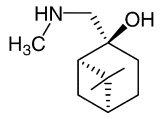
Ee = 99%
$[\alpha]_D^{20} = -16.5$ (*c* 3.5, $CHCl_3$)
Source of chirality: (−)-β-pinene
Absolute configuration: (1*R*,2*S*,5*S*)

$C_{18}H_{27}NO_3S$

N-(((1*R*,2*S*,5*S*)-2-Hydroxy-6,6-dimethylbicyclo[3.1.1]heptan-2-yl)ethyl)-*N*-4-dimethylbenzenesulfonamide

Krzysztof Z. Łączkowski *, Anna Kmieciak, Anna Kozakiewicz

Tetrahedron: Asymmetry *20 (2009) 1487*



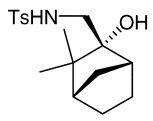
Ee = 99%
$[\alpha]_D^{20} = -60.0$ (*c* 1.15, $CHCl_3$)
Source of chirality: (−)-β-pinene
Absolute configuration: (1*R*,2*S*,5*S*)

$C_{11}H_{21}NO$

(1*R*,2*S*,5*S*)-6,6-Dimethyl-2-((methylamino)methyl)bicyclo-[3.1.1]heptan-2-ol

Krzysztof Z. Łączkowski *, Anna Kmieciak, Anna Kozakiewicz

Tetrahedron: Asymmetry *20 (2009) 1487*



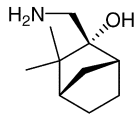
Ee = 75%
$[\alpha]_D^{20} = +14.2$ (*c* 1.25, $CHCl_3$)
Source of chirality: (−)-camphene
Absolute configuration: (1*R*,2*R*,4*S*)

$C_{17}H_{25}NO_3S$

N-(((1*R*,2*R*,4*S*)-2-Hydroxy-3,3-dimethylbicyclo[2.2.1]heptan-2-yl)methyl)-4-methylbenzenesulfonamide

Krzysztof Z. Łączkowski *, Anna Kmieciak, Anna Kozakiewicz

Tetrahedron: Asymmetry *20 (2009) 1487*



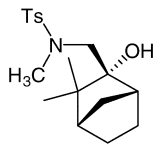
Ee = 75%
$[\alpha]_D^{20} = +18.7$ (*c* 1.1, DMSO)
Source of chirality: (−)-camphene
Absolute configuration: (1*R*,2*R*,4*S*)

$C_{10}H_{19}NO$

(1*R*,2*R*,4*S*)-2-(Aminomethyl)-3,3-dimethylbicyclo[2.2.1]heptan-2-ol

Krzysztof Z. Łączkowski *, Anna Kmieciak, Anna Kozakiewicz

Tetrahedron: Asymmetry *20 (2009) 1487*



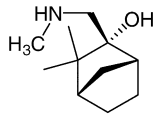
Ee = 75%
$[\alpha]_D^{20} = +1.4$ (*c* 2.2, DMSO)
Source of chirality: (−)-camphene
Absolute configuration: (1*R*,2*S*,4*S*)

$C_{18}H_{27}NO_3$

N-(((1*R*,2*R*,4*S*)-2-Hydroxy-3,3-dimethylbicyclo[2.2.1]heptan-2-yl)methyl)-*N*-4-dimethylbenzenesulfonamide

Krzysztof Z. Łączkowski *, Anna Kmieciak, Anna Kozakiewicz

Tetrahedron: Asymmetry *20 (2009) 1487*



Ee = 75%
$[\alpha]_D^{20} = +18.2$ (*c* 1.35, MeOH)
Source of chirality: (−)-camphene
Absolute configuration: (1*R*,2*R*,4*S*)

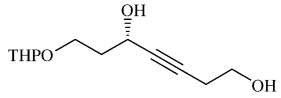
$C_{11}H_{21}NO$

(1*R*,2*R*,4*S*)-3,3-Dimethyl-2-((methylamino)methyl)bicyclo-[2.2.1]heptan-2-ol

Gowravaram Sabitha *, Peddabuddi Gopal, Jhillu S. Yadav

Tetrahedron: Asymmetry *20 (2009) 1493*

$[\alpha]_D^{25} = +5.1$ (*c* 1.05, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (5*S*)



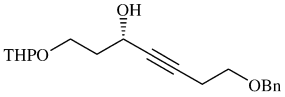
$C_{12}H_{20}O_4$

(5*S*)-7-(Tetrahydro-2*H*-2-pyranyloxy)-3-heptyne-1,5-diol

Gowravaram Sabitha *, Peddabuddi Gopal, Jhillu S. Yadav

Tetrahedron: Asymmetry *20 (2009) 1493*

$[\alpha]_D^{25} = -40.3$ (*c* 0.9, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (3*S*)



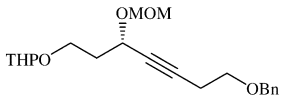
$C_{19}H_{26}O_4$

(3*S*)-7-(Benzyloxy)-1-(tetrahydro-2*H*-2-pyranyloxy)-4-heptyn-3-ol

Gowravaram Sabitha *, Peddabuddi Gopal, Jhillu S. Yadav

Tetrahedron: Asymmetry *20 (2009) 1493*

$[\alpha]_D^{25} = -36.9$ (*c* 1.0, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (3*S*)



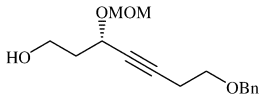
$C_{21}H_{30}O_5$

2-[(3*S*)-7-(Benzyloxy)-3-(methoxymethoxy)-4-heptynyl]oxytetrahydro-2*H*-pyran

Gowravaram Sabitha *, Peddabuddi Gopal, Jhillu S. Yadav

Tetrahedron: Asymmetry *20 (2009) 1493*

$[\alpha]_D^{25} = -88.1$ (*c* 1, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (3*S*)



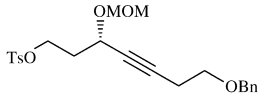
$C_{16}H_{22}O_4$

(3*S*)-7-(Benzyloxy)-3-(methoxymethoxy)-4-heptyn-1-ol

Gowravaram Sabitha *, Peddabuddi Gopal, Jhillu S. Yadav

Tetrahedron: Asymmetry *20 (2009) 1493*

$[\alpha]_D^{25} = -47.4$ (*c* 1.35, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (3*S*)



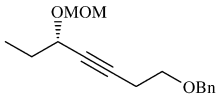
$C_{23}H_{28}O_6S$

(3*S*)-7-(Benzyloxy)-3-(methoxymethoxy)-4-heptynyl 4-methyl-1-benzenesulfonate

Gowravaram Sabitha *, Peddabuddi Gopal, Jhillu S. Yadav

Tetrahedron: Asymmetry *20 (2009) 1493*

$[\alpha]_D^{25} = -99.3$ (*c* 1, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (5*S*)



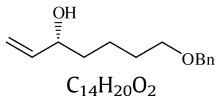
$C_{16}H_{22}O_3$

(5*S*)-1-(benzyloxy)-5-(methoxymethoxy)-3-heptyne

Gowravaram Sabitha *, Peddabuddi Gopal, Jhillu S. Yadav

Tetrahedron: Asymmetry *20 (2009) 1493*

$[\alpha]_D^{25} = -6.0$ (*c* 1, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (3*S*)



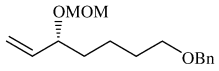
$C_{14}H_{20}O_2$

(3*R*)-7-(Benzyloxy)-1-hepten-3-ol

Gowravaram Sabitha *, Peddabuddi Gopal, Jhillu S. Yadav

Tetrahedron: Asymmetry *20 (2009) 1493*

$[\alpha]_D^{25} = +26.0$ (*c* 0.5, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (3*R*)



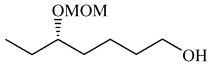
$C_{16}H_{24}O_3$

(3*R*)-7-(Benzyloxy)-3-(methoxymethoxy)-1-heptene

Gowravaram Sabitha *, Peddabuddi Gopal, Jhillu S. Yadav

Tetrahedron: Asymmetry *20 (2009) 1493*

$[\alpha]_D^{25} = +4.9$ (*c* 1.1, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (5*S*)



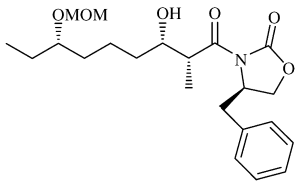
$C_9H_{20}O_3$

(5*S*)-5-(Methoxymethoxy)heptan-1-ol

Gowravaram Sabitha *, Peddabuddi Gopal, Jhillu S. Yadav

Tetrahedron: Asymmetry *20 (2009) 1493*

$[\alpha]_D^{25} = -38.4$ (*c* 1.4, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (4*R*,2*R*,3*S*,7*S*)



$C_{22}H_{33}NO_6$

(4*R*)-4-Benzyl-3-[(2*R*,3*S*,7*S*)-3-hydroxy-7-(methoxymethoxy)-2-methylnonanoyl]-1,3-oxazolan-2-one

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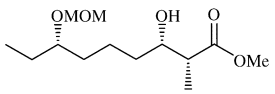
Gowravaram Sabitha *, Peddabuddi Gopal, Jhillu S. Yadav

Tetrahedron: Asymmetry *20 (2009) 1493*

$[\alpha]_D^{25} = -10.2$ (*c* 1.2, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (2*R*,3*S*,7*S*)



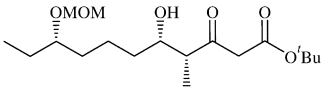
$C_{13}H_{26}O_5$

Methyl (2*R*,3*S*,7*S*)-3-hydroxy-7-(methoxymethoxy)-2-methylnonanoate

Gowravaram Sabitha *, Peddabuddi Gopal, Jhillu S. Yadav

Tetrahedron: Asymmetry *20 (2009) 1493*

$[\alpha]_D^{25} = -5.0$ (*c* 1.1, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (4*R*,5*S*,9*S*)



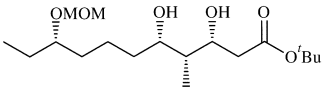
$C_{18}H_{34}O_6$

tert-Butyl(4*R*,5*S*,9*S*)-5-hydroxy-9-(methoxymethoxy)-4-methyl-3-oxoundecanoate

Gowravaram Sabitha *, Peddabuddi Gopal, Jhillu S. Yadav

Tetrahedron: Asymmetry *20 (2009) 1493*

$[\alpha]_D^{25} = +3.0$ (*c* 1.0, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (3*R*,4*R*,5*S*,9*S*)



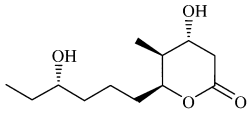
$C_{18}H_{36}O_6$

tert-Butyl(3*R*,4*R*,5*S*,9*S*)-3,5-dihydroxy-9-(methoxymethoxy)-4-methylundecanoate

Gowravaram Sabitha *, Peddabuddi Gopal, Jhillu S. Yadav

Tetrahedron: Asymmetry *20 (2009) 1493*

$[\alpha]_D^{25} = -39.5$ (*c* 0.27, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (4*R*,5*S*,6*S*)



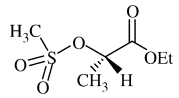
$C_{12}H_{22}O_4$

(4*R*,5*S*,6*S*)-4-Hydroxy-6-[(4*S*)-4-hydroxyhexyl]-5-methyltetrahydro-2*H*-2-pyranone

Alexander V. Kurkin *, Anna A. Bernovskaya, Marina A. Yurovskaya

Tetrahedron: Asymmetry *20 (2009) 1500*

$[\alpha]_D^{20} = -65$ (*c* 1, $CHCl_3$)
Source of chirality: ethyl ester (*S*)-2-hydroxypropionic acid
Absolute configuration: (*S*)

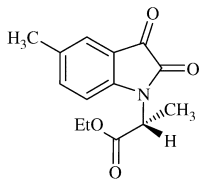


$C_6H_{12}O_5S$

Ethyl *O*-methanesulfonyl-(*S*)-2-hydroxypropanoate

Alexander V. Kurkin *, Anna A. Bernovskaya, Marina A. Yurovskaya

Tetrahedron: Asymmetry *20 (2009) 1500*



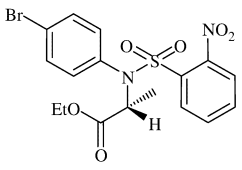
$C_{14}H_{15}NO_4$

Ethyl 2-(5-methylisatin-1-yl)propanoate

Ee $\geqslant$ 30%
$[\alpha]_D^{20} = -1.3$ (*c* 3.8, $CHCl_3$)
Source of chirality: (*S*)-ethyl 2-(methanesulfonyl)propanoate
Absolute configuration: (*R*)

Alexander V. Kurkin *, Anna A. Bernovskaya, Marina A. Yurovskaya

Tetrahedron: Asymmetry *20 (2009) 1500*



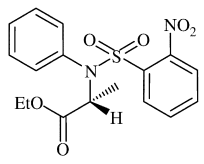
$C_{17}H_{17}BrN_2O_6S$

Ethyl (*R*)-*N*-(2-nitrophenylsulfonyl)-*N*-(4-bromophenyl)-2-aminopropanoate

$[\alpha]_D^{20} = -8.4$ (*c* 3.2, $CHCl_3$)
Source of chirality: ethyl (*S*)-2-hydroxypropanoate
Absolute configuration: (*R*)

Alexander V. Kurkin *, Anna A. Bernovskaya, Marina A. Yurovskaya

Tetrahedron: Asymmetry *20 (2009) 1500*



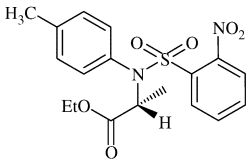
$C_{17}H_{18}N_2O_6S$

Ethyl (*R*)-*N*-(2-nitrophenylsulfonyl)-*N*-(4-phenyl)-2-aminopropanoate

$[\alpha]_D^{20} = +10.1$ (*c* 3.27, $CHCl_3$)
Source of chirality: ethyl (*S*)-2-hydroxypropanoate
Absolute configuration: (*R*)

Alexander V. Kurkin *, Anna A. Bernovskaya, Marina A. Yurovskaya

Tetrahedron: Asymmetry *20 (2009) 1500*



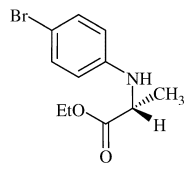
$C_{18}H_{20}N_2O_6S$

Ethyl (*R*)-*N*-(2-nitrophenylsulfonyl)-*N*-(4-methylphenyl)-2-aminopropanoate

$[\alpha]_D^{20} = +2.1$ (*c* 3.27 $CHCl_3$)
Source of chirality: ethyl (*S*)-2-hydroxypropanoate
Absolute configuration: (*R*)

Alexander V. Kurkin *, Anna A. Bernovskaya, Marina A. Yurovskaya

Tetrahedron: Asymmetry *20 (2009) 1500*



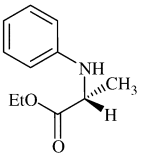
$C_{11}H_{14}BrNO_2$

Ethyl (*R*)-*N*-(4-bromophenylamino)-propanoate

$[\alpha]_D^{20} = +67$ (*c* 3.37 $CHCl_3$)
Source of chirality: ethyl (*S*)-2-hydroxypropanoate
Absolute configuration: (*R*)

Alexander V. Kurkin *, Anna A. Bernovskaya, Marina A. Yurovskaya

Tetrahedron: Asymmetry *20 (2009) 1500*



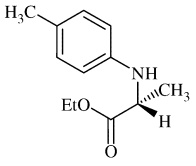
$C_{11}H_{15}NO_2$

Ethyl (*R*)-*N*-(4-phenylamino)-propanoate

$[\alpha]_D^{20} = +40$ (*c* 2.71, $CHCl_3$)
Source of chirality: ethyl (*S*)-2-hydroxypropanoate
Absolute configuration: (*R*)

Alexander V. Kurkin *, Anna A. Bernovskaya, Marina A. Yurovskaya

Tetrahedron: Asymmetry *20 (2009) 1500*



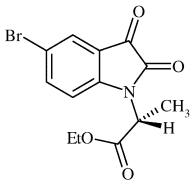
$C_{12}H_{17}NO_2$

Ethyl (*R*)-*N*-(4-methylphenylamino)-propanoate

$[\alpha]_D^{20} = +49$ (*c* 3.30, $CHCl_3$)
Source of chirality: ethyl (*S*)-2-hydroxypropanoate
Absolute configuration: (*R*)

Alexander V. Kurkin *, Anna A. Bernovskaya, Marina A. Yurovskaya

Tetrahedron: Asymmetry *20 (2009) 1500*



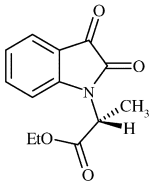
$C_{13}H_{12}BrNO_4$

(*R*)-Ethyl 2-(5-bromisatin-1-yl)propanoate

$[\alpha]_D^{20} = +2$ (*c* 1.0, $CHCl_3$)
Ee $\geqslant$ 97%
Source of chirality: Ethyl (*R*)-N-(4-bromophenylamino)-propanoate
Absolute configuration: (*R*)

Alexander V. Kurkin *, Anna A. Bernovskaya, Marina A. Yurovskaya

Tetrahedron: Asymmetry *20 (2009) 1500*



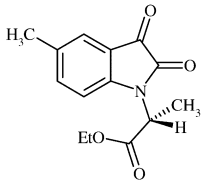
$C_{13}H_{13}NO_4$

(*R*)-Ethyl 2-(isatin-1-yl)propanoate

$[\alpha]_D^{20} = +8$ (*c* 1.0, $CHCl_3$)
Ee ⩾ 99%
Source of chirality: Ethyl (*R*)-N-(4-phenylamino)-propanoate
Absolute configuration: (*R*)

Alexander V. Kurkin *, Anna A. Bernovskaya, Marina A. Yurovskaya

Tetrahedron: Asymmetry *20 (2009) 1500*



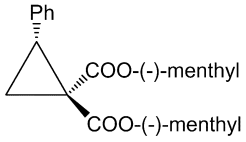
$C_{14}H_{15}NO_4$

(*R*)-Ethyl 2-(5-methylisatin-1-yl)propanoate

$[\alpha]_D^{20} = -4.3$ (*c* 3.8, $CHCl_3$)
Ee ⩾ 99%
Source of chirality: Ethyl (*R*)-N-(4-methylphenylamino)-propanoate
Absolute configuration: (*R*)

Luana Bagnoli *, Catalina Scarponi, Lorenzo Testaferri, Marcello Tiecco *

Tetrahedron: Asymmetry *20 (2009) 1506*



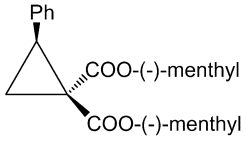
$C_{31}H_{46}O_4$

Di-(−)-menthyl-(2*R*)-2-phenylcyclopropane-1,1-dicarboxylate

$[\alpha]_D^{19} = +34.6$ (*c* 1.69, $CHCl_3$)
Source of chirality: (1*R*,2*S*,5*R*)-(−)-menthol
Absolute configuration: (2*R*)

Luana Bagnoli *, Catalina Scarponi, Lorenzo Testaferri, Marcello Tiecco *

Tetrahedron: Asymmetry *20 (2009) 1506*



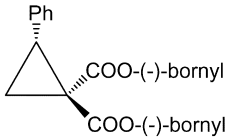
$C_{31}H_{46}O_4$

Di-(−)-menthyl-(2*S*)-2-phenylcyclopropane-1,1-dicarboxylate

$[\alpha]_D^{18} = -86.0$ (*c* 0.84, $CHCl_3$)
Source of chirality: (1*R*,2*S*,5*R*)-(−)-menthol
Absolute configuration: (2*S*)

Luana Bagnoli *, Catalina Scarponi, Lorenzo Testaferri, Marcello Tiecco *

Tetrahedron: Asymmetry *20 (2009) 1506*



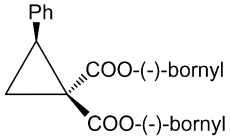
$[\alpha]_D^{22} = +43.9$ (*c* 2.20, $CHCl_3$)
Source of chirality: [(1*S*)-*endo*]-(−)-borneol
Absolute configuration: (2*R*)

$C_{31}H_{42}O_4$

Di-(−)-bornyl-(2*R*)-2-phenylcyclopropane-1,1-dicarboxylate

Luana Bagnoli *, Catalina Scarponi, Lorenzo Testaferri, Marcello Tiecco *

Tetrahedron: Asymmetry *20 (2009) 1506*



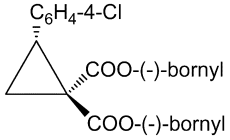
$[\alpha]_D^{22} = -113.9$ (*c* 2.80, $CHCl_3$)
Source of chirality: [(1*S*)-*endo*]-(−)-borneol
Absolute configuration: (2*S*)

$C_{31}H_{42}O_4$

Di-(−)-bornyl-(2*S*)-2-phenylcyclopropane-1,1-dicarboxylate

Luana Bagnoli *, Catalina Scarponi, Lorenzo Testaferri, Marcello Tiecco *

Tetrahedron: Asymmetry *20 (2009) 1506*



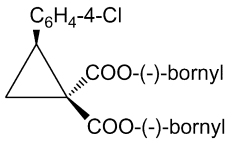
$[\alpha]_D^{25} = +55.2$ (*c* 1.30, $CHCl_3$)
Source of chirality: [(1*S*)-*endo*]-(−)-borneol
Absolute configuration: (2*R*)

$C_{31}H_{41}ClO_4$

Di-(−)-bornyl-(2*R*)-2-(4-chlorophenyl)cyclopropane-1,1-dicarboxylate

Luana Bagnoli *, Catalina Scarponi, Lorenzo Testaferri, Marcello Tiecco *

Tetrahedron: Asymmetry *20 (2009) 1506*



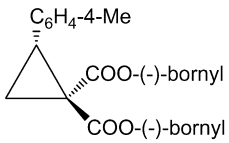
$[\alpha]_D^{24} = -84.7$ (*c* 1.26, $CHCl_3$)
Source of chirality: [(1*S*)-*endo*]-(−)-borneol
Absolute configuration: (2*S*)

$C_{31}H_{41}ClO_4$

Di-(−)-bornyl-(2*S*)-2-(4-chlorophenyl)cyclopropane-1,1-dicarboxylate

Luana Bagnoli *, Catalina Scarponi, Lorenzo Testaferri, Marcello Tiecco *

Tetrahedron: Asymmetry *20 (2009) 1506*



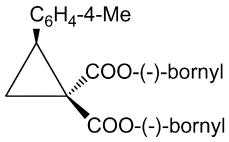
$C_{32}H_{44}O_4$

Di-(−)-bornyl-(2*R*)-2-(4-methylphenyl)cyclopropane-1,1-dicarboxylate

$[\alpha]_D^{26} = +48.3$ (*c* 2.16, $CHCl_3$)
Source of chirality: [(1*S*)-*endo*]-(−)-borneol
Absolute configuration: (2*R*)

Luana Bagnoli *, Catalina Scarponi, Lorenzo Testaferri, Marcello Tiecco *

Tetrahedron: Asymmetry *20 (2009) 1506*



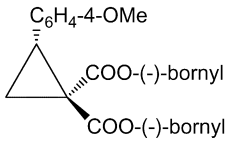
$C_{32}H_{44}O_4$

Di-(−)-bornyl-(2*S*)-2-(4-methylphenyl)cyclopropane-1,1-dicarboxylate

$[\alpha]_D^{26} = -104.2$ (*c* 2.02, $CHCl_3$)
Source of chirality: [(1*S*)-*endo*]-(−)-borneol
Absolute configuration: (2*S*)

Luana Bagnoli *, Catalina Scarponi, Lorenzo Testaferri, Marcello Tiecco *

Tetrahedron: Asymmetry *20 (2009) 1506*



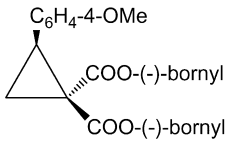
$C_{32}H_{44}O_5$

Di-(−)-bornyl-(2*R*)-2-(4-methoxyphenyl)cyclopropane-1,1-dicarboxylate

$[\alpha]_D^{27} = +53.5$ (*c* 2.17, $CHCl_3$)
Source of chirality: [(1*S*)-*endo*]-(−)-borneol
Absolute configuration: (2*R*)

Luana Bagnoli *, Catalina Scarponi, Lorenzo Testaferri, Marcello Tiecco *

Tetrahedron: Asymmetry *20 (2009) 1506*



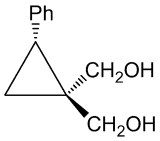
$C_{32}H_{44}O_5$

Di-(−)-bornyl-(2*S*)-2-(4-methoxyphenyl)cyclopropane-1,1-dicarboxylate

$[\alpha]_D^{25} = -93.1$ (*c* 2.88, $CHCl_3$)
Source of chirality: [(1*S*)-*endo*]-(−)-borneol
Absolute configuration: (2*S*)

Luana Bagnoli *, Catalina Scarponi, Lorenzo Testaferri, Marcello Tiecco *

Tetrahedron: Asymmetry *20 (2009) 1506*



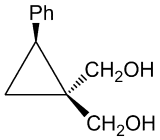
$C_{11}H_{14}O_2$

[(2*R*)-2-Phenylcyclopropane-1,1-diyl]dimethanol

$[\alpha]_D^{16} = +2.2$ (*c* 1.75, $CHCl_3$)
Source of chirality: [(1*S*)-*endo*]-(−)-borneol
Absolute configuration: (2*R*)

Luana Bagnoli *, Catalina Scarponi, Lorenzo Testaferri, Marcello Tiecco *

Tetrahedron: Asymmetry *20 (2009) 1506*



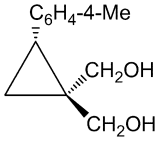
$C_{11}H_{14}O_2$

[(2*S*)-2-Phenylcyclopropane-1,1-diyl]dimethanol

$[\alpha]_D^{18} = -2.1$ (*c* 2.39, $CHCl_3$)
Source of chirality: [(1*S*)-*endo*]-(−)-borneol
Absolute configuration: (2*S*)

Luana Bagnoli *, Catalina Scarponi, Lorenzo Testaferri, Marcello Tiecco *

Tetrahedron: Asymmetry *20 (2009) 1506*



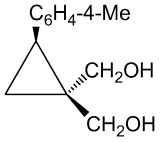
$C_{12}H_{16}O_2$

[(2*R*)-2-(4-Methylphenyl)cyclopropane-1,1-diyl]dimethanol

$[\alpha]_D^{23} = +9.9$ (*c* 1.41, $CHCl_3$)
Source of chirality: [(1*S*)-*endo*]-(−)-borneol
Absolute configuration: (2*R*)

Luana Bagnoli *, Catalina Scarponi, Lorenzo Testaferri, Marcello Tiecco *

Tetrahedron: Asymmetry *20 (2009) 1506*



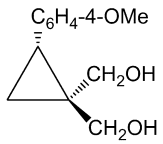
$C_{12}H_{16}O_2$

[(2*S*)-2-(4-Methylphenyl)cyclopropane-1,1-diyl]dimethanol

$[\alpha]_D^{25} = -8.6$ (*c* 2.42, $CHCl_3$)
Source of chirality: [(1*S*)-*endo*]-(−)-borneol
Absolute configuration: (2*S*)

Luana Bagnoli *, Catalina Scarponi, Lorenzo Testaferri, Marcello Tiecco *

Tetrahedron: Asymmetry *20 (2009) 1506*



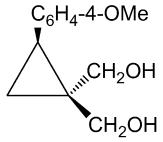
$C_{12}H_{16}O_3$

[(2*R*)-2-(4-Methoxyphenyl)cyclopropane-1,1-diyl]dimethanol

$[\alpha]_D^{30} = +9.1$ (*c* 1.75, $CHCl_3$)
Source of chirality: [(1*S*)-*endo*]-(−)-borneol
Absolute configuration: (2*R*)

Luana Bagnoli *, Catalina Scarponi, Lorenzo Testaferri, Marcello Tiecco *

Tetrahedron: Asymmetry *20 (2009) 1506*



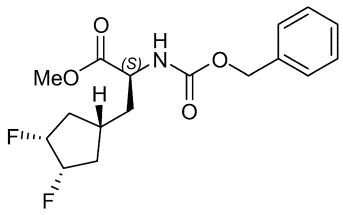
$C_{12}H_{16}O_3$

[(2*S*)-2-(4-Methoxyphenyl)cyclopropane-1,1-diyl]dimethanol

$[\alpha]_D^{27} = -9.4$ (*c* 1.21, $CHCl_3$)
Source of chirality: [(1*S*)-*endo*]-(−)-borneol
Absolute configuration: (2*S*)

Robert D. Simpson *, Wei Zhao

Tetrahedron: Asymmetry *20 (2009) 1515*



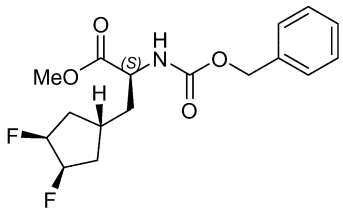
$C_{17}H_{21}F_2NO_4$

(*S*)-Methyl 2-(benzyloxycarbonylamino)-3-((1*s*,3*R*,4*S*)-3,4-difluorocyclopentyl)propanoate(*S*)-methyl 2-(benzyloxycarbonylamino)-3-((1*r*,3*R*,4*S*)-3,4-difluorocyclopentyl)propanoate

Ee = > 98%
$[\alpha]_D^{23} = +3.2(c\ 0.51, CH_2Cl_2)$
Source of chirality: asymmetric alkylation

Robert D. Simpson *, Wei Zhao

Tetrahedron: Asymmetry *20 (2009) 1515*



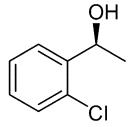
$C_{17}H_{21}F_2NO_4$

(*S*)-Methyl 2-(benzyloxycarbonylamino)-3-((1*s*,3*R*,4*S*)-3,4-difluorocyclopentyl)propanoate(*S*)-methyl 2-(benzyloxycarbonylamino)-3-((1*s*,3*R*,4*S*)-3,4-difluorocyclopentyl)propanoate

Ee = > 98%
$[\alpha]_D^{23} = +1.95(c\ 0.51, CH_2Cl_2)$
Source of chirality: asymmetric alkylation

Leandro H. Andrade *, Leandro Piovan, Mônica D. Pasquini

Tetrahedron: Asymmetry *20 (2009) 1521*

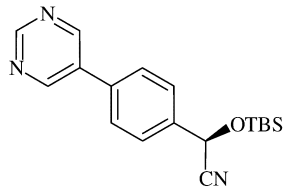


C_8H_9ClO
(*S*)-1-(2-Chlorophenyl)ethanol

Ee = 99%
$[\alpha]_D^{24} = -59.8$ (*c* 1.0, $CHCl_3$)
Absolute configuration: (*S*)
Source of chirality : Bioreduction

Rajib Bhunya, Tridib Mahapatra, Samik Nanda *

Tetrahedron: Asymmetry *20 (2009) 1526*

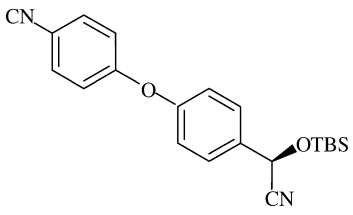


$C_{18}H_{23}N_3OSi$
(*R*)-(*tert*-Butyl-dimethyl-silanyloxy)-(4-pyrimidin-5-yl-phenyl)-acetonitrile

Ee = 94%
$[\alpha]_D^{28} = +26.4$ (*c* 1.0, MeOH)
Source of chirality: enzymatic hydrocyanation
Absolute configuration: (2*R*)

Rajib Bhunya, Tridib Mahapatra, Samik Nanda *

Tetrahedron: Asymmetry *20 (2009) 1526*

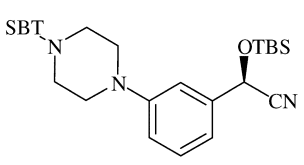


$C_{21}H_{24}N_2O_2Si$
(*R*)-4-{4-[(*tert*-Butyl-dimethyl-silanyloxy)-cyano-methyl]-phenoxy}-benzonitrile

Ee = 96%
$[\alpha]_D^{28} = +38.7$ (*c* 1.0, MeOH)
Source of chirality: enzymatic hydrocyanation
Absolute configuration: (2*R*)

Rajib Bhunya, Tridib Mahapatra, Samik Nanda *

Tetrahedron: Asymmetry *20 (2009) 1526*

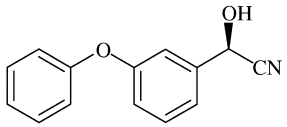


$C_{24}H_{43}N_3OSi_2$
(*R*)-(*tert*-Butyl-dimethyl-silanyloxy)-{3-[4-(*tert*-butyl-dimethylsilanyl)-piperazin-1-yl]-phenyl}-acetonitrile

Ee = 94%
$[\alpha]_D^{28} = +26.4$ (*c* 1.0, MeOH)
Source of chirality: enzymatic hydrocyanation
Absolute configuration: (2*R*)

Rajib Bhunya, Tridib Mahapatra, Samik Nanda *

Tetrahedron: Asymmetry *20 (2009) 1526*



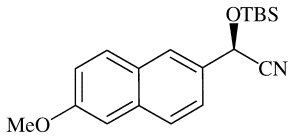
$C_{14}H_{11}NO_2$

(*R*)-2-Hydroxy-2-(3-phenoxy-phenyl)-acetonitrile

Ee = 99%
$[\alpha]_D^{28} = +26.4$ (*c* 1.0, MeOH)
Source of chirality: enzymatic hydrocyanation
Absolute configuration: (2*R*)

Rajib Bhunya, Tridib Mahapatra, Samik Nanda *

Tetrahedron: Asymmetry *20 (2009) 1526*



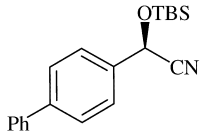
$C_{19}H_{25}NO_2Si$

(*R*)-(*tert*-Butyl-dimethyl-silanyloxy)-(6-methoxy-naphthalen-2-yl)-acetonitrile

Ee = 97%
$[\alpha]_D^{28} = +32.5$ (*c* 1.0, MeOH)
Source of chirality: enzymatic hydrocyanation
Absolute configuration: (2*R*)

Rajib Bhunya, Tridib Mahapatra, Samik Nanda *

Tetrahedron: Asymmetry *20 (2009) 1526*



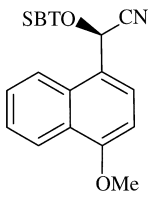
$C_{20}H_{25}NOSi$

(*R*)-Biphenyl-4-yl-(*tert*-butyl-dimethyl-silanyloxy)-acetonitrile

Ee = 96%
$[\alpha]_D^{28} = +18.9$ (*c* 1.0, MeOH)
Source of chirality: enzymatic hydrocyanation
Absolute configuration: (2*R*)

Rajib Bhunya, Tridib Mahapatra, Samik Nanda *

Tetrahedron: Asymmetry *20 (2009) 1526*



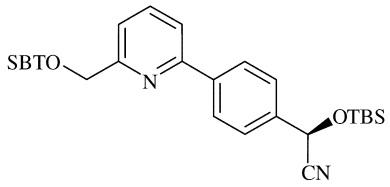
$C_{19}H_{25}NO_2Si$

(*R*)-(*tert*-Butyl-dimethyl-silanyloxy)-(4-methoxy-naphthalen-2-yl)-acetonitrile

Ee = 94%
$[\alpha]_D^{28} = +61.2$ (*c* 1.0, MeOH)
Source of chirality: enzymatic hydrocyanation
Absolute configuration: (2*R*)

Rajib Bhunya, Tridib Mahapatra, Samik Nanda *

Tetrahedron: Asymmetry *20 (2009) 1526*



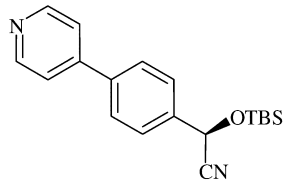
Ee = 98%
$[\alpha]_D^{28} = +49.8$ (*c* 1.0, MeOH)
Source of chirality: enzymatic hydrocyanation
Absolute configuration: (2*R*)

$C_{26}H_{40}N_2O_2Si_2$

(*R*)-(*tert*-Butyl-dimethyl-silanyloxy)-{4-[6-(*tert*-butyl-dimethylsilanyloxymethyl)-pyridin-2-yl]-phenyl}-acetonitrile

Rajib Bhunya, Tridib Mahapatra, Samik Nanda *

Tetrahedron: Asymmetry *20 (2009) 1526*



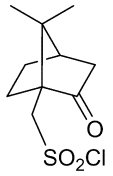
Ee = 96%
$[\alpha]_D^{28} = +23.45$ (*c* 1.0, MeOH)
Source of chirality: enzymatic hydrocyanation
Absolute configuration: (2*R*)

$C_{19}H_{24}N_2OSi$

(*R*)-(*tert*-Butyl-dimethyl-silanyloxy)-(4-pyridin-4-yl-phenyl)-acetonitrile

Frank W. Lewis, Gilles Egron, David H. Grayson *

Tetrahedron: Asymmetry *20 (2009) 1531*



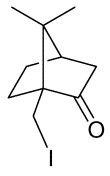
Ee = 100%
$[\alpha]_D^{27} = +30.9$ (*c* 1.29, $CHCl_3$)
Source of chirality: homochiral template
Absolute configuration: (1*S*,4*R*)

$C_{10}H_{15}O_3SCl$

(1*S*,4*R*)-(7,7-Dimethyl-2-oxobicyclo[2.2.1]hept-1-yl) methanesulfonyl chloride

Frank W. Lewis, Gilles Egron, David H. Grayson *

Tetrahedron: Asymmetry *20 (2009) 1531*



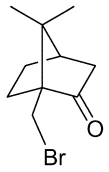
Ee = 100%
$[\alpha]_D^{23} = -20.1$ (*c* 1.28, $CHCl_3$)
Source of chirality: homochiral template
Absolute configuration: (1*S*,4*R*)

$C_{10}H_{15}OI$

(1*S*,4*R*)-1-(Iodomethyl)-7,7-dimethylbicyclo-[2.2.1]heptan-2-one

Frank W. Lewis, Gilles Egron, David H. Grayson *

Tetrahedron: Asymmetry *20 (2009) 1531*



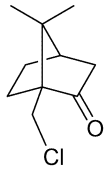
$C_{10}H_{15}OBr$

(1*S*,4*R*)-1-(Bromomethyl)-7,7-dimethylbicyclo-[2.2.1]heptan-2-one

Ee = 100%
$[\alpha]_D^{23} = +24.8$ (*c* 1.12, $CHCl_3$)
Source of chirality: homochiral template
Absolute configuration: (1*S*,4*R*)

Frank W. Lewis, Gilles Egron, David H. Grayson *

Tetrahedron: Asymmetry *20 (2009) 1531*



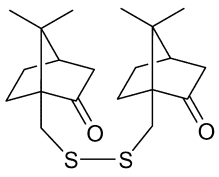
$C_{10}H_{15}OCl$

(1*S*,4*R*)-1-(Chloromethyl)-7,7-dimethylbicyclo-[2.2.1]heptan-2-one

Ee = 100%
$[\alpha]_D^{16} = +39.7$ (*c* 1.16, EtOH)
Source of chirality: homochiral template
Absolute configuration: (1*S*,4*R*)

Frank W. Lewis, Gilles Egron, David H. Grayson *

Tetrahedron: Asymmetry *20 (2009) 1531*



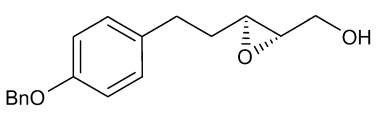
$C_{20}H_{30}O_2S_2$

1,1′-[Dithiobis(methylene)]bis(1*S*, 4*R*)-7,7-dimethylbicyclo[2.2.1]heptan-2-one

Ee = 100%
$[\alpha]_D^{22} = -102.1$ (*c* 0.94, $CHCl_3$)
Source of chirality: homochiral template
Absolute configuration: (1*S*,4*R*)

Biswanath Das *, Kanaparthy Suneel, Gandham Satyalakshmi, Duddukuri Nandan Kumar

Tetrahedron: Asymmetry *20 (2009) 1536*



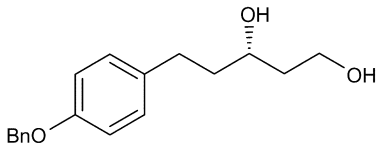
$C_{18}H_{20}O_3$

((2*S*,3*S*)-3-(4-(Benzyloxy)phenethyl)oxiran-2-yl)methanol

$[\alpha]_D = -5.4$ (*c* 0.5, $CHCl_3$)
Source of chirality: Sharpless epoxidation
Absolute configuration: (2*S*,3*S*)

Biswanath Das *, Kanaparthy Suneel, Gandham Satyalakshmi, Duddukuri Nandan Kumar

Tetrahedron: Asymmetry *20 (2009) 1536*



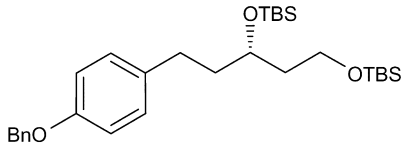
$C_{18}H_{22}O_3$

(*S*)-5-(4-(Benzyloxy)phenyl)pentane-1,3-diol

$[\alpha]_D = -1.4$ (*c* 0.5, $CHCl_3$)
Source of chirality: Sharpless epoxidation
Absolute configuration: (3*S*)

Biswanath Das *, Kanaparthy Suneel, Gandham Satyalakshmi, Duddukuri Nandan Kumar

Tetrahedron: Asymmetry *20 (2009) 1536*



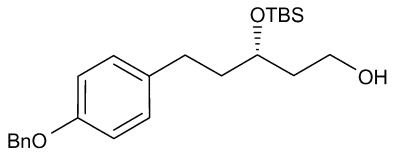
$C_{30}H_{50}O_3Si_2$

(*S*)-5-(4-(Benzyloxy)phenethyl)-2,2,3,3,9,9,10,10-octamethyl-4,8-dioxa-3,9-disilaundecane

$[\alpha]_D = +7.0$ (*c* 0.5, $CHCl_3$)
Source of chirality: Sharpless epoxidation
Absolute configuration: (3*S*)

Biswanath Das *, Kanaparthy Suneel, Gandham Satyalakshmi, Duddukuri Nandan Kumar

Tetrahedron: Asymmetry *20 (2009) 1536*



$C_{24}H_{36}O_3Si$

(*S*)-5-(4-(Benzyloxy)phenyl)-3-(tert-butyldimethylsilyloxy)pentan-1-ol

$[\alpha]_D = -33.0$ (*c* 0.6, $CHCl_3$)
Source of chirality: Sharpless epoxidation
Absolute configuration: (3*S*)

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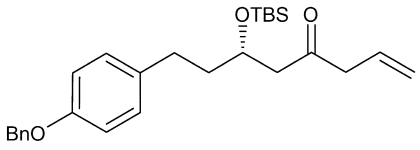
Tetrahedron: Asymmetry *20 (2009) 1536*



$C_{27}H_{38}O_3Si$

(*S*)-8-(4-(Benzyloxy)phenyl)-6-(*tert*-butyldimethylsilyloxy)oct-1-en-4-one

$[\alpha]_D = +1.8$ (*c* 0.6, $CHCl_3$)
Source of chirality: Sharpless epoxidation
Absolute configuration: (6*S*)

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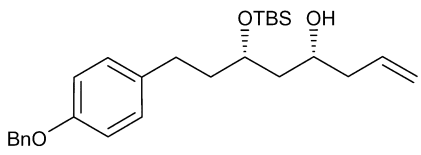
Tetrahedron: Asymmetry *20 (2009) 1536*



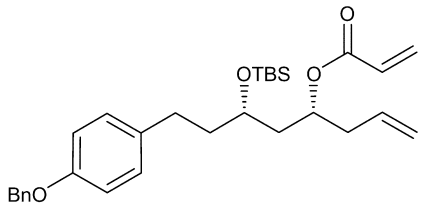
$[\alpha]_D = -0.1$ (*c* 0.6, $CHCl_3$)
Source of chirality: Sharpless epoxidation and 1,3 induction
Absolute configuration: (4*R*,6*S*)

$C_{27}H_{40}O_3Si$

(4*R*,6*S*)-8-(4-(Benzyloxy)phenyl)-6-(*tert*butyldimethylsilyloxy)oct-1-en-4-ol

Biswanath Das *, Kanaparthy Suneel, Gandham Satyalakshmi, Duddukuri Nandan Kumar

Tetrahedron: Asymmetry *20 (2009) 1536*



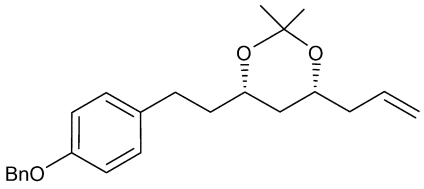
$[\alpha]_D = -2.0$ (*c* 0.25, $CHCl_3$)
Source of Chirality: Sharpless epoxidation and 1,3 induction
Absolute configuration: (4*R*,6*S*)

$C_{30}H_{42}O_4Si$

(4*R*,6*S*)-8-(4-(Benzyloxy)phenyl)-6-(*tert*butyldimethylsilyloxy)oct-1-en-4-ylacrylate

Biswanath Das *, Kanaparthy Suneel, Gandham Satyalakshmi, Duddukuri Nandan Kumar

Tetrahedron: Asymmetry *20 (2009) 1536*



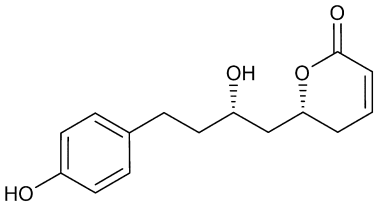
$[\alpha]_D = -7.1$ (*c* 0.15, $CHCl_3$)
Source of chirality: Sharpless epoxidation and 1,3 induction
Absolute configuration: (3*S*,5*R*)

$C_{24}H_{30}O_3$

(4*R*,6*S*)-4-Allyl-6-(4-(benzyloxy)phenethyl)-2,2-dimethyl-1,3-dioxane

Biswanath Das *, Kanaparthy Suneel, Gandham Satyalakshmi, Duddukuri Nandan Kumar

Tetrahedron: Asymmetry *20 (2009) 1536*



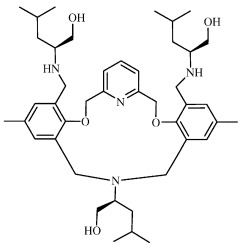
$[\alpha]_D = +39.3$ (*c* 0.35, $CHCl_3$)
Source of chirality: Sharpless epoxidation and 1,3 induction
Absolute configuration: (6*R*,2*S*)

$C_{15}H_{18}O_4$

(*R*)-6-((*S*)-2-Hydroxy-4-(4-hydroxyphenyl)butyl)-5,6-dihydro-2*H*-pyran-2-one

Hayriye Ozer, Şafak Ozhan Kocakaya, Abuzer Akgun, Halil Hoşgören, Mahmut Togrul *

Tetrahedron: Asymmetry *20 (2009) 1541*



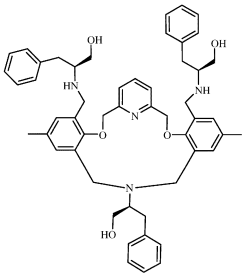
$C_{43}H_{66}N_4O_5$

Macrocyclic (*S*,*S*,*S*)-**1**

$[\alpha]_D^{35} = +6.8$ (*c* 0.7, CH_2Cl_2)
Source of chirality: L-leucine
Absolute configuration: (*S*,*S*,*S*)

Hayriye Ozer, Şafak Ozhan Kocakaya, Abuzer Akgun, Halil Hoşgören, Mahmut Togrul *

Tetrahedron: Asymmetry *20 (2009) 1541*



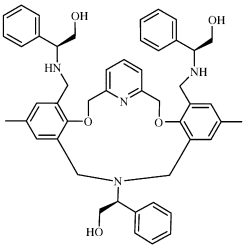
$C_{52}H_{60}N_4O_5$

Macrocyclic (*S*,*S*,*S*)-**2**

$[\alpha]_D^{35} = +23.9$ (*c* 0.7, CH_2Cl_2)
Source of chirality: L-phenylalanine
Absolute configuration: (*S*,*S*,*S*)

Hayriye Ozer, Şafak Ozhan Kocakaya, Abuzer Akgun, Halil Hoşgören, Mahmut Togrul *

Tetrahedron: Asymmetry *20 (2009) 1541*



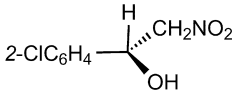
$C_{49}H_{54}N_4O_5$

Macrocyclic (*S*,*S*,*S*)-**3**

$[\alpha]_D^{35} = -23.7$ (*c* 0.7, CH_2Cl_2)
Source of chirality: L-glycinol
Absolute configuration: (*S*,*S*,*S*)

Michał Rachwalski, Stanisław Leśniak *, Ewelina Sznajder, Piotr Kiełbasiński *

Tetrahedron: Asymmetry *20 (2009) 1547*



$C_8H_8ClNO_3$

1-(2′-Chlorophenyl)-2-nitroethanol

Ee = 87 %
$[\alpha]_D = -50.4$ (*c* 1, $CHCl_3$)
Source of chirality : asymmetric synthesis
Absolute configuration: (*R*) (literature data)

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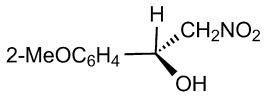
Tetrahedron: Asymmetry *20 (2009) 1547*

Ee = 95 %
$[\alpha]_D$ = −45.5 (*c* 1, $CHCl_3$)
Source of chirality : asymmetric synthesis
Absolute configuration: (*R*) (literature data)

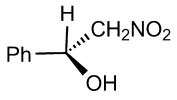


$C_9H_{11}NO_4$
1-(2′-Methoxyphenyl)-2-nitroethanol

Michał Rachwalski, Stanisław Leśniak *, Ewelina Sznajder, Piotr Kiełbasiński *

Tetrahedron: Asymmetry *20 (2009) 1547*

Ee = 98 %
$[\alpha]_D$ = −22.0 (*c* 1, $CHCl_3$)
Source of chirality : asymmetric synthesis
Absolute configuration: (*R*) (literature data)



$C_8H_9NO_3$
1-Phenyl-2-nitroethanol

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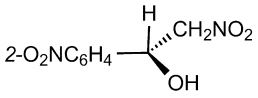
Tetrahedron: Asymmetry *20 (2009) 1547*

Ee = 90 %
$[\alpha]_D$ = +228 (*c* 1, $CHCl_3$)
Source of chirality : asymmetric synthesis
Absolute configuration: (*R*) (literature data)



$C_8H_8N_2O_5$
1-(2′-Nitrophenyl)-2-nitroethanol

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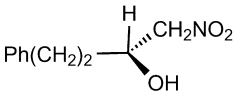
Tetrahedron: Asymmetry *20 (2009) 1547*

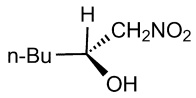
Ee = 85 %
$[\alpha]_D$ = +14.2 (*c* 1, $CHCl_3$)
Source of chirality : asymmetric synthesis
Absolute configuration: (*R*) (literature data)



$C_{10}H_{13}NO_5$
1-Nitro-4-phenylbutan-2-ol

Michał Rachwalski, Stanisław Leśniak *, Ewelina Sznajder, Piotr Kiełbasiński *

Tetrahedron: Asymmetry *20 (2009) 1547*



$C_6H_{13}NO_5$

1-Nitrohexan-2-ol

Ee = 90 %
$[\alpha]_D = -9.0$ (*c* 1, $CHCl_3$)
Source of chirality : asymmetric synthesis
Absolute configuration: (*R*) (literature data)

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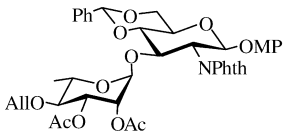
Tetrahedron: Asymmetry *20 (2009) 1550*



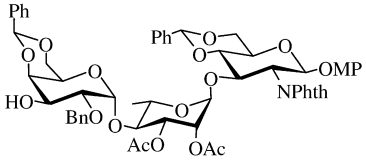
$C_{41}H_{43}NO_{14}$

4-Methoxyphenyl (2,3-di-*O*-acetyl-4-*O*-allyl-α-L-rhamnopyranosyl)-(1→3)-4,6-*O*-benzylidene-2-deoxy-2-*N*-phthalimido-β-D-glucopyranoside

$[\alpha]_D^{25} = +9.3$ (*c* 1.2, $CHCl_3$)
Source of chirality: L-rhamnose, D-glucosamine hydrochloride

Rajib Panchadhayee, Anup Kumar Misra *

Tetrahedron: Asymmetry *20 (2009) 1550*



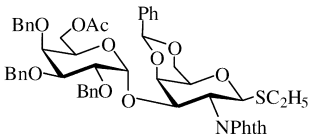
$C_{58}H_{59}NO_{19}$

4-Methoxyphenyl (2-*O*-benzyl-4,6-*O*-benzylidene-α-D-galactopyranosyl)-(1→4)-(2,3-di-*O*-acetyl-α-L-rhamnopyranosyl)-(1→3)-4,6-*O*-benzylidene-2-deoxy-2-*N*-phthalimido-β-D-glucopyranoside

$[\alpha]_D^{25} = -4$ (*c* 1.2, $CHCl_3$)
Source of chirality: D-galactose, L-rhamnose, D-glucosamine hydrochloride

Rajib Panchadhayee, Anup Kumar Misra *

Tetrahedron: Asymmetry *20 (2009) 1550*



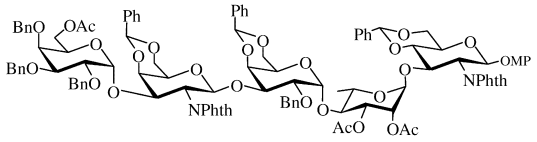
$C_{52}H_{53}NO_{12}S$

Ethyl (6-*O*-acetyl-2,3,4-tri-*O*-benzyl-α-D-galactopyranosyl)-(1→3)-4,6-*O*-benzylidene-2-deoxy-2-*N*-phthalimido-1-thio-β-D-galactopyranoside

$[\alpha]_D^{25} = +81$ (*c* 1.5, $CHCl_3$)
Source of chirality: D-galactose, D-glucosamine hydrochloride

Rajib Panchadhayee, Anup Kumar Misra *

Tetrahedron: Asymmetry *20 (2009) 1550*



$[\alpha]_D^{25} = +66$ (*c* 1.2, $CHCl_3$)
Source of chirality: D-galactose, D-glucosamine, L-rhamnose, D-glucosamine hydrochloride

$C_{108}H_{106}N_2O_{31}$

4-Methoxyphenyl (6-*O*-acetyl-2,3,4-tri-*O*-benzyl-α-D-galactopyranosyl)-(1→3)-(4,6-*O*-benzylidene-2-deoxy-2-*N*-phthalimido-β-D-galactopyranosyl)-(1→3)-(2-*O*-benzyl-4,6-*O*-benzylidene-α-D-galactopyranosyl)-(1→4)-(2,3-di-*O*-acetyl-α-L-rhamnopyranosyl)-(1→3)-4,6-*O*-benzylidene-2-deoxy-2-*N*-phthalimido-β-D-glucopyranoside

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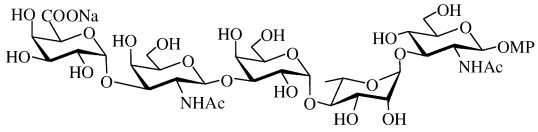
Rajib Panchadhayee, Anup Kumar Misra *

Tetrahedron: Asymmetry *20 (2009) 1550*



$[\alpha]_D^{25} = +77$ (*c* 1.0, H_2O)
Source of chirality: D-galactose, D-glucosamine hydrochloride, L-rhamnose, D-glucosamine hydrochloride

$C_{41}H_{61}N_2NaO_{27}$

4-Methoxyphenyl (sodium α-D-galactopyranosyl uronate)-(1→3)-(2-acetamido-2-deoxy-β-D-galactopyranosyl)-(1→3)-(α-D-galactopyranosyl)-(1→4)-(α-L-rhamnopyranosyl)-(1→3)-2-acetamido-2-deoxy-β-D-glucopyranoside

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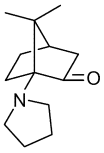
Zhi-Long Wu, Hsyueh-Liang Wu, Ping-Yu Wu, Biing-Jiun Uang *

Tetrahedron: Asymmetry *20 (2009) 1556*



Ee = 100%
$[\alpha]_D^{24} = +45.2$ (*c* 1.0, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*S*)

$C_{13}H_{21}NO$

(1*S*)-7,7-Dimethyl-1-pyrrolidin-1-yl-bicyclo[2.2.1]heptan-2-one

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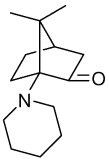
Zhi-Long Wu, Hsyueh-Liang Wu, Ping-Yu Wu, Biing-Jiun Uang *

Tetrahedron: Asymmetry *20 (2009) 1556*



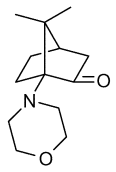
Ee = 100%
$[\alpha]_D^{24} = +91.4$ (*c* 1.0, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*S*)

$C_{14}H_{23}NO$

(1*S*)-7,7-Dimethyl-1-piperidin-1-yl-bicyclo[2.2.1]heptan-2-one

Zhi-Long Wu, Hsyueh-Liang Wu, Ping-Yu Wu, Biing-Jiun Uang *

Tetrahedron: Asymmetry *20 (2009) 1556*



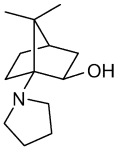
$C_{13}H_{21}NO_2$

(1*S*)-7,7-Dimethyl-1-morpholin-4-yl-bicyclo[2.2.1]heptan-2-one

Ee = 100%
$[\alpha]_D^{24} = +82.5$ (*c* 1.0, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*S*)

Zhi-Long Wu, Hsyueh-Liang Wu, Ping-Yu Wu, Biing-Jiun Uang *

Tetrahedron: Asymmetry *20 (2009) 1556*



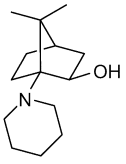
$C_{13}H_{23}NO$

(1*S*, 2*R*)-7,7-Dimethyl-1-pyrrolidin-1-yl-bicyclo[2.2.1]heptan-2-ol

Ee = 100%
$[\alpha]_D^{24} = +1.2$ (*c* 1.0, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*S*, 2*R*)

Zhi-Long Wu, Hsyueh-Liang Wu, Ping-Yu Wu, Biing-Jiun Uang *

Tetrahedron: Asymmetry *20 (2009) 1556*



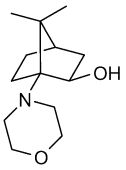
$C_{14}H_{25}NO$

(1*S*, 2*R*)-7,7-Dimethyl-1-piperidin-1-yl-bicyclo[2.2.1]heptan-2-ol

Ee = 100%
$[\alpha]_D^{24} = +14.2$ (*c* 1.0, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*S*, 2*R*)

Zhi-Long Wu, Hsyueh-Liang Wu, Ping-Yu Wu, Biing-Jiun Uang *

Tetrahedron: Asymmetry *20 (2009) 1556*



$C_{13}H_{23}NO_2$

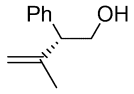
(1*S*, 2*R*)-7,7-Dimethyl-1-morpholin-4-yl-bicyclo[2.2.1]heptan-2-ol

Ee = 100%
$[\alpha]_D^{24} = +11.0$ (*c* 1.0, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*S*, 2*R*)

Yue-Lei Chen *, Dieter Hoppe *

Tetrahedron: Asymmetry *20 (2009) 1561*

$[\alpha]_D = -55.3$ (*c* 1, $CHCl_3$)
Source of chirality: (*S*)-phenyloxirane
Absolute chemistry: (2*R*)

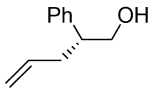


$C_{11}H_{14}O$
(*R*)-3-Methyl-2-phenylbut-3-en-1-ol

Yue-Lei Chen *, Dieter Hoppe *

Tetrahedron: Asymmetry *20 (2009) 1561*

$[\alpha]_D = +6.0$ (*c* 1, $CHCl_3$)
Source of chirality: (*S*)-phenyloxirane
Absolute chemistry: (2*R*)

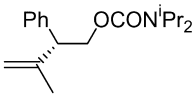


$C_{11}H_{14}O$
(*R*)-2-Phenylpent-4-en-1-ol

Yue-Lei Chen *, Dieter Hoppe *

Tetrahedron: Asymmetry *20 (2009) 1561*

$[\alpha]_D = -36.0$ (*c* 1, $CHCl_3$)
Source of chirality: (*S*)-phenyloxirane
Absolute chemistry: (2*R*)



$C_{18}H_{27}NO_2$
(*R*)-3-Methyl-2-phenylbut-3-enyl *N*,*N*-diisopropylcarbamate

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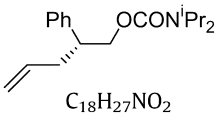
$[\alpha]_D = +2.7$ (*c* 1, $CHCl_3$)
Source of chirality: (*S*)-phenyloxirane
Absolute chemistry: (2*R*)



$C_{18}H_{27}NO_2$
(*R*)-2-Phenylpent-4-enyl *N*,*N*-diisopropylcarbamate

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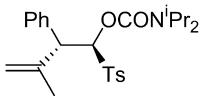

$C_{25}H_{33}NO_4S$

(1*S*,2*R*)-3-Methyl-2-phenyl-1-tosyl-but-3-enyl *N*,*N*-diisopropylcarbamate

$[\alpha]_D = -35.5$ (*c* 1, $CHCl_3$)
Er on C1 = 87.3:12.7, er on C2 = 91.7:8.3
Source of chirality: enantioselective deprotonation by (−)-sparteine/*s*-BuLi on (*R*)-2-phenylpent-4-enyl *N*,*N*-diisopropylcarbamate
Absolute chemistry: (1*S*,2*R*)

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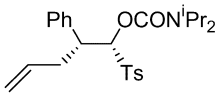

$C_{25}H_{33}NO_4S$

(1*S*,2*R*)-2-Phenyl-1-tosyl-pent-4-enyl *N*,*N*-diisopropylcarbamate

$[\alpha]_D = +39.6$ (*c* 1, $CHCl_3$)
Er on C1 = 88.8:11.2, er on C2 = 97.2:2.8
Source of chirality: diastereoselective deprotonation by TMEDA/*s*-BuLi on (*R*)-2-phenylpent-4-enyl *N*,*N*-diisopropylcarbamate
Absolute chemistry: (1*R*,2*R*)