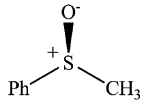
Fabio Pezzotti and Michel Therisod*

Tetrahedron: Asymmetry *18 (2007) 701*

Ee = 75–78% ee
Source of chirality: asymmetric enzymatic catalysis
Absolute configuration: (*S*)

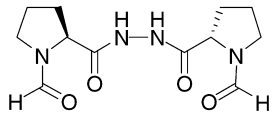


C_7H_8OS
Methyl-phenyl-sulfoxide

Zhouyu Wang, Siyu Wei, Chao Wang and Jian Sun*

Tetrahedron: Asymmetry *18 (2007) 705*

Ee = 100%
$[\alpha]_D^{20} = -137.04$ (*c* 0.108, EtOH)

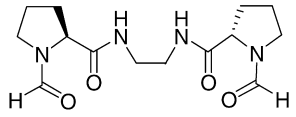


$C_{12}H_{18}N_4O_4$
N,*N*′-Di-(*N*-formyl-L-prolyl)-hydrazine

Zhouyu Wang, Siyu Wei, Chao Wang and Jian Sun*

Tetrahedron: Asymmetry *18 (2007) 705*

Ee = 100%
$[\alpha]_D^{20} = -81.25$ (*c* 0.16, EtOH)

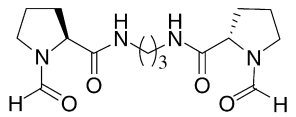


$C_{14}H_{22}N_4O_4$
N,*N*′-Di-(*N*-formyl-L-prolyl)-ethane-1,2-diamine

Zhouyu Wang, Siyu Wei, Chao Wang and Jian Sun*

Tetrahedron: Asymmetry *18 (2007) 705*

Ee = 100%
$[\alpha]_D^{20} = -89.04$ (*c* 0.132, EtOH)



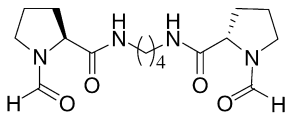
$C_{15}H_{24}N_4O_4$
N,*N*′-Di-(*N*-formyl-L-prolyl)-propane-1,3-diamine

Zhouyu Wang, Siyu Wei, Chao Wang and Jian Sun*

Tetrahedron: Asymmetry *18 (2007) 705*

Ee = 100%

$[\alpha]_D^{20} = -111.03$ (*c* 0.136, EtOH)



$C_{16}H_{24}N_4O_4$

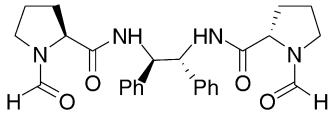
N,*N*′-Di-(*N*-formyl-L-prolyl)-butane-1,4-diamine

Zhouyu Wang, Siyu Wei, Chao Wang and Jian Sun*

Tetrahedron: Asymmetry *18 (2007) 705*

Ee = 100%

$[\alpha]_D^{20} = -61.54$ (*c* 0.104, MeOH)



$C_{26}H_{30}N_4O_4$

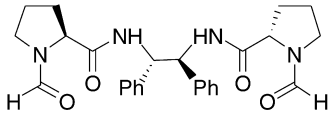
N,*N*′-Di-(*N*-formyl-L-prolyl)-(1*S*,2*S*)-1,2-diphenylethane-1,2-diamine

Zhouyu Wang, Siyu Wei, Chao Wang and Jian Sun*

Tetrahedron: Asymmetry *18 (2007) 705*

Ee = 100%

$[\alpha]_D^{20} = -127.88$ (*c* 0.104, MeOH)



$C_{26}H_{30}N_4O_4$

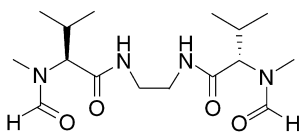
N,*N*′-Di-(*N*-formyl-L-prolyl)-(1*R*,2*R*)-1,2-diphenylethane-1,2-diamine

Zhouyu Wang, Siyu Wei, Chao Wang and Jian Sun*

Tetrahedron: Asymmetry *18 (2007) 705*

Ee = 100%

$[\alpha]_D^{20} = -71.07$ (*c* 0.242, CH_3OH)



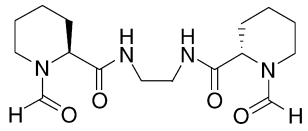
$C_{16}H_{30}N_4O_4$

N,*N*′-Di-(*N*-methylformyl-L-valinyl)-ethane-1,2-diamine

Zhouyu Wang, Siyu Wei, Chao Wang and Jian Sun*

Tetrahedron: Asymmetry *18 (2007) 705*

Ee = 100%
$[\alpha]_D^{20} = -114.4$ (*c* 0.104, EtOH)

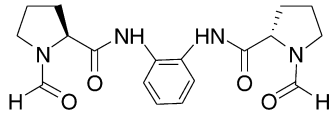


$C_{16}H_{26}N_4O_4$
N,*N*′-Di-(*N*-formyl-L-piperidyl)-ethane-1,2-diamine

Zhouyu Wang, Siyu Wei, Chao Wang and Jian Sun*

Tetrahedron: Asymmetry *18 (2007) 705*

Ee = 100%
$[\alpha]_D^{20} = -69.5$ (*c* 0.154, EtOH)

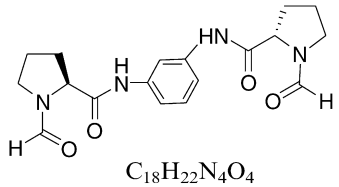


$C_{18}H_{22}N_4O_4$
N,*N*′-Di-(*N*-formyl-L-prolyl)-benzene-1,2-diamine

Zhouyu Wang, Siyu Wei, Chao Wang and Jian Sun*

Tetrahedron: Asymmetry *18 (2007) 705*

Ee = 100%
$[\alpha]_D^{20} = -160.0$ (*c* 0.14, EtOH)

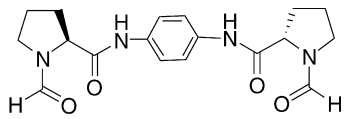


$C_{18}H_{22}N_4O_4$
N,*N*′-Di-(*N*-formyl-L-prolyl)-benzene-1,3-diamine

Zhouyu Wang, Siyu Wei, Chao Wang and Jian Sun*

Tetrahedron: Asymmetry *18 (2007) 705*

Ee = 100%
$[\alpha]_D^{20} = -194.0$ (*c* 0.1, EtOH)

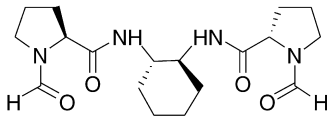


$C_{18}H_{22}N_4O_4$
N,*N*′-Di-(*N*-formyl-L-prolyl)-benzene-1,4-diamine

Zhouyu Wang, Siyu Wei, Chao Wang and Jian Sun*

Tetrahedron: Asymmetry *18 (2007) 705*

Ee = 100%
$[\alpha]_D^{20} = -148.28$ (*c* 0.160, EtOH)

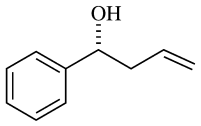


$C_{18}H_{28}N_4O_4$
N,*N*′-Di-(*N*-formyl-L-prolyl)-(1*S*,2*S*)-cyclohexane-1,2-diamine

Ling-yan Liu, Jing Sun, Nan Liu, Wei-xing Chang and Jing Li*

Tetrahedron: Asymmetry *18 (2007) 710*

$[\alpha]_D^{20} = +22.3$ (*c* 2, benzene)
Absolute configuration: (*R*)

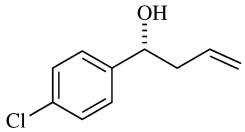


$C_{10}H_{12}O$
(*R*)-(+)-1-Phenyl-3-buten-1-ol

Ling-yan Liu, Jing Sun, Nan Liu, Wei-xing Chang and Jing Li*

Tetrahedron: Asymmetry *18 (2007) 710*

$[\alpha]_D^{20} = +15.5$ (*c* 2.4, benzene)
Absolute configuration: (*R*)

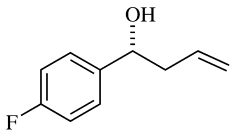


$C_{10}H_{11}ClO$
(*R*)-(+)-1-(*p*-Chlorophenyl)-3-buten-1-ol

Ling-yan Liu, Jing Sun, Nan Liu, Wei-xing Chang and Jing Li*

Tetrahedron: Asymmetry *18 (2007) 710*

$[\alpha]_D^{20} = +21.5$ (*c* 2, $CHCl_3$)
Absolute configuration: (*R*)

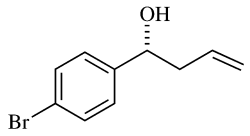


$C_{10}H_{11}FO$
(*R*)-(+)-1-(*p*-Fluorophenyl)-3-buten-1-ol

Ling-yan Liu, Jing Sun, Nan Liu, Wei-xing Chang and Jing Li*

Tetrahedron: Asymmetry *18 (2007) 710*

$[\alpha]_D^{20} = +12.6$ (*c* 3.5, benzene)
Absolute configuration: (*R*)

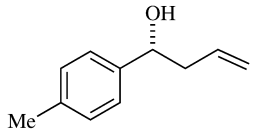


$C_{10}H_{11}BrO$
(*R*)-(+)-1-(*p*-Bromophenyl)-3-buten-1-ol

Ling-yan Liu, Jing Sun, Nan Liu, Wei-xing Chang and Jing Li*

Tetrahedron: Asymmetry *18 (2007) 710*

$[\alpha]_D^{20} = +15.5$ (*c* 2, benzene)
Absolute configuration: (*R*)

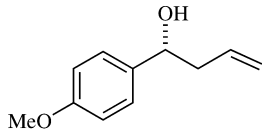


$C_{11}H_{14}O$
(*R*)-(+)-1-(*p*-Methylphenyl)-3-buten-1-ol

Ling-yan Liu, Jing Sun, Nan Liu, Wei-xing Chang and Jing Li*

Tetrahedron: Asymmetry *18 (2007) 710*

$[\alpha]_D^{20} = +15.4$ (*c* 2, benzene)
Absolute configuration: (*R*)

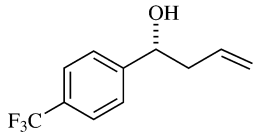


$C_{11}H_{14}O_2$
(*R*)-(+)-1-(*p*-Methoxyphenyl)-3-buten-1-ol

Ling-yan Liu, Jing Sun, Nan Liu, Wei-xing Chang and Jing Li*

Tetrahedron: Asymmetry *18 (2007) 710*

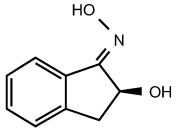
$[\alpha]_D^{20} = +14.2$ (*c* 1.7, $CHCl_3$)
Absolute configuration: (*R*)



$C_{11}H_{14}F_3O$
(*R*)-(+)-1-(*p*-Trifluorophenyl)-3-buten-1-ol

Jhillu S. Yadav, Garudammagari S. K. K. Reddy, Gowravaram Sabitha, Avvaru D. Krishna, Attaluri R. Prasad, Hafeez-U-R-Rahaman, Katta Vishwaswar Rao and Adari Bhaskar Rao*

Tetrahedron: Asymmetry *18 (2007) 717*



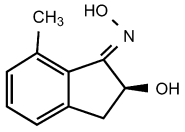
$C_9H_9NO_2$

(*R*)-2-Hydroxy-1-indanone-oxime

Ee = 80% (*D. carota*)
$[\alpha]_D^{25} = +48.2$ (*c* 0.8, MeOH)
Absolute configuration: (*R*)

Jhillu S. Yadav, Garudammagari S. K. K. Reddy, Gowravaram Sabitha, Avvaru D. Krishna, Attaluri R. Prasad, Hafeez-U-R-Rahaman, Katta Vishwaswar Rao and Adari Bhaskar Rao*

Tetrahedron: Asymmetry *18 (2007) 717*



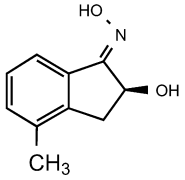
$C_{10}H_{11}NO_2$

7-Methyl-(*R*)-2-hydroxy-1-indanone-oxime

Ee = 88% (*D. carota*)
$[\alpha]_D^{25} = +58.5$ (*c* 0.7, MeOH)
Absolute configuration: (*R*)

Jhillu S. Yadav, Garudammagari S. K. K. Reddy, Gowravaram Sabitha, Avvaru D. Krishna, Attaluri R. Prasad, Hafeez-U-R-Rahaman, Katta Vishwaswar Rao and Adari Bhaskar Rao*

Tetrahedron: Asymmetry *18 (2007) 717*



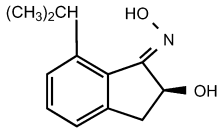
$C_{10}H_{11}NO_2$

4-Methyl-(*R*)-2-hydroxy-1-indanone-oxime

Ee = 85% (*D. carota*)
$[\alpha]_D^{25} = +78.5$ (*c* 0.9, MeOH)
Absolute configuration: (*R*)

Jhillu S. Yadav, Garudammagari S. K. K. Reddy, Gowravaram Sabitha, Avvaru D. Krishna, Attaluri R. Prasad, Hafeez-U-R-Rahaman, Katta Vishwaswar Rao and Adari Bhaskar Rao*

Tetrahedron: Asymmetry *18 (2007) 717*



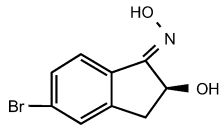
$C_{12}H_{15}NO_2$

7-Isopropyl-(*R*)-2-hydroxy-1-indanone-oxime

Ee = 88% (*D. carota*)
$[\alpha]_D^{25} = +23.5$ (*c* 1.0, MeOH)
Absolute configuration: (*R*)

Jhillu S. Yadav, Garudammagari S. K. K. Reddy, Gowravaram Sabitha, Avvaru D. Krishna, Attaluri R. Prasad, Hafeez-U-R-Rahaman, Katta Vishwaswar Rao and Adari Bhaskar Rao*

Tetrahedron: Asymmetry *18 (2007) 717*



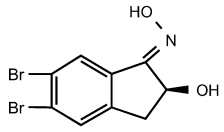
$C_9H_8BrNO_2$

5-Bromo-(*R*)-2-hydroxy-1-indanone-oxime

Ee = 80% (*D. carota*)
$[\alpha]_D^{25} = +39.5$ (*c* 0.6, MeOH)
Absolute configuration: (*R*)

Jhillu S. Yadav, Garudammagari S. K. K. Reddy, Gowravaram Sabitha, Avvaru D. Krishna, Attaluri R. Prasad, Hafeez-U-R-Rahaman, Katta Vishwaswar Rao and Adari Bhaskar Rao*

Tetrahedron: Asymmetry *18 (2007) 717*



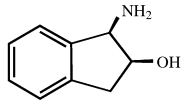
$C_9H_7Br_2NO_2$

5,6-Bromo-(*R*)-2-hydroxy-1-indanone-oxime

Ee = 80% (*D. carota*)
$[\alpha]_D^{25} = +52.5$ (*c* 0.9, MeOH)
Absolute configuration: (*R*)

Jhillu S. Yadav, Garudammagari S. K. K. Reddy, Gowravaram Sabitha, Avvaru D. Krishna, Attaluri R. Prasad, Hafeez-U-R-Rahaman, Katta Vishwaswar Rao and Adari Bhaskar Rao*

Tetrahedron: Asymmetry *18 (2007) 717*



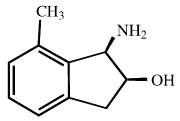
$C_9H_{11}NO$

cis-(1*R*,2*S*)-1-Amino-2-indanol

Ee = 99% (*D. carota*)
$[\alpha]_D^{25} = +56.6$ (*c* 0.8, MeOH)
Absolute configuration: (*S*)

Jhillu S. Yadav, Garudammagari S. K. K. Reddy, Gowravaram Sabitha, Avvaru D. Krishna, Attaluri R. Prasad, Hafeez-U-R-Rahaman, Katta Vishwaswar Rao and Adari Bhaskar Rao*

Tetrahedron: Asymmetry *18 (2007) 717*



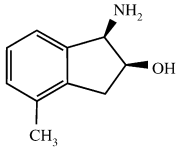
$C_{10}H_{13}NO$

7-Methyl-*cis*-(1*R*,2*S*)-1-amino-2-indanol

Ee = 98% (*D. carota*)
$[\alpha]_D^{25} = -112.2$ (*c* 0.6, $CHCl_3$)
Absolute configuration: (*S*)

Jhillu S. Yadav, Garudammagari S. K. K. Reddy, Gowravaram Sabitha, Avvaru D. Krishna, Attaluri R. Prasad, Hafeez-U-R-Rahaman, Katta Vishwaswar Rao and Adari Bhaskar Rao*

Tetrahedron: Asymmetry *18 (2007) 717*



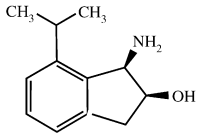
$C_{10}H_{13}NO$

4-Methyl-*cis*-(1*R*,2*S*)-1-amino-2-indanol

Ee = 95% (*D. carota*)
$[\alpha]_D^{25} = -29.6$ (*c* 0.6, $CHCl_3$)
Absolute configuration: (*S*)

Jhillu S. Yadav, Garudammagari S. K. K. Reddy, Gowravaram Sabitha, Avvaru D. Krishna, Attaluri R. Prasad, Hafeez-U-R-Rahaman, Katta Vishwaswar Rao and Adari Bhaskar Rao*

Tetrahedron: Asymmetry *18 (2007) 717*



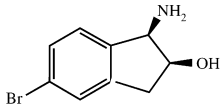
$C_{12}H_{17}NO$

7-Isopropyl-*cis*-(1*R*,2*S*)-1-amino-2-indanol

Ee = 90% (*D. carota*)
$[\alpha]_D^{25} = -113.1$ (*c* 0.5, $CHCl_3$)
Absolute configuration: (1*R*,2*S*)

Jhillu S. Yadav, Garudammagari S. K. K. Reddy, Gowravaram Sabitha, Avvaru D. Krishna, Attaluri R. Prasad, Hafeez-U-R-Rahaman, Katta Vishwaswar Rao and Adari Bhaskar Rao*

Tetrahedron: Asymmetry *18 (2007) 717*



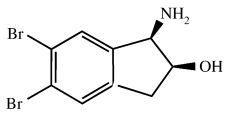
$C_9H_{10}BrNO$

5-Bromo-*cis*-(1*R*,2*S*)-1-amino-2-indanol

Ee = 95% (*D. carota*)
$[\alpha]_D^{25} = -32.1$ (*c* 0.8, MeOH)
Absolute configuration: (1*R*,2*S*)

Jhillu S. Yadav, Garudammagari S. K. K. Reddy, Gowravaram Sabitha, Avvaru D. Krishna, Attaluri R. Prasad, Hafeez-U-R-Rahaman, Katta Vishwaswar Rao and Adari Bhaskar Rao*

Tetrahedron: Asymmetry *18 (2007) 717*



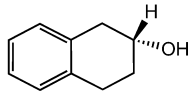
$C_9H_9Br_2NO$

5,6-Bromo-*cis*-(1*R*,2*S*)-1-amino-2-indanol

Ee = 96% (*D. carota*)
$[\alpha]_D^{25} = -33.5$ (*c* 1.5, $CHCl_3$)
Absolute configuration: (1*R*,2*S*)

Jhillu S. Yadav, Garudammagari S. K. K. Reddy, Gowravaram Sabitha, Avvaru D. Krishna, Attaluri R. Prasad, Hafeez-U-R-Rahaman, Katta Vishwaswar Rao and Adari Bhaskar Rao*

Tetrahedron: Asymmetry *18 (2007) 717*



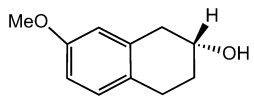
$C_{10}H_{12}O$

2-Tetralol

Ee = 85% (*D. carota*)
$[\alpha]_D^{25} = -19.2$ (*c* 0.9, $CHCl_3$)
Absolute configuration: (*S*)

Jhillu S. Yadav, Garudammagari S. K. K. Reddy, Gowravaram Sabitha, Avvaru D. Krishna, Attaluri R. Prasad, Hafeez-U-R-Rahaman, Katta Vishwaswar Rao and Adari Bhaskar Rao*

Tetrahedron: Asymmetry *18 (2007) 717*



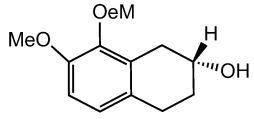
$C_{11}H_{14}O_2$

7-Methoxy-2-tetralol

Ee = 70% (*D. carota*)
$[\alpha]_D^{25} = +16.1$ (*c* 1.0, $CHCl_3$)
Absolute configuration: (*S*)

Jhillu S. Yadav, Garudammagari S. K. K. Reddy, Gowravaram Sabitha, Avvaru D. Krishna, Attaluri R. Prasad, Hafeez-U-R-Rahaman, Katta Vishwaswar Rao and Adari Bhaskar Rao*

Tetrahedron: Asymmetry *18 (2007) 717*



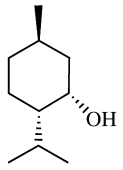
$C_{12}H_{16}O_3$

7,8-Dimethoxy-2-tetralol

Ee = 80% (*D. carota*)
$[\alpha]_D^{25} = +19.1$ (*c* 0.43, $CHCl_3$)
Absolute configuration: (*S*)

Jhillu S. Yadav, Garudammagari S. K. K. Reddy, Gowravaram Sabitha, Avvaru D. Krishna, Attaluri R. Prasad, Hafeez-U-R-Rahaman, Katta Vishwaswar Rao and Adari Bhaskar Rao*

Tetrahedron: Asymmetry *18 (2007) 717*



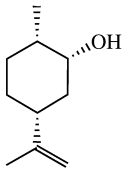
$C_{10}H_{20}O$

Neomenthol

Ee = 99% (*D. carota*)
$[\alpha]_D^{25} = -21.2$ (*c* 0.21, $CHCl_3$)

Jhillu S. Yadav, Garudammagari S. K. K. Reddy, Gowravaram Sabitha, Avvaru D. Krishna, Attaluri R. Prasad, Hafeez-U-R-Rahaman, Katta Vishwaswar Rao and Adari Bhaskar Rao*

Tetrahedron: Asymmetry *18 (2007) 717*

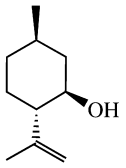


$C_{10}H_{18}O$
Neoisodihydrocarveol

Ee = 95% (*D. carota*)
$[\alpha]_D^{25} = -18.08$ (*c* 0.71, $CHCl_3$)

Jhillu S. Yadav, Garudammagari S. K. K. Reddy, Gowravaram Sabitha, Avvaru D. Krishna, Attaluri R. Prasad, Hafeez-U-R-Rahaman, Katta Vishwaswar Rao and Adari Bhaskar Rao*

Tetrahedron: Asymmetry *18 (2007) 717*

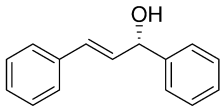


$C_{10}H_{18}O$
Isopulegol

Ee = 90% (*D. carota*)
$[\alpha]_D^{25} = -22.1$ (*c* 0.91, $CHCl_3$)

Zhuo Chai, Xin-Yuan Liu, Jun-Kang Zhang and Gang Zhao*

Tetrahedron: Asymmetry *18 (2007) 724*

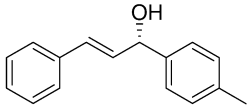


$C_{15}H_{14}O$
(1*S*)-(*E*)-1,3-Diphenylprop-2-en-1-ol

Ee = 96%
$[\alpha]_D^{24} = -31.5$ (*c* 0.75, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

Zhuo Chai, Xin-Yuan Liu, Jun-Kang Zhang and Gang Zhao*

Tetrahedron: Asymmetry *18 (2007) 724*

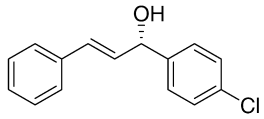


$C_{16}H_{16}O$
(1*S*)-(*E*)-3-Phenyl-1-*p*-tolylprop-2-en-1-ol

Ee = 92%
$[\alpha]_D^{22} = -22.3$ (*c* 0.50, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

Zhuo Chai, Xin-Yuan Liu, Jun-Kang Zhang and Gang Zhao*

Tetrahedron: Asymmetry *18 (2007) 724*



$C_{15}H_{13}ClO$

(1*S*)-(*E*)-1-(4-Chlorophenyl)-3-phenylprop-2-en-1-ol

Ee = 93%

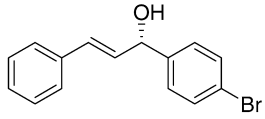
$[\alpha]_D^{22} = -16.8$ (*c* 0.65, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)

Zhuo Chai, Xin-Yuan Liu, Jun-Kang Zhang and Gang Zhao*

Tetrahedron: Asymmetry *18 (2007) 724*



$C_{15}H_{13}BrO$

(1*S*)-(*E*)-1-(4-Bromophenyl)-3-phenylprop-2-en-1-ol

Ee = 84%

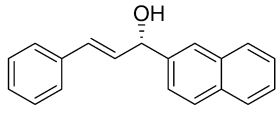
$[\alpha]_D^{25} = -14.9$ (*c* 0.47, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)

Zhuo Chai, Xin-Yuan Liu, Jun-Kang Zhang and Gang Zhao*

Tetrahedron: Asymmetry *18 (2007) 724*



$C_{19}H_{16}O$

(1*S*)-(*E*)-1-(Naphthalen-2-yl)-3-phenylprop-2-en-1-ol

Ee = 91%

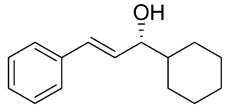
$[\alpha]_D^{25} = -25.2$ (*c* 0.33, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)

Zhuo Chai, Xin-Yuan Liu, Jun-Kang Zhang and Gang Zhao*

Tetrahedron: Asymmetry *18 (2007) 724*



$C_{15}H_{20}O$

(1*S*)-(*E*)-1-Cyclohexyl-3-phenylprop-2-en-1-ol

Ee = 82%

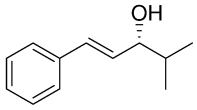
$[\alpha]_D^{24} = -5.7$ (*c* 0.47, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Zhuo Chai, Xin-Yuan Liu, Jun-Kang Zhang and Gang Zhao*

Tetrahedron: Asymmetry *18 (2007) 724*



$C_{12}H_{16}O$

(3*R*)-(*E*)-4-Methyl-1-phenylpent-1-en-3-ol

Ee = 76%

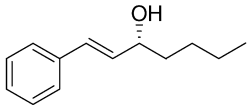
$[\alpha]_D^{22} = -8.2$ (*c* 0.75, EtOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Zhuo Chai, Xin-Yuan Liu, Jun-Kang Zhang and Gang Zhao*

Tetrahedron: Asymmetry *18 (2007) 724*



$C_{13}H_{18}O$

(3*R*)-(*E*)-1-Phenylhept-1-en-3-ol

Ee = 66%

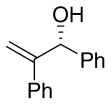
$[\alpha]_D^{25} = -2.7$ (*c* 0.47, benzene)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Zhuo Chai, Xin-Yuan Liu, Jun-Kang Zhang and Gang Zhao*

Tetrahedron: Asymmetry *18 (2007) 724*



$C_{15}H_{14}O$

(*R*)-1,2-Diphenylprop-2-en-1-ol

Ee = 94%

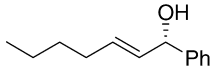
$[\alpha]_D^{22} = -47.6$ (*c* 0.27, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Zhuo Chai, Xin-Yuan Liu, Jun-Kang Zhang and Gang Zhao*

Tetrahedron: Asymmetry *18 (2007) 724*



$C_{13}H_{18}O$

(1*S*)-(*E*)-1-Phenylhept-2-en-1-ol

Ee = 94%

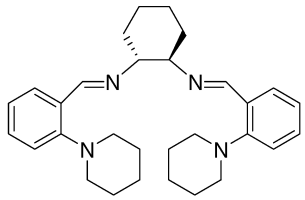
$[\alpha]_D^{22} = +34.2$ (*c* 0.58, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)

Wei-Yi Shen, Hui Zhang, Hua-Lin Zhang and Jing-Xing Gao*

Tetrahedron: Asymmetry *18 (2007) 729*



$[\alpha]_D^{20} = +85.5$ (*c* 1.0, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*R*,2*R*)

$C_{30}H_{40}N_4$
(1*R*,2*R*)-N^1,N^2-Bis(2-(piperidin-1-yl)benzylidene)cyclohexane-1,2-diamine

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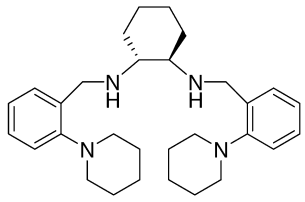
Wei-Yi Shen, Hui Zhang, Hua-Lin Zhang and Jing-Xing Gao*

Tetrahedron: Asymmetry *18 (2007) 729*



$[\alpha]_D^{20} = -55.4$ (*c* 1.0, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*R*,2*R*)

$C_{30}H_{44}N_4$
(1*R*,2*R*)-N^1,N^2-Bis(2-(piperidin-1-yl)benzyl)cyclohexane-1,2-diamine

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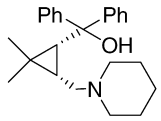
Jiangchun Zhong, Hongchao Guo, Mingan Wang, Mingming Yin and Min Wang*

Tetrahedron: Asymmetry *18 (2007) 734*



Ee = 99%
$[\alpha]_D^{18} = +167.6$ (*c* 0.82, $CHCl_3$)
Source of chirality: methyl (+)-*cis*-chrysanthemate
Absolute configuration: (1*R*,3*S*)

$C_{24}H_{31}NO$
((1*R*,3*S*)-2,2-Dimethyl-3-(pyrrolidin-1-ylmethyl)cyclopropyl)diphenylmethanol

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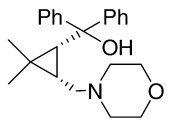
Jiangchun Zhong, Hongchao Guo, Mingan Wang, Mingming Yin and Min Wang*

Tetrahedron: Asymmetry *18 (2007) 734*

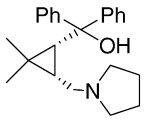


Ee = 99%
$[\alpha]_D^{18} = +158.5$ (*c* 0.93, $CHCl_3$)
Source of chirality: methyl (+)-*cis*-chrysanthemate
Absolute configuration: (1*R*,3*S*)

$C_{23}H_{29}NO_2$
((1*R*,3*S*)-2,2-Dimethyl-3-(morpholinomethyl)cyclopropyl)diphenylmethanol

Jiangchun Zhong, Hongchao Guo, Mingan Wang, Mingming Yin and Min Wang*

Tetrahedron: Asymmetry *18 (2007) 734*



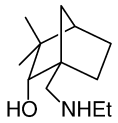
$C_{23}H_{29}NO$

((1*R*,3*S*)-2,2-Dimethyl-3-(pyrrolidin-1-ylmethyl)cyclopropyl)diphenylmethanol

Ee = 99%
$[\alpha]_D^{18} = +14.1$ (*c* 1.51, $CHCl_3$)
Source of chirality: methyl (+)-*cis*-chrysanthemate
Absolute configuration: (1*R*,3*S*)

Antonio García Martínez,* Enrique Teso Vilar,* Amelia García Fraile, Santiago de la Moya Cerero, Paloma Martínez Ruiz and Cristina Díaz Morillo

Tetrahedron: Asymmetry *18 (2007) 742*



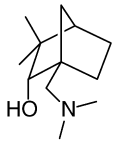
$C_{12}H_{23}NO$

1-[(Ethylamino)methyl]-3,3-dimethylnorbornan-2-ol

$[\alpha]_D^{20} = -4.5$ (*c* 0.62, MeOH)
Source of chirality: natural (1*R*)-(+)-camphor
Absolute configuration: (1*S*,2*R*)

Antonio García Martínez,* Enrique Teso Vilar,* Amelia García Fraile, Santiago de la Moya Cerero, Paloma Martínez Ruiz and Cristina Díaz Morillo

Tetrahedron: Asymmetry *18 (2007) 742*



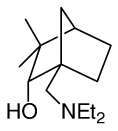
$C_{12}H_{23}NO$

1-[(Dimethylamino)methyl]-3,3-dimethylnorbornan-2-ol

$[\alpha]_D^{20} = -9.3$ (*c* 0.50, MeOH)
Source of chirality: natural (1*R*)-(+)-camphor
Absolute configuration: (1*S*,2*R*)

Antonio García Martínez,* Enrique Teso Vilar,* Amelia García Fraile, Santiago de la Moya Cerero, Paloma Martínez Ruiz and Cristina Díaz Morillo

Tetrahedron: Asymmetry *18 (2007) 742*



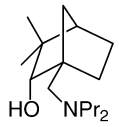
$C_{14}H_{27}NO$

1-[(Diethylamino)methyl]-3,3-dimethylnorbornan-2-ol

$[\alpha]_D^{20}$ (hydrochloride) = −14.5 (*c* 1.17, MeOH)
Source of chirality: natural (1*R*)-(+)-camphor
Absolute configuration: (1*S*,2*R*)

Antonio García Martínez,* Enrique Teso Vilar,* Amelia García Fraile, Santiago de la Moya Cerero, Paloma Martínez Ruiz and Cristina Díaz Morillo

Tetrahedron: Asymmetry *18 (2007) 742*



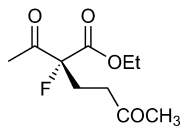
$C_{16}H_{31}NO$

1-[(Dipropylamino)methyl]-3,3-dimethylnorbornan-2-ol

$[\alpha]_D^{20}$ (hydrochloride) = −2.7 (*c* 0.70, MeOH)
Source of chirality: natural (1*R*)-(+)-camphor
Absolute configuration: (1*S*,2*R*)

Sandrine Delarue-Cochin,* Bouchaib Bahlaouan, Frédéric Hendra, Michèle Ourévitch, Delphine Joseph, Georges Morgant and Christian Cavé

Tetrahedron: Asymmetry *18 (2007) 759*



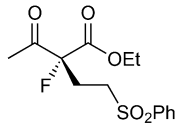
$C_{10}H_{15}FO_4$

Ethyl (*R*)-2-acetyl-2-fluoro-5-oxo-hexanoate

Ee = 60%
$[\alpha]_D^{20}$ = −23 (*c* 1.0, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

Sandrine Delarue-Cochin,* Bouchaib Bahlaouan, Frédéric Hendra, Michèle Ourévitch, Delphine Joseph, Georges Morgant and Christian Cavé

Tetrahedron: Asymmetry *18 (2007) 759*



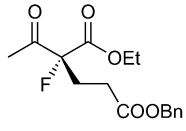
$C_{14}H_{17}FO_5S$

Ethyl (*R*)-2-acetyl-4-benzenesulfonyl-2-fluoro-butanoate

Ee = 77%
$[\alpha]_D^{20}$ = −33 (*c* 1.1, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

Sandrine Delarue-Cochin,* Bouchaib Bahlaouan, Frédéric Hendra, Michèle Ourévitch, Delphine Joseph, Georges Morgant and Christian Cavé

Tetrahedron: Asymmetry *18 (2007) 759*



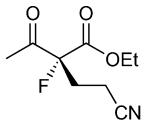
$C_{16}H_{19}FO_5$

Ethyl (*R*)-2-acetyl-4-benzyloxycarbonyl-2-fluoro-butanoate

Ee = 75%
$[\alpha]_D^{20}$ = −30 (*c* 1.3, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

Sandrine Delarue-Cochin,* Bouchaib Bahlaouan, Frédéric Hendra, Michèle Ourévitch, Delphine Joseph, Georges Morgant and Christian Cavé

Tetrahedron: Asymmetry *18 (2007) 759*



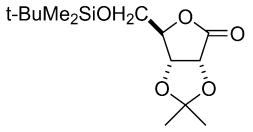
$C_9H_{12}FNO_3$

Ethyl (*R*)-2-acetyl-4-cyano-2-fluoro-butanoate

Ee = 74%
$[\alpha]_D^{20} = -60$ (*c* 1.1, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

Nigel A. Jones, Sarah F. Jenkinson, Raquel Soengas, Mette Fanefjord, Mark R. Wormald, Raymond A. Dwek, Gullapalli P. Kiran, Rao Devendar, Goro Takata, Kenji Morimoto, Ken Izumori and George W. J. Fleet*

Tetrahedron: Asymmetry *18 (2007) 774*



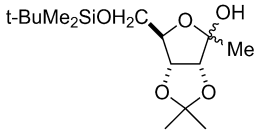
$C_4H_{26}O_5Si$

5-*O*-*tert*-Butyldimethylsilyl-2,3,-*O*-isopropylidene-D-ribono-1,4-lactone

Ee = 100%
$[\alpha]_D^{23} = -49.0$ (*c* 1.2, $CHCl_3$)
Source of chirality: D-ribose as starting material

Nigel A. Jones, Sarah F. Jenkinson, Raquel Soengas, Mette Fanefjord, Mark R. Wormald, Raymond A. Dwek, Gullapalli P. Kiran, Rao Devendar, Goro Takata, Kenji Morimoto, Ken Izumori and George W. J. Fleet*

Tetrahedron: Asymmetry *18 (2007) 774*



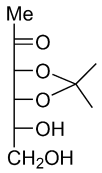
$C_{15}H_{30}O_5Si$

6-*O*-*tert*-Butyldimethylsilyl-1-deoxy-3,4-*O*-isopropylidene-D-psicofuranose

Ee = 100%
$[\alpha]_D^{21} = -13.1$ (*c* 1.0, $CHCl_3$)
Source of chirality: D-ribose as starting material

Nigel A. Jones, Sarah F. Jenkinson, Raquel Soengas, Mette Fanefjord, Mark R. Wormald, Raymond A. Dwek, Gullapalli P. Kiran, Rao Devendar, Goro Takata, Kenji Morimoto, Ken Izumori and George W. J. Fleet*

Tetrahedron: Asymmetry *18 (2007) 774*



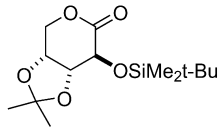
$C_9H_{16}O_5$

1-Deoxy-3,4-*O*-isopropylidene-D-psicose

Ee = 100%
$[\alpha]_D^{21} = -15.0$ (*c* 1.1, $CHCl_3$)
Source of chirality: D-ribose as starting material

Nigel A. Jones, Sarah F. Jenkinson, Raquel Soengas, Mette Fanefjord, Mark R. Wormald, Raymond A. Dwek, Gullapalli P. Kiran, Rao Devendar, Goro Takata, Kenji Morimoto, Ken Izumori and George W. J. Fleet*

Tetrahedron: Asymmetry *18 (2007) 774*



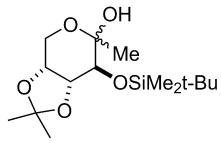
$C_{14}H_{26}O_5Si$

2-*O*-*tert*-Butyldimethylsilyl-3,4-*O*-isopropylidene-D-arabinono-1,5-lactone

Ee = 100%
$[\alpha]_D^{21} = -87.2$ (*c* 1.0, $CHCl_3$)
Source of chirality: D-arabinose as starting material

Nigel A. Jones, Sarah F. Jenkinson, Raquel Soengas, Mette Fanefjord, Mark R. Wormald, Raymond A. Dwek, Gullapalli P. Kiran, Rao Devendar, Goro Takata, Kenji Morimoto, Ken Izumori and George W. J. Fleet*

Tetrahedron: Asymmetry *18 (2007) 774*



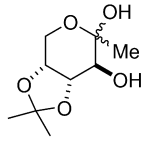
$C_{15}H_{30}O_5Si$

3-*O*-*tert*-Butyldimethylsilyl-1-deoxy-4,5-*O*-isopropylidene-D-fructose

Ee = 100%
$[\alpha]_D^{21} = -61.3$ (*c* 1.0, $CHCl_3$)
Source of chirality: D-arabinose as starting material

Nigel A. Jones, Sarah F. Jenkinson, Raquel Soengas, Mette Fanefjord, Mark R. Wormald, Raymond A. Dwek, Gullapalli P. Kiran, Rao Devendar, Goro Takata, Kenji Morimoto, Ken Izumori and George W. J. Fleet*

Tetrahedron: Asymmetry *18 (2007) 774*



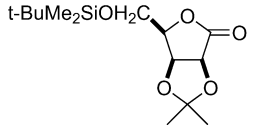
$C_9H_{16}O_5$

1-Deoxy-4,5-*O*-isopropylidene-D-fructose

Ee = 100%
$[\alpha]_D^{21} = -102.2$ (*c* 1.0, $CHCl_3$)
$[\alpha]_D^{23} = -137.9$ (*c* 1.0, MeOH)
Source of chirality: D-arabinose as starting material

Nigel A. Jones, Sarah F. Jenkinson, Raquel Soengas, Mette Fanefjord, Mark R. Wormald, Raymond A. Dwek, Gullapalli P. Kiran, Rao Devendar, Goro Takata, Kenji Morimoto, Ken Izumori and George W. J. Fleet*

Tetrahedron: Asymmetry *18 (2007) 774*



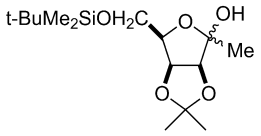
$C_{14}H_{26}O_5Si$

5-*O*-*tert*-Butydimethylsilyl-2,3-*O*-isopropylidene-D-lyxono-1,4-lactone

Ee = 100%
$[\alpha]_D^{21} = +58.0$ (*c* 1.0, $CHCl_3$)
Source of chirality: D-galactose as starting material

Nigel A. Jones, Sarah F. Jenkinson, Raquel Soengas, Mette Fanefjord, Mark R. Wormald, Raymond A. Dwek, Gullapalli P. Kiran, Rao Devendar, Goro Takata, Kenji Morimoto, Ken Izumori and George W. J. Fleet*

Tetrahedron: Asymmetry *18 (2007) 774*



$C_{15}H_{30}O_5Si$

6-*O*-*tert*-Butydimethylsilyl-1-deoxy-3,4-*O*-isopropylidene-D-tagatofuranose

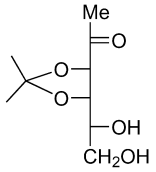
Ee = 100%

$[\alpha]_D^{20} = +5.0$ (*c* 1.0, $CHCl_3$)

Source of chirality: D-galactose as starting material

Nigel A. Jones, Sarah F. Jenkinson, Raquel Soengas, Mette Fanefjord, Mark R. Wormald, Raymond A. Dwek, Gullapalli P. Kiran, Rao Devendar, Goro Takata, Kenji Morimoto, Ken Izumori and George W. J. Fleet*

Tetrahedron: Asymmetry *18 (2007) 774*



$C_9H_{16}O_5$

1-Deoxy-3,4-*O*-isopropylidene-D-tagatose

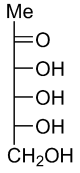
Ee = 100%

$[\alpha]_D^{21} = +21.0$ (*c* 1.0, $CHCl_3$)

Source of chirality: D-galactose as starting material

Nigel A. Jones, Sarah F. Jenkinson, Raquel Soengas, Mette Fanefjord, Mark R. Wormald, Raymond A. Dwek, Gullapalli P. Kiran, Rao Devendar, Goro Takata, Kenji Morimoto, Ken Izumori and George W. J. Fleet*

Tetrahedron: Asymmetry *18 (2007) 774*



$C_6H_{12}O_5$

1-Deoxy-D-psicose

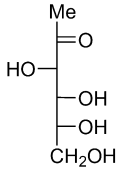
Ee = 100%

$[\alpha]_D^{21} = +1.0$ (*c* 1.0, H_2O)

Source of chirality: D-ribose as starting material

Nigel A. Jones, Sarah F. Jenkinson, Raquel Soengas, Mette Fanefjord, Mark R. Wormald, Raymond A. Dwek, Gullapalli P. Kiran, Rao Devendar, Goro Takata, Kenji Morimoto, Ken Izumori and George W. J. Fleet*

Tetrahedron: Asymmetry *18 (2007) 774*



$C_6H_{12}O_5$

1-Deoxy-D-fructose

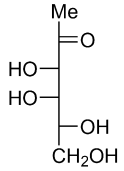
Ee = 100%

$[\alpha]_D^{21} = -80.5$ (*c* 1.0, H_2O)

Source of chirality: D-arabinose as starting material

Nigel A. Jones, Sarah F. Jenkinson, Raquel Soengas, Mette Fanefjord, Mark R. Wormald, Raymond A. Dwek, Gullapalli P. Kiran, Rao Devendar, Goro Takata, Kenji Morimoto, Ken Izumori and George W. J. Fleet*

Tetrahedron: Asymmetry *18 (2007) 774*



$C_6H_{12}O_5$

1-Deoxy-D-tagatose

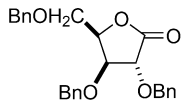
Ee = 100%

$[\alpha]_D^{22} = -13.0$ (*c* 2.0, H_2O)

Source of chirality: D-galactose as starting material

Nigel A. Jones, Sarah F. Jenkinson, Raquel Soengas, Mette Fanefjord, Mark R. Wormald, Raymond A. Dwek, Gullapalli P. Kiran, Rao Devendar, Goro Takata, Kenji Morimoto, Ken Izumori and George W. J. Fleet*

Tetrahedron: Asymmetry *18 (2007) 774*



$C_{26}H_{26}O_5$

2,3,5-Tri-*O*-benzyl-D-xylono-1,4-lactone

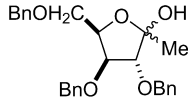
Ee = 100%

$[\alpha]_D^{20} = 89.0$ (*c* 1.0, $CHCl_3$)

Source of chirality: D-xylose as starting material

Nigel A. Jones, Sarah F. Jenkinson, Raquel Soengas, Mette Fanefjord, Mark R. Wormald, Raymond A. Dwek, Gullapalli P. Kiran, Rao Devendar, Goro Takata, Kenji Morimoto, Ken Izumori and George W. J. Fleet*

Tetrahedron: Asymmetry *18 (2007) 774*



$C_{27}H_{30}O_5$

3,4,6-Tri-*O*-benzyl-1-deoxy-D-sorbofuranose

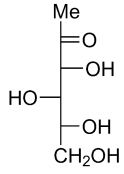
Ee = 100%

$[\alpha]_D^{20} = -11.0$ (*c* 1.0, $CHCl_3$)

Source of chirality: D-xylose as starting material

Nigel A. Jones, Sarah F. Jenkinson, Raquel Soengas, Mette Fanefjord, Mark R. Wormald, Raymond A. Dwek, Gullapalli P. Kiran, Rao Devendar, Goro Takata, Kenji Morimoto, Ken Izumori and George W. J. Fleet*

Tetrahedron: Asymmetry *18 (2007) 774*



$C_6H_{12}O_5$

1-Deoxy-D-sorbose

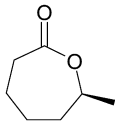
Ee = 100%

$[\alpha]_D^{20} = +49.0$ (*c* 1.0, H_2O)

Source of chirality: D-xylose as starting material

Bart A. C. van As, Dah-Kee Chan, Patrick J. J. Kivit, Anja R. A. Palmans* and E. W. Meijer*

Tetrahedron: Asymmetry *18 (2007) 787*



$C_7H_{14}O_2$

(*S*)-6-Methyl-ε-caprolactone

Ee = 99.6%

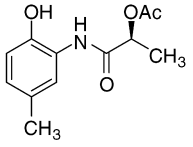
$[\alpha]_D = -25.9$ (*c* 13, $CHCl_3$)

Source of chirality: enzyme-mediated kinetic resolution

Absolute configuration: (*S*)

Kani Zilbeyaz, Ertan Sahin and Hamdullah Kilic*

Tetrahedron: Asymmetry *18 (2007) 791*



$C_{12}H_{15}NO_4$

(*S*)-1-(2-Hydroxy-5-methylphenylamino)-1-oxopropan-2-yl acetate

Ee >99%

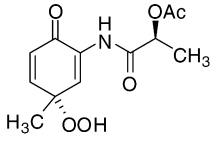
$[\alpha]_D = -50$ (*c* 0.05, $CHCl_3$)

Source of chirality: L-lactic acid

Absolute configuration: (*S*)

Kani Zilbeyaz, Ertan Sahin and Hamdullah Kilic*

Tetrahedron: Asymmetry *18 (2007) 791*



$C_{12}H_{15}NO_6$

(*S*)-1-((*R*)-3-Hydroperoxy-3-methyl-6-oxocyclohexa-1,4-dienylamino)-1-oxopropan-2-yl acetate

Ee >99%

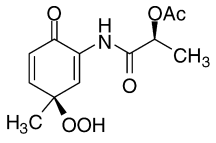
$[\alpha]_D = -12$ (*c* 0.05, $CHCl_3$)

Source of chirality: L-lactic acid

Absolute configuration: (3*R*,12*S*)

Kani Zilbeyaz, Ertan Sahin and Hamdullah Kilic*

Tetrahedron: Asymmetry *18 (2007) 791*



$C_{12}H_{15}NO_6$

(*S*)-1-((*S*)-3-Hydroperoxy-3-methyl-6-oxocyclohexa-1,4-dienylamino)-1-oxopropan-2-yl acetate

Ee >99%

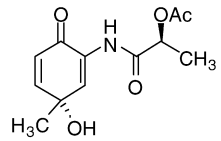
$[\alpha]_D = -38$ (*c* 0.05, $CHCl_3$)

Source of chirality: L-lactic acid

Absolute configuration: (3*S*,12*S*)

Kani Zilbeyaz, Ertan Sahin and Hamdullah Kilic*

Tetrahedron: Asymmetry *18 (2007) 791*



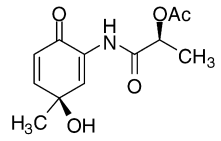
Ee >99%
$[\alpha]_D = -29$ (*c* 0.05, $CHCl_3$)
Source of chirality: L-lactic acid
Absolute configuration: (3*R*,12*S*)

$C_{12}H_{15}NO_5$

(*S*)-1-((*R*)-3-Hydroxy-3-methyl-6-oxocyclohexa-1,4-dienylamino)-1-oxopropan-2-yl acetate

Kani Zilbeyaz, Ertan Sahin and Hamdullah Kilic*

Tetrahedron: Asymmetry *18 (2007) 791*



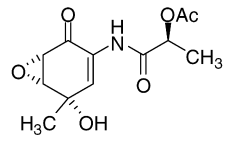
Ee >99%
$[\alpha]_D = -40$ (*c* 0.05, $CHCl_3$)
Source of chirality: L-lactic acid
Absolute configuration: (3*S*,12*S*)

$C_{12}H_{15}NO_5$

(*S*)-1-((*S*)-3-Hydroxy-3-methyl-6-oxocyclohexa-1,4-dienylamino)-1-oxopropan-2-yl acetate

Kani Zilbeyaz, Ertan Sahin and Hamdullah Kilic*

Tetrahedron: Asymmetry *18 (2007) 791*



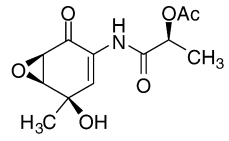
Ee >99%
$[\alpha]_D = -122$ (*c* 0.05, $CHCl_3$)
Source of chirality: L-lactic acid
Absolute configuration: (1*S*,5*S*,6*R*,15*S*)

$C_{12}H_{15}NO_6$

(*S*)-1-((1*S*,5*S*,6*R*)-5-Hydroxy-5-methyl-2-oxo-7-oxabicyclo[4.1.0]hept-3-en-3-ylamino)-1-oxopropan-2-yl acetate

Kani Zilbeyaz, Ertan Sahin and Hamdullah Kilic*

Tetrahedron: Asymmetry *18 (2007) 791*



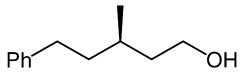
Ee >99%
$[\alpha]_D = +115$ (*c* 0.05, $CHCl_3$)
Source of chirality: L-lactic acid
Absolute configuration: (1*R*,5*R*,6*S*,15*S*)

$C_{12}H_{15}NO_6$

(*S*)-1-((1*R*,5*R*,6*S*)-5-Hydroxy-5-methyl-2-oxo-7-oxabicyclo[4.1.0]hept-3-en-3-ylamino)-1-oxopropan-2-yl acetate

Ugo Matteoli,* Alessandra Ciappa, Sara Bovo, Matheo Bertoldini and Alberto Scrivanti

Tetrahedron: Asymmetry *18 (2007) 797*



$C_{12}H_{18}O$

(*R*)-3-Methyl-5-phenylpentan-1-ol

Ee >97% ee

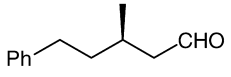
$[\alpha]_D^{25} = +14.5$ (*c* 5, dichloromethane)

Source of chirality: asymmetric hydrogenation

Absolute configuration: (*R*)

Ugo Matteoli,* Alessandra Ciappa, Sara Bovo, Matheo Bertoldini and Alberto Scrivanti

Tetrahedron: Asymmetry *18 (2007) 797*



$C_{12}H_{16}O$

(*R*)-3-Methyl-5-phenylpentanal

Ee >97% ee

$[\alpha]_D^{25} = +22.9$ (*c* 1, dichloromethane)

Source of chirality: asymmetric hydrogenation

Absolute configuration: (*R*)

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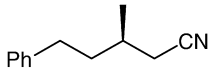

$C_{12}H_{15}N$

(*R*)-3-Methyl-5-phenylpentanenitrile

Ee >97% ee

$[\alpha]_D^{25} = -2.3$ (*c* 2.2, ethanol)

Source of chirality: asymmetric hydrogenation

Absolute configuration: (*R*)