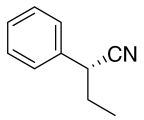
Birgit Kosjek,* Fred J. Fleitz, Peter G. Dormer, Jeffrey T. Kuethe, Paul N. Devine

Tetrahedron: Asymmetry *19 (2008) 1403*



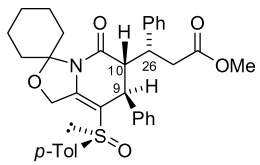
$C_{10}H_{11}N$

2-Phenyl-butyronitrile

$[\alpha]_D^{20} = +26.1$ (*c* 7.08, CH_3OH)
Absolute configuration: (*R*)-(+)

Carlos Alvarez-Ibarra,* Juan F. Collados Luján, Maria L. Quiroga-Feijóo, Gonzalo Rodríguez

Tetrahedron: Asymmetry *19 (2008) 1411*



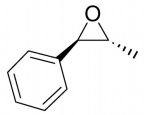
$C_{35}H_{37}NO_5S$

Methyl (3*R*)-{(S_S,6′*R*,7′*S*)-8′-[(4-methylphenyl)sulfinyl]-5′-oxo-7′-phenyl-1′,5′,6′,7′-tetrahydrospiro[cyclohexane-1,3′-[1,3]oxazolo[3,4-*a*]pyridin]6′-yl}-3-phenylpropanoate

Ee ⩾ 97%
$[\alpha]_D^{25} = +188.4$ (*c* 0.4, $CHCl_3$)
Absolute configuration: (S_S,9*S*,10*R*,26*R*)

Sarah A. Kavanagh, Stephen J. Connon*

Tetrahedron: Asymmetry *19 (2008) 1414*



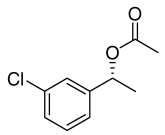
$C_9H_{10}O$

(1*R*,2*R*)-1,2-Epoxy-1-phenyl-propane

Absolute configuration: (1*R*,2*R*)
$[\alpha]_D^{20} = +64.6$ (*c* 0.71)

Luciana L. Machado, Telma L. G. Lemos,* Marcos Carlos de Mattos, Maria da Conceicão F. de Oliveira, Gonzalo de Gonzalo, Vicente Gotor-Fernández, Vicente Gotor*

Tetrahedron: Asymmetry *19 (2008) 1419*



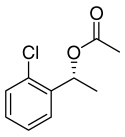
$C_{10}H_{11}ClO_2$

(*R*)-1-(3-Chlorophenyl)ethyl acetate

Ee = 96% (GC, CP-Chiralsil DEX CB)
$[\alpha]_D^{25} = +15.8$ (*c* 0.80, CH_2Cl_2)
Source of chirality: enzymatic acetylation
Absolute configuration: (*R*)

Luciana L. Machado, Telma L.G. Lemos,* Marcos Carlos de Mattos,
Maria da Conceicão F. de Oliveira, Gonzalo de Gonzalo, Vicente Gotor-Fernández,
Vicente Gotor*

Tetrahedron: Asymmetry *19 (2008) 1419*



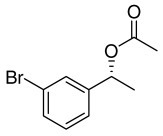
$C_{10}H_{11}ClO_2$

(*R*)-1-(2-Chlorophenyl)ethyl acetate

Ee = 88% (GC, CP-Chiralsil DEX CB)
$[\alpha]_D^{25} = +9.6$ (*c* 0.64, CH_2Cl_2)
Source of chirality: enzymatic acetylation
Absolute configuration: (*R*)

Luciana L. Machado, Telma L.G. Lemos,* Marcos Carlos de Mattos,
Maria da Conceicão F. de Oliveira, Gonzalo de Gonzalo, Vicente Gotor-Fernández,
Vicente Gotor*

Tetrahedron: Asymmetry *19 (2008) 1419*



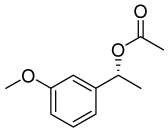
$C_{10}H_{11}BrO_2$

(*R*)-1-(3-Bromophenyl)ethyl acetate

Ee = 96% (GC, CP-Chiralsil DEX CB)
$[\alpha]_D^{25} = +13.7$ (*c* 0.75, CH_2Cl_2)
Source of chirality: enzymatic acetylation
Absolute configuration: (*R*)

Luciana L. Machado, Telma L.G. Lemos,* Marcos Carlos de Mattos,
Maria da Conceicão F. de Oliveira, Gonzalo de Gonzalo, Vicente Gotor-Fernández,
Vicente Gotor*

Tetrahedron: Asymmetry *19 (2008) 1419*



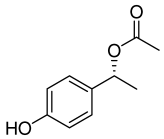
$C_{11}H_{14}O_3$

(*R*)-1-(3-Methoxyphenyl)ethyl acetate

Ee = 95% (GC, CP-Chiralsil DEX CB)
$[\alpha]_D^{25} = +27.8$ (*c* 0.94, CH_2Cl_2)
Source of chirality: enzymatic acetylation
Absolute configuration: (*R*)

Luciana L. Machado, Telma L.G. Lemos,* Marcos Carlos de Mattos,
Maria da Conceicão F. de Oliveira, Gonzalo de Gonzalo, Vicente Gotor-Fernández,
Vicente Gotor*

Tetrahedron: Asymmetry *19 (2008) 1419*



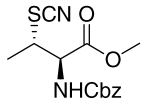
$C_{10}H_{12}O_3$

(*R*)-1-(4-Hydroxyphenyl)ethyl acetate

Ee = 95% (HPLC, Chiralcel OB-H)
$[\alpha]_D^{25} = +11.2$ (*c* 1.00, CH_2Cl_2)
Source of chirality: enzymatic acetylation
Absolute configuration: (*R*)

R. B. Nasir Baig, V. Sai Sudhir, Srinivasan Chandrasekaran*

Tetrahedron: Asymmetry *19 (2008) 1425*

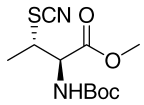


$[\alpha]_D = +70$ (*c* 1, $CHCl_3$)
Absolute configuration: (2*R*,3*S*)

$C_{14}H_{16}N_2O_4S$
(2*R*,3*S*)-Methyl 2-(benzyloxycarbonyl)-3-thiocyanatobutanoate

R. B. Nasir Baig, V. Sai Sudhir, Srinivasan Chandrasekaran*

Tetrahedron: Asymmetry *19 (2008) 1425*



$[\alpha]_D = +97$ (*c* 1, $CHCl_3$)
Absolute configuration: (2*R*,3*S*)

$C_{11}H_{18}N_2O_4S$
(2*R*,3*S*)-Methyl 2-(*tert*-butoxycarbonyl)-3-thiocyanatobutanoate

R. B. Nasir Baig, V. Sai Sudhir, Srinivasan Chandrasekaran*

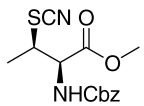
Tetrahedron: Asymmetry *19 (2008) 1425*

$[\alpha]_D = +55.96$ (*c* 1, $CHCl_3$)
Absolute configuration: (2*R*,3*S*)

$C_{21}H_{20}N_2O_4S$
(2*R*,3*S*)-Methyl 2-(((9*H*-fluoren-9-yl)methoxy)carbonyl)-3-thiocyanatobutanoate

R. B. Nasir Baig, V. Sai Sudhir, Srinivasan Chandrasekaran*

Tetrahedron: Asymmetry *19 (2008) 1425*

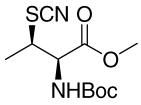


$[\alpha]_D = +25.6$ (*c* 1, $CHCl_3$)
Absolute configuration: (2*R*,3*R*)

$C_{14}H_{16}N_2O_4S$
(2*R*,3*R*)-Methyl 2-(benzyloxycarbonyl)-3-thiocyanatobutanoate

R. B. Nasir Baig, V. Sai Sudhir, Srinivasan Chandrasekaran*

Tetrahedron: Asymmetry *19 (2008) 1425*

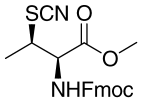


$[\alpha]_D = +15.1$ (*c* 1, $CHCl_3$)
Absolute configuration: (2*R*,3*R*)

$C_{11}H_{18}N_2O_4S$
(2*R*,3*R*)-Methyl 2-(*tert*-butoxycarbonyl)-3-thiocyanatobutanoate

R. B. Nasir Baig, V. Sai Sudhir, Srinivasan Chandrasekaran*

Tetrahedron: Asymmetry *19 (2008) 1425*

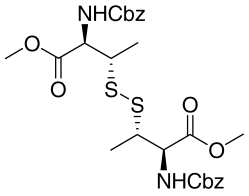


$[\alpha]_D = +13.7$ (*c* 1, $CHCl_3$)
Absolute configuration: (2*R*,3*R*)

$C_{21}H_{20}N_2O_4S$
(2*R*,3*R*)-Methyl 2-(((9*H*-fluoren-9-yl)methoxy)carbonyl)-3-thiocyanatobutanoate

R. B. Nasir Baig, V. Sai Sudhir, Srinivasan Chandrasekaran*

Tetrahedron: Asymmetry *19 (2008) 1425*

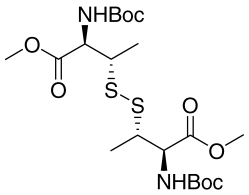


$[\alpha]_D = -98.3$ (*c* 1, $CHCl_3$)

$C_{26}H_{32}N_2O_8S_2$
N,*N*′-Bis(benzyloxycarbonyl)-*allo*-3,3′-dimethyl-L-cystine dimethyl ester

R. B. Nasir Baig, V. Sai Sudhir, Srinivasan Chandrasekaran*

Tetrahedron: Asymmetry *19 (2008) 1425*

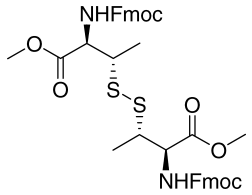


$[\alpha]_D = -54.9$ (*c* 4.38, $CHCl_3$)

$C_{20}H_{36}N_2O_8S_2$
N,*N*′-Bis(*tert*-butoxycarbonyl)-*allo*-3,3′-dimethyl-L-cystine dimethyl ester

R. B. Nasir Baig, V. Sai Sudhir, Srinivasan Chandrasekaran*

Tetrahedron: Asymmetry *19 (2008) 1425*



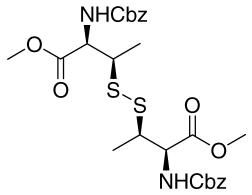
$[\alpha]_D = -44$ (c 1, $CHCl_3$)

$C_{40}H_{40}N_2O_8S_2$

N,*N*′-Bis(9-fluorenylmethoxycarbonyl)-*allo*-3,3′-dimethyl-L-cystine dimethyl ester

R. B. Nasir Baig, V. Sai Sudhir, Srinivasan Chandrasekaran*

Tetrahedron: Asymmetry *19 (2008) 1425*



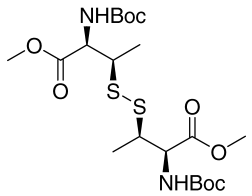
$[\alpha]_D = +172$ (c 0.44, $CHCl_3$)

$C_{26}H_{32}N_2O_8S_2$

N,*N*′-Bis(benzyloxycarbonyl)-*threo*-3,3′-dimethyl-L-cystine dimethyl ester

R. B. Nasir Baig, V. Sai Sudhir, Srinivasan Chandrasekaran*

Tetrahedron: Asymmetry *19 (2008) 1425*



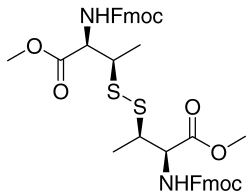
$[\alpha]_D = +145$ (c 1, $CHCl_3$)

$C_{20}H_{36}N_2O_8S_2$

N,*N*′-Bis(*tert*-butoxycarbonyl)-*threo*-3,3′-dimethyl-L-cystine dimethyl ester

R. B. Nasir Baig, V. Sai Sudhir, Srinivasan Chandrasekaran*

Tetrahedron: Asymmetry *19 (2008) 1425*



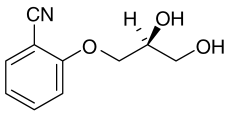
$[\alpha]_D = +75.6$ (c 1, $CHCl_3$)

$C_{40}H_{40}N_2O_8S_2$

N,*N*′-Bis(9-fluorenylmethoxycarbonyl)-*threo*-3,3′-dimethyl-L-cystine dimethyl ester

Zemfira A. Bredikhina, Flyura S. Akhatova, Dmitry V. Zakharychev, Alexander A. Bredikhin*

Tetrahedron: Asymmetry *19 (2008) 1430*



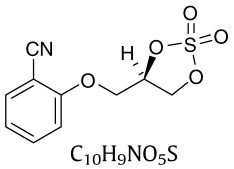
$C_{10}H_{11}NO_3$

(*S*)-3-(2-Cyanophenoxy)-propane-1,2-diol

Ee = 99.4% [chiral HPLC of diacetate derivative]
$[\alpha]_D^{20} = +14.3$ (*c* 0.5, H_2O)
$[\alpha]_D^{20} = +3.1$ (*c* 1.0, EtOH)
$[\alpha]_D^{20} = -9.5$ (*c* 1.0, MTBE)
Initial source of chirality: (*S*)-3-chloropropane-1,2-diol
Subsequent source of chirality: spontaneous resolution
Absolute configuration: (*S*)

Zemfira A. Bredikhina, Flyura S. Akhatova, Dmitry V. Zakharychev, Alexander A. Bredikhin*

Tetrahedron: Asymmetry *19 (2008) 1430*



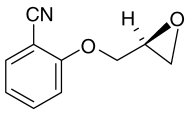
$C_{10}H_9NO_5S$

(*R*)-4-(2-Cyanophenoxymethyl)-1,3,2-dioxathiolane-2,2-dioxide

Ee = 99.9% [chiral HPLC]
$[\alpha]_D^{20} = +17.0$ (*c* 0.6, EtOH)
Initial source of chirality: (*S*)-3-chloropropane-1,2-diol
Subsequent source of chirality: spontaneous resolution
Absolute configuration: (*R*)

Zemfira A. Bredikhina, Flyura S. Akhatova, Dmitry V. Zakharychev, Alexander A. Bredikhin*

Tetrahedron: Asymmetry *19 (2008) 1430*



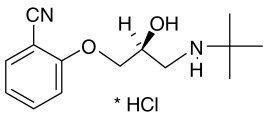
$C_{10}H_9NO_2$

(*S*)-1,2-Epoxy-3-(2-cyanophenoxy)-propane

Ee >99% [d.s.c.]
$[\alpha]_D^{20} = +18.5$ (*c* 0.5, EtOH)
$[\alpha]_D^{20} = -5.0$ (*c* 1.0, $CHCl_3$)
Source of chirality: (*S*)-3-chloropropane-1,2-diol
Absolute configuration: (*S*)

Zemfira A. Bredikhina, Flyura S. Akhatova, Dmitry V. Zakharychev, Alexander A. Bredikhin*

Tetrahedron: Asymmetry *19 (2008) 1430*



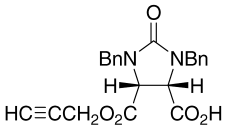
$C_{14}H_{21}ClN_2O_2$

(*S*)-1-(2-Cyanophenoxy)-2-hydroxy-3-*tert*-butylaminopropane hydrochloride; (*S*)-bunitrolol hydrochloride

Ee >99.9% [d.s.c.]
$[\alpha]_D^{20} = -29.6$ (*c* 0.9, EtOH)
$[\alpha]_D^{20} = -14.7$ (*c* 0.8, H_2O)
Source of chirality: (*S*)-3-(2-cyanophenoxy)propane-1,2-diol
Absolute configuration: (*S*)

Jian Huang, Fei Xiong, Fen-Er Chen*

Tetrahedron: Asymmetry *19 (2008) 1436*



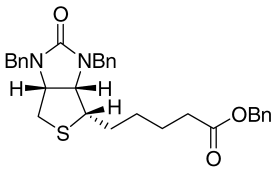
Ee = 97%
$[\alpha]_D^{25} = +15.6$ (*c* 1.0, $CHCl_3$)
Absolute configuration: (4*S*,5*R*)

$C_{22}H_{20}N_2O_5$

(4*S*,5*R*)-1,3-Dibenzyl-5-(propargyloxycarbonyl)-2-oxo-imidazolidine-4-carboxylic acid

Jian Huang, Fei Xiong, Fen-Er Chen*

Tetrahedron: Asymmetry *19 (2008) 1436*



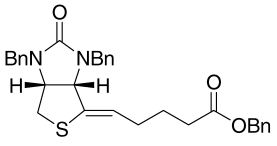
$[\alpha]_D^{25} = -20.7$ (*c* 1.0, MeOH)
Absolute configuration: (3a*S*,4*S*,6a*R*)

$C_{31}H_{34}N_2O_3S$

Benzyl(3a*S*,4*S*,6a*R*)-5-(1,3-dibenzyl-2,3,3a,4,6,6a-hexahydro-2-oxo-1*H*-thieno[3,4-*d*]imidazol-5-yl)pentanoate

Jian Huang, Fei Xiong, Fen-Er Chen*

Tetrahedron: Asymmetry *19 (2008) 1436*



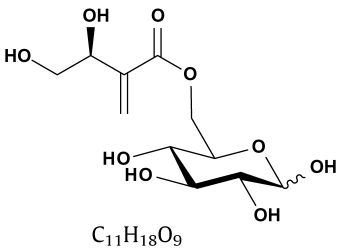
$[\alpha]_D^{25} = +154.4$ (*c* 1.0, MeOH)
Absolute configuration: (3a*S*,4*Z*,6a*R*)

$C_{31}H_{32}N_2O_3S$

Benzyl(3a*S*,4*Z*,6a*R*)-5-(1,3-dibenzyl-2,3,3a,4,6,6a-hexahydro-2-oxo-1*H*-thieno[3,4-*d*]imidazol-5-ylidene)pentanoate

Kengo Shigetomi, Takao Kishimoto, Kazuaki Shoji, Makoto Ubukata*

Tetrahedron: Asymmetry *19 (2008) 1444*



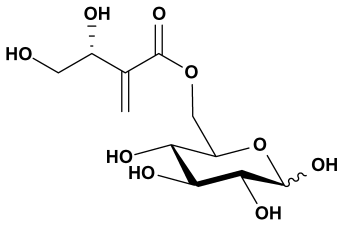
$[\alpha]_D = +37.7$ (*c* 1.0, MeOH)
Source of chirality: D-glucose
Absolute configuration: (3′*S*)

$C_{11}H_{18}O_9$

(+)-6-Tuliposide B

Kengo Shigetomi, Takao Kishimoto, Kazuaki Shoji, Makoto Ubukata*

Tetrahedron: Asymmetry *19 (2008) 1444*



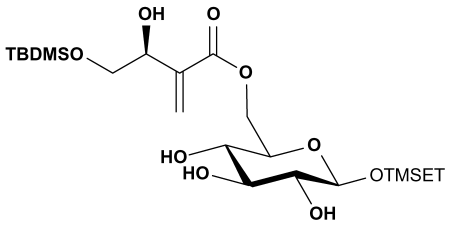
$C_{11}H_{18}O_9$

(3′R)-*epi*-6-Tuliposide B

$[\alpha]_D = +30.9$ (*c* 1.0, MeOH)
Source of chirality: D-glucose
Absolute configuration: (3′*R*)

Kengo Shigetomi, Takao Kishimoto, Kazuaki Shoji, Makoto Ubukata*

Tetrahedron: Asymmetry *19 (2008) 1444*



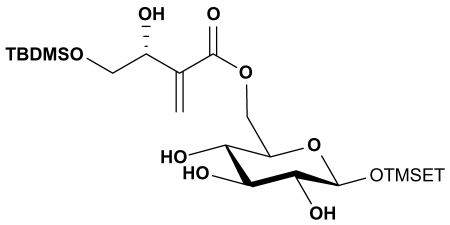
$C_{22}H_{45}O_9Si_2$

1-*O*-(2-Trimethylsilylethyl)-6-*O*-[(3′S)-4′-(*tert*-butyldiethylsilyloxy)-3′-hydroxy-2′-methylenebutanoyl]-β-D-glucopyranoside

$[\alpha]_D = -24.0$ (*c* 1.0, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (3′*S*)

Kengo Shigetomi, Takao Kishimoto, Kazuaki Shoji, Makoto Ubukata*

Tetrahedron: Asymmetry *19 (2008) 1444*



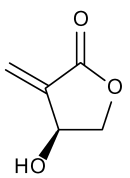
$C_{22}H_{45}O_9Si_2$

1-*O*-(2-Trimethylsilylethyl)-6-*O*-[(3′*R*)-4′-(*tert*-butyldiethylsilyloxy)-3′-hydroxy-2′-methylenebutanoyl]-β-D-glucopyranoside

$[\alpha]_D = -35.1$ (*c* 1.0, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (3′*R*)

Kengo Shigetomi, Takao Kishimoto, Kazuaki Shoji, Makoto Ubukata*

Tetrahedron: Asymmetry *19 (2008) 1444*



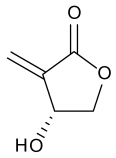
$C_5H_6O_3$

(−)-Tulipalin B

$[\alpha]_D = -79.1$ (*c* 0.25, MeOH)
Source of chirality: 6-tuliposide B
Absolute configuration: (3*S*)

Kengo Shigetomi, Takao Kishimoto, Kazuaki Shoji, Makoto Ubukata*

Tetrahedron: Asymmetry *19 (2008) 1444*



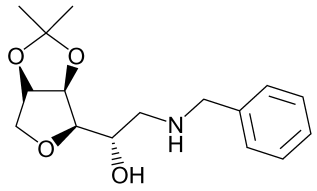
$C_5H_6O_3$

(+)-Tulipalin B

$[\alpha]_D = +79.4$ (*c* 0.25, MeOH)
Source of chirality: (3′*R*)-*epi*-6-tuliposide B
Absolute configuration: (3*R*)

Stéphane Guillarme, Thi Xuan Mai Nguyen, Christine Saluzzo*

Tetrahedron: Asymmetry *19 (2008) 1450*



$C_{16}H_{23}NO_4$

3,6-Anhydro-1-(benzylamino)-1-deoxy-4,5-*O*-isopropylidene-D-sorbitol

$[\alpha]_D^{25} = -57.5$ (*c* 1.0, CH_2Cl_2)
Source of chirality: isosorbide
Absolute configuration: (2*S*,3*R*,4*R*,5*R*)

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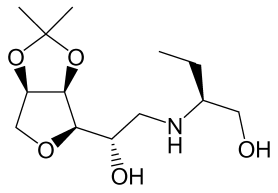
Tetrahedron: Asymmetry *19 (2008) 1450*



$C_{13}H_{25}NO_5$

3,6-Anhydro-1-[(*S*)-(1-hydroxybutan-2-ylamino)]-1-deoxy-4,5-*O*-isopropylidene-D-sorbitol

$[\alpha]_D^{25} = -35.3$ (*c* 1.0, CH_2Cl_2)
Source of chirality: isosorbide
Absolute configuration: (1′*S*,2*S*,3*R*,4*R*,5*R*)

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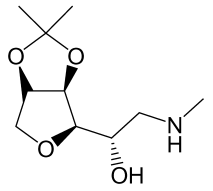
Tetrahedron: Asymmetry *19 (2008) 1450*



$C_{10}H_{19}NO_4$

3,6-Anhydro-1-(methylamino)-1-deoxy-4,5-*O*-isopropylidene-D-sorbitol

$[\alpha]_D^{25} = -54.2$ (*c* 0.5, CH_3OH)
Source of chirality: isosorbide
Absolute configuration: (2*S*,3*R*,4*R*,5*R*)

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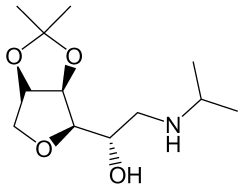
Tetrahedron: Asymmetry *19 (2008) 1450*



$[\alpha]_D^{25} = -58.8$ (*c* 1.0, CH_2Cl_2)
Source of chirality: isosorbide
Absolute configuration: (2*S*,3*R*,4*R*,5*R*)

$C_{12}H_{23}NO_4$

3,6-Anhydro-1-(isopropylamino)-1-deoxy-4,5-*O*-isopropylidene-D-sorbitol

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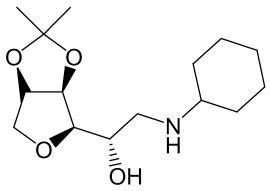
Tetrahedron: Asymmetry *19 (2008) 1450*



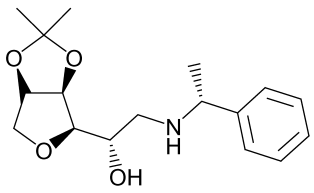
$[\alpha]_D^{25} = -58.2$ (*c* 1.0, CH_2Cl_2)
Source of chirality: isosorbide
Absolute configuration: (2*S*,3*R*,4*R*,5*R*)

$C_{15}H_{27}NO_4$

3,6-Anhydro-1-(cyclohexylamino)-1-deoxy-4,5-*O*-isopropylidene-D-sorbitol

Stéphane Guillarme, Thi Xuan Mai Nguyen, Christine Saluzzo*

Tetrahedron: Asymmetry *19 (2008) 1450*



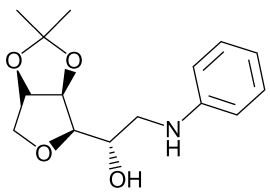
$[\alpha]_D^{25} = -17.3$ (*c* 1.0, CH_2Cl_2)
Source of chirality: isosorbide
Absolute configuration: (1′*R*,2*S*,3*R*,4*R*,5*R*)

$C_{17}H_{25}NO_4$

3,6-Anhydro-1-[(*R*)-α-méthylbenzylamino)]-1-deoxy-4,5-*O*-isopropylidene-D-sorbitol

Stéphane Guillarme, Thi Xuan Mai Nguyen, Christine Saluzzo*

Tetrahedron: Asymmetry *19 (2008) 1450*



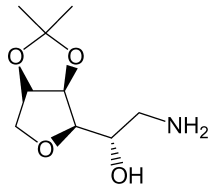
$[\alpha]_D^{25} = -70.0$ (*c* 0.25, CH_2Cl_2)
Source of chirality: isosorbide
Absolute configuration: (2*S*,3*R*,4*R*,5*R*)

$C_{12}H_{23}NO_4$

3,6-Anhydro-1-(benzeneamino)-1-deoxy-4,5-*O*-isopropylidene-D-sorbitol

Stéphane Guillarme, Thi Xuan Mai Nguyen, Christine Saluzzo*

Tetrahedron: Asymmetry *19 (2008) 1450*



$[\alpha]_D^{25} = -40.0$ (*c* 1.0, CH_2Cl_2)
Source of chirality: isosorbide
Absolute configuration: (2*S*,3*R*,4*R*,5*R*)

$C_{12}H_{23}NO_4$

3,6-Anhydro-1-(amino)-1-deoxy-4,5-*O*-isopropylidene-D-sorbitol

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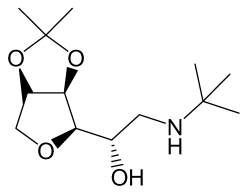
Stéphane Guillarme, Thi Xuan Mai Nguyen, Christine Saluzzo*

Tetrahedron: Asymmetry *19 (2008) 1450*



$[\alpha]_D^{25} = -62.3$ (*c* 1.0, CH_2Cl_2)
Source of chirality: isosorbide
Absolute configuration: (2*S*,3*R*,4*R*,5*R*)

$C_{13}H_{25}NO_4$

3,6-Anhydro-1-(tertiobutylamino)-1-deoxy-4,5-*O*-isopropylidene-D-sorbitol

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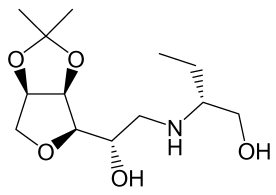
Stéphane Guillarme, Thi Xuan Mai Nguyen, Christine Saluzzo*

Tetrahedron: Asymmetry *19 (2008) 1450*



$[\alpha]_D^{25} = -64.0$ (*c* 1.0, CH_2Cl_2)
Source of chirality: isosorbide
Absolute configuration: (1′*R*,2*S*,3*R*,4*R*,5*R*)

$C_{13}H_{25}NO_5$

3,6-Anhydro-1-((*R*)-(1-hydroxybutan-2-ylamino)-1-deoxy-4,5-*O*-isopropylidene-D-sorbitol

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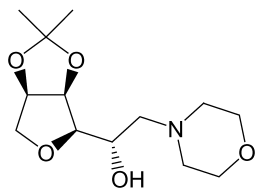
Stéphane Guillarme, Thi Xuan Mai Nguyen, Christine Saluzzo*

Tetrahedron: Asymmetry *19 (2008) 1450*



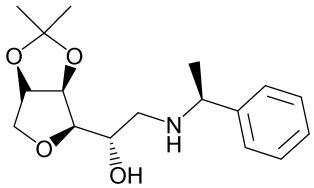
$[\alpha]_D^{25} = -63.8$ (*c* 1.0, CH_2Cl_2)
Source of chirality: isosorbide
Absolute configuration: (2*S*,3*R*,4*R*,5*R*)

$C_{13}H_{23}NO_5$

3,6-Anhydro-1-(morpholino)-1-deoxy-4,5-*O*-isopropylidene-D-sorbitol

Stéphane Guillarme, Thi Xuan Mai Nguyen, Christine Saluzzo*

Tetrahedron: Asymmetry *19 (2008) 1450*



$[\alpha]_D^{25} = -90.0$ (*c* 1.0, CH_2Cl_2)
Source of chirality: isosorbide
Absolute configuration: (1′*S*,2*S*,3*R*,4*R*,5*R*)

$C_{17}H_{25}NO_4$

3,6-Anhydro-1-[(*S*)-α-méthylbenzylamino)]-1-deoxy-4,5-*O*-isopropylidene-D-sorbitol

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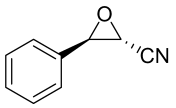
Malgorzata Zagozda, Jan Plenkiewicz*

Tetrahedron: Asymmetry *19 (2008) 1455*



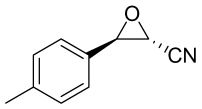
Ee = 29%
$[\alpha]_D^{25} = +24.3$ (*c* 0.86, EtOH)
Source of chirality: microbial hydrolysis
Absolute configuration: (2*R*,3*R*)

C_9H_7NO

(2*R*,3*R*)-2,3-Epoxy-3-phenylpropanenitrile

Malgorzata Zagozda, Jan Plenkiewicz*

Tetrahedron: Asymmetry *19 (2008) 1455*



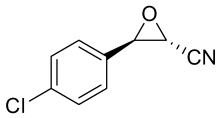
Ee = 13%
$[\alpha]_D^{24} = +15.8$ (*c* 0.57, EtOH)
Source of chirality: microbial hydrolysis
Absolute configuration: (2*R*,3*R*)

$C_{10}H_9NO$

(2*R*,3*R*)-2,3-Epoxy-3-(*p*-methylphenyl)propanenitrile

Malgorzata Zagozda, Jan Plenkiewicz*

Tetrahedron: Asymmetry *19 (2008) 1455*



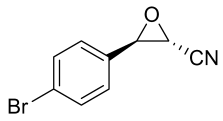
Ee = 44%
$[\alpha]_D^{24} = +25.4$ (*c* 0.64, EtOH)
Source of chirality: microbial hydrolysis
Absolute configuration: (2*R*,3*R*)

C_9H_6ClNO

(2*R*,3*R*)-2,3-Epoxy-3-(*p*-chlorophenyl)propanenitrile

Malgorzata Zagozda, Jan Plenkiewicz*

Tetrahedron: Asymmetry *19 (2008) 1455*



C_9H_6BrNO

(2*R*,3*R*)-2,3-Epoxy-3-(*p*-bromophenyl)propanenitrile

Ee = 18%
$[\alpha]_D^{24} = +14.5$ (*c* 0.59, EtOH)
Source of chirality: microbial hydrolysis
Absolute configuration: (2*R*,3*R*)

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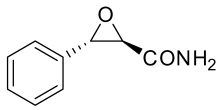
Tetrahedron: Asymmetry *19 (2008) 1455*



$C_9H_9NO_2$

(2*R*,3*S*)-2,3-Epoxy-3-phenylpropaneamide

Ee = 36%
$[\alpha]_D^{25} = -33.2$ (*c* 0.39, EtOH)
Source of chirality: microbial hydrolysis
Absolute configuration: (2*R*,3*S*)

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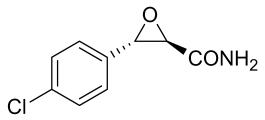
Tetrahedron: Asymmetry *19 (2008) 1455*



$C_9H_8ClNO_2$

(2*R*,3*S*)-2,3-Epoxy-3-(*p*-chlorophenyl)propaneamide

Ee = 25%
$[\alpha]_D^{25} = -11.8$ (*c* 0.35, EtOH)
Source of chirality: microbial hydrolysis
Absolute configuration: (2*R*,3*S*)

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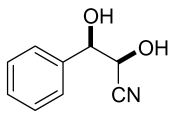
Tetrahedron: Asymmetry *19 (2008) 1455*



$C_9H_9NO_2$

syn-(−)-2,3-Dihydroxy-3-phenylpropanenitrile

Ee = 89%
$[\alpha]_D^{24} = -28.7$ (*c* 0.84, EtOH)
Source of chirality: kinetic resolution

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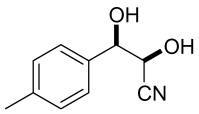
Tetrahedron: Asymmetry *19 (2008) 1455*



$C_{10}H_{11}NO_2$

syn-(−)-2,3-Dihydroxy-3-(4-methylphenyl)propanenitrile

Ee = 99%
$[\alpha]_D^{24} = -37.9$ (*c* 0.66, EtOH)
Source of chirality: kinetic resolution

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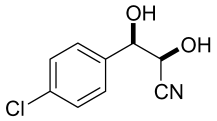
Tetrahedron: Asymmetry *19 (2008) 1455*



$C_9H_8ClNO_2$

syn-(−)-2,3-Dihydroxy-3-(*p*-chlorophenyl)propanenitrile

Ee = 55%
$[\alpha]_D^{24} = -11.4$ (*c* 0.18, EtOH)
Source of chirality: microbial hydrolysis

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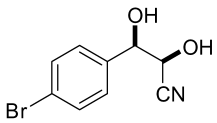
Tetrahedron: Asymmetry *19 (2008) 1455*



$C_9H_8BrNO_2$

syn-(−)-2,3-Dihydroxy-3-(*p*-bromophenyl)propanenitrile

Ee = 34%
$[\alpha]_D^{24} = -9.1$ (*c* 0.44, EtOH)
Source of chirality: microbial hydrolysis

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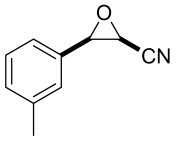
Tetrahedron: Asymmetry *19 (2008) 1455*



$C_{10}H_9NO$

cis-(+)-2,3-Epoxy-3-(*m*-methylphenyl)propanenitrile

Ee = 23%
$[\alpha]_D^{25} = +23.8$ (*c* 0.42, EtOH)
Source of chirality: microbial hydrolysis

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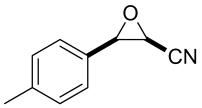
Tetrahedron: Asymmetry *19 (2008) 1455*



$C_{10}H_9NO$

cis-(+)-2,3-Epoxy-3-(*p*-methylphenyl)propanenitrile

Ee = 23%
$[\alpha]_D^{25} = +22.4$ (*c* 0.85, EtOH)
Source of chirality: microbial hydrolysis

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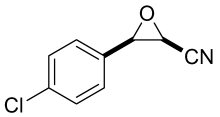
Tetrahedron: Asymmetry *19 (2008) 1455*



C_9H_6ClNO

cis-(−)-2,3-Epoxy-3-(*p*-chlorophenyl)propanenitrile

Ee = 36%
$[\alpha]_D^{25} = -19.5$ (*c* 0.82, EtOH)
Source of chirality: microbial hydrolysis

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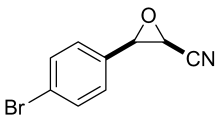
Tetrahedron: Asymmetry *19 (2008) 1455*



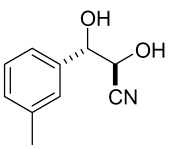
C_9H_6BrNO

cis-(−)-2,3-Epoxy-3-(*p*-bromophenyl)propanenitrile

Ee = 20%
$[\alpha]_D^{25} = -15.1$ (*c* 0.71, EtOH)
Source of chirality: microbial hydrolysis

Malgorzata Zagozda, Jan Plenkiewicz*

Tetrahedron: Asymmetry *19 (2008) 1455*



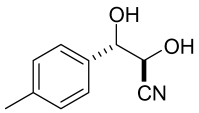
$C_{10}H_{11}NO_2$

anti-(−)-2,3-Dihydroxy-3-(*m*-methylphenyl)propanenitrile

Ee = 25%
$[\alpha]_D^{25} = -3.1$ (*c* 0.64, EtOH)
Source of chirality: microbial hydrolysis

Malgorzata Zagozda, Jan Plenkiewicz*

Tetrahedron: Asymmetry *19 (2008) 1455*

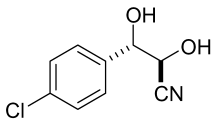


Ee = 37%
$[\alpha]_D^{25} = -15.2$ (*c* 0.53, EtOH)
Source of chirality: microbial hydrolysis

$C_{10}H_{11}NO_2$
anti-(−)-2,3-Dihydroxy-3-(*p*-methylphenyl)propanenitrile

Malgorzata Zagozda, Jan Plenkiewicz*

Tetrahedron: Asymmetry *19 (2008) 1455*

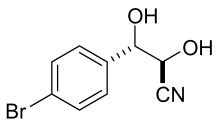


Ee = 25%
$[\alpha]_D^{25} = +8.9$ (*c* 0.34, EtOH)
Source of chirality: microbial hydrolysis

$C_9H_8ClNO_2$
anti-(+)-2,3-Dihydroxy-3-(*p*-chlorophenyl)propanenitrile

Malgorzata Zagozda, Jan Plenkiewicz*

Tetrahedron: Asymmetry *19 (2008) 1455*

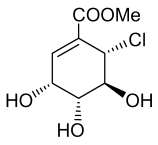


Ee = 19%
$[\alpha]_D^{25} = +3.2$ (*c* 0.63, EtOH)
Source of chirality: microbial hydrolysis

$C_9H_8BrNO_2$
anti-(+)-2,3-Dihydroxy-3-(*p*-bromophenyl)propanenitrile

Yoshihide Usami,* Koji Mizuki, Hayato Ichikawa, Masao Arimoto

Tetrahedron: Asymmetry *19 (2008) 1461*

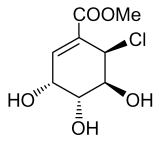


$[\alpha]_D^{25} = -101.0$ (*c* 0.20, EtOH)
Chiral source: synthesis from (−)-quinic acid
Absolute configuration: (3*R*,4*R*,5*S*,6*S*)

$C_8H_{11}O_5Cl$
Methyl (3*R*,4*R*,5*S*,6*S*)-6-chloro-3,4,5-trihydroxy-1-cyclohexene-1-carboxylate

Yoshihide Usami,* Koji Mizuki, Hayato Ichikawa, Masao Arimoto

Tetrahedron: Asymmetry *19 (2008) 1461*



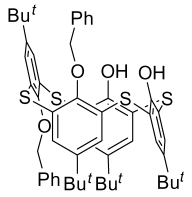
$[\alpha]_D^{25} = -275.4$ (*c* 0.04, EtOH)
Chiral source: synthesis from (−)-quinic acid
Absolute configuration: (3*R*,4*R*,5*S*,6*R*)

$C_8H_{11}O_5Cl$

Methyl (3*R*,4*R*,5*S*,6*R*)-6-chloro-3,4,5-trihydroxy-1-cyclohexene-1-carboxylate, (−)-pericosine D

Fumitaka Narumi,* Nobuji Matsumura, Nariaki Sasagawa, Koichi Natori, Takashi Kajiwara, Tetsutaro Hattori*

Tetrahedron: Asymmetry *19 (2008) 1470*



Ee = 99.9%
$[\alpha]_D^{28} = +4.5$ (*c* 1.00, chloroform)
Absolute configuration: S_a

$C_{54}H_{60}O_4S_4$

(S_a)-*anti*-25,26-Bis(benzyloxy)-5,11,17,23-tetra-*tert*-butyl-27,28-dihydroxythiacalix[4]arene

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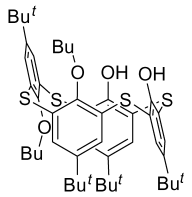
Fumitaka Narumi,* Nobuji Matsumura, Nariaki Sasagawa, Koichi Natori, Takashi Kajiwara, Tetsutaro Hattori*

Tetrahedron: Asymmetry *19 (2008) 1470*



Ee = 99.8%
$[\alpha]_D^{27} = +16.3$ (*c* 1.00, chloroform)
Absolute configuration: S_a

$C_{48}H_{64}O_4S_4$

(S_a)-*anti*-25,26-Dibutoxy-5,11,17,23-tetra-*tert*-butyl-27,28-dihydroxythiacalix[4]arene

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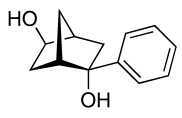
Cecilia Olsson, Annika Friberg, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1476*



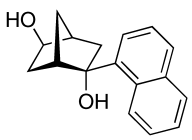
Ee = 94%
$[\alpha]_D^{20} = -20$ (*c* 1.1, EtOH)
Absolute configuration: (1*S*,2*S*,4*S*,5*R*)

$C_{13}H_{16}O_2$

(−)-(1*S*,2*S*,4*S*,5*R*)-2-Phenyl-bicyclo[2.2.1]heptane-2,5-diol

Cecilia Olsson, Annika Friberg, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1476*



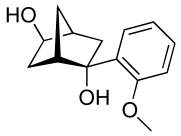
Ee = 94%
$[\alpha]_D^{20} = -91$ (*c* 2.4, EtOH)
Absolute configuration: (1*S*,2*S*,4*S*,5*R*)

$C_{17}H_{18}O_2$

(−)-(1*S*,2*S*,4*S*,5*R*)-2-(1-Naphthyl)-bicyclo[2.2.1]heptane-2,5-diol

Cecilia Olsson, Annika Friberg, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1476*



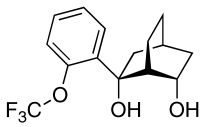
Ee = 94%
$[\alpha]_D^{20} = -15$ (*c* 1.1, $CHCl_3$)
Absolute configuration: (1*S*,2*S*,4*S*,5*R*)

$C_{14}H_{18}O_3$

(−)-(1*S*,2*S*,4*S*,5*R*)-2-(2-Methoxy-phenyl)-bicyclo[2.2.1]heptane-2,5-diol

Cecilia Olsson, Annika Friberg, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1476*



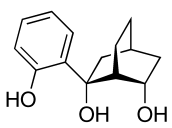
Ee >99%
$[\alpha]_D^{20} = +60$ (*c* 0.9, $CHCl_3$)
Absolute configuration: (1*R*,2*R*,4*S*,6*S*)

$C_{15}H_{17}O_3F_3$

(+)-(1*R*,2*R*,4*S*,6*S*)-2-(2-Trifluoromethoxy-phenyl)-bicyclo[2.2.2]octane-2,6-diol

Cecilia Olsson, Annika Friberg, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1476*



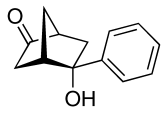
Ee >99%
$[\alpha]_D^{20} = +38$ (*c* 0.56, $CHCl_3$)
Absolute configuration: (1*R*,2*R*,4*S*,6*S*)

$C_{14}H_{18}O_3$

(+)-(1*R*,2*R*,4*S*,6*S*)-2-(2-Hydroxy-phenyl)-bicyclo[2.2.2]octane-2,6-diol

Cecilia Olsson, Annika Friberg, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1476*

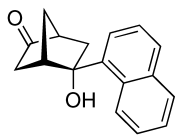


Ee >99%
$[\alpha]_D^{20} = -56$ (*c* 1.1, $CHCl_3$)
Absolute configuration: (1*S*,4*S*,5*S*)

$C_{13}H_{14}O_2$
(−)-(1*S*,4*S*,5*S*)-5-Hydroxy-5-phenyl-bicyclo[2.2.1]heptan-2-one

Cecilia Olsson, Annika Friberg, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1476*

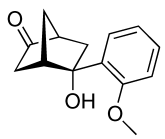


Ee >99%
$[\alpha]_D^{20} = -119$ (*c* 1.15, *t*-BuOMe)
Absolute configuration: (1*S*,4*S*,5*S*)

$C_{17}H_{16}O_2$
(−)-(1*S*,4*S*,5*S*)-5-Hydroxy-5-(1-naphthyl)-bicyclo[2.2.1]heptan-2-one

Cecilia Olsson, Annika Friberg, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1476*

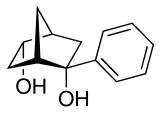


Ee = 99%
$[\alpha]_D^{20} = -64$ (*c* 1, $CHCl_3$)
Absolute configuration: (1*S*,4*S*,5*S*)

$C_{14}H_{16}O_3$
(−)-(1*S*,4*S*,5*S*)-5-Hydroxy-5-(2-methoxy-phenyl)-bicyclo[2.2.1]heptan-2-one

Cecilia Olsson, Annika Friberg, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1476*

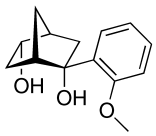


Ee >99%
$[\alpha]_D^{20} = -23$ (*c* 0.6, EtOH)
Absolute configuration: (1*S*,2*S*,4*S*,5*S*)

$C_{13}H_{16}O_2$
(−)-(1*S*,2*S*,4*S*,5*S*)-2-Phenyl-bicyclo[2.2.1]heptane-2,5-diol

Cecilia Olsson, Annika Friberg, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1476*

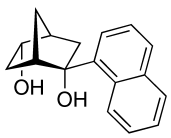


Ee >99%
$[\alpha]_D^{20} = -28$ (*c* 0.55, EtOH)
Absolute configuration: (1*S*,2*S*,4*S*,5*S*)

$C_{14}H_{18}O_3$
(−)-(1*S*,2*S*,4*S*,5*S*)-2-(2-Methoxy-phenyl)-bicyclo[2.2.1]heptane-2,5-diol

Cecilia Olsson, Annika Friberg, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1476*

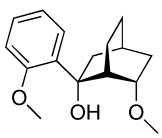


Ee >99%
$[\alpha]_D^{20} = -68$ (*c* 1.1, EtOH)
Absolute configuration: (1*S*,2*S*,4*S*,5*S*)

$C_{17}H_{18}O_2$
(−)-(1*S*,2*S*,4*S*,5*S*)-2-(1-Naphthyl)-bicyclo[2.2.1]heptane-2,5-diol

Cecilia Olsson, Annika Friberg, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1476*

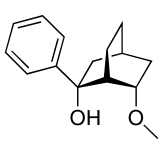


Ee >99%
$[\alpha]_D^{20} = +67$ (*c* 1.5, $CHCl_3$)
Absolute configuration: (1*R*,2*R*,4*S*,6*S*)

$C_{16}H_{22}O_3$
(+)-(1*R*,2*R*,4*S*,6*S*)-6-Methoxy-2-(2-methoxy-phenyl)-bicyclo[2.2.2]octan-2-ol

Cecilia Olsson, Annika Friberg, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1476*



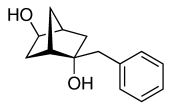
Ee >99%
$[\alpha]_D^{20} = +60$ (*c* 1.1, $CHCl_3$)
Absolute configuration: (1*R*,2*R*,4*S*,6*S*)

$C_{15}H_{20}O_2$
(+)-(1*R*,2*R*,4*S*,6*S*)-6-Methoxy-2-phenyl-bicyclo[2.2.2]octan-2-ol

Cecilia Olsson, Sara Helgesson, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1484*

$[\alpha]_D^{20} = -18$ (*c* 1.0, $CHCl_3$), 96% ee
Source of chirality: enzymatic resolution
Absolute configuration: (1*S*,2*R*,4*S*,5*R*)

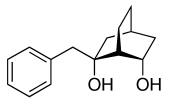


$C_{14}H_{18}O_2$
(1*S*,2*R*,4*S*,5*R*)-2-Benzyl-bicyclo[2.2.1]heptan-2,5-diol

Cecilia Olsson, Sara Helgesson, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1484*

$[\alpha]_D^{20} = +61$ (*c* 1.05, $CHCl_3$), 99% ee
Source of chirality: Baker's yeast reduction
Absolute configuration: (1*R*,2*S*,4*S*,6*S*)

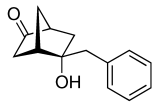


$C_{15}H_{20}O_2$
(1*R*,2*S*,4*S*,6*S*)-2-Benzyl-bicyclo[2.2.2]octane-2,6-diol

Cecilia Olsson, Sara Helgesson, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1484*

$[\alpha]_D^{20} = -45$ (*c* 1.1, $CHCl_3$), 96% ee
Source of chirality: enzymatic resolution
Absolute configuration: (1*S*,4*S*,5*R*)



$C_{14}H_{16}O_2$
(1*S*,4*S*,5*R*)-5-Benzyl-5-hydroxy-bicyclo[2.2.1]heptan-2-one

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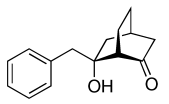
Cecilia Olsson, Sara Helgesson, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1484*

$[\alpha]_D^{20} = +46$ (*c* 0.95, $CHCl_3$), 99% ee
Source of chirality: Baker's yeast reduction
Absolute configuration: (1*S*,4*S*,6*S*)

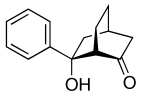


$C_{15}H_{18}O_2$
(1*S*,4*R*,6*S*)-6-Benzyl-6-hydroxy-bicyclo[2.2.2]octane-2-one

Cecilia Olsson, Sara Helgesson, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1484*

$[\alpha]_D^{20} = +13$ (*c* 1.0, $CHCl_3$), 99% ee
Source of chirality: Baker's yeast reduction
Absolute configuration: (1*S*,4*R*,6*R*)



$C_{14}H_{16}O_2$
(1*S*,4*R*,6*R*)-6-Hydroxy-6-phenyl-bicyclo[2.2.2]octan-2-one

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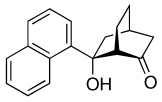
Cecilia Olsson, Sara Helgesson, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1484*

$[\alpha]_D^{20} = +14$ (*c* 0.65, $CHCl_3$), 99% ee
Source of chirality: Baker's yeast reduction
Absolute configuration: (1*S*,4*R*,6*R*)



$C_{18}H_{18}O_2$
(1*S*,4*R*,6*R*)-6-Hydroxy-6-(1-naphthyl)-bicyclo[2.2.2]octan-2-one

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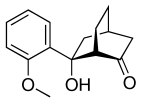
Cecilia Olsson, Sara Helgesson, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1484*

$[\alpha]_D^{20} = -33$ (*c* 1.3, $CHCl_3$), 99% ee
Source of chirality: Baker's yeast reduction
Absolute configuration: (1*S*,4*R*,6*R*)



$C_{15}H_{18}O_3$
(1*S*,4*R*,6*R*)-6-Hydroxy-6-(2-methoxy-phenyl)-bicyclo[2.2.2]octan-2-one

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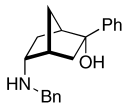
Cecilia Olsson, Sara Helgesson, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1484*

$[\alpha]_D^{20} = +40$ (*c* 0.7, $CHCl_3$), >99% ee
Source of chirality: enzymatic resolution
Absolute configuration: (1*S*,2*R*,4*R*,5*R*)

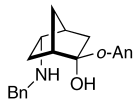


$C_{20}H_{23}ON$
(1*R*,2*R*,4*R*,5*R*)-5-Benzylamino-2-phenyl-bicyclo[2.2.1]heptane-2-ol

Cecilia Olsson, Sara Helgesson, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1484*

$[\alpha]_D^{20} = -5$ (*c* 0.5, $CHCl_3$), 99% ee
Source of chirality: enzymatic resolution
Absolute configuration: (1*S*,2*S*,4*S*,5*S*)



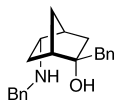
$C_{21}H_{25}O_2N$

(1*S*,2*S*,4*S*,5*S*)-5-Benzylamino-2-(2-methoxy-phenyl)-bicyclo[2.2.1]heptane-2-ol

Cecilia Olsson, Sara Helgesson, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1484*

$[\alpha]_D^{20} = -41$ (*c* 1.2, $CHCl_3$), 98% ee
Source of chirality: enzymatic resolution
Absolute configuration: (1*S*,2*R*,4*S*,5*S*)



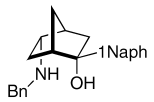
$C_{21}H_{25}ON$

(1*S*,2*R*,4*S*,5*S*)-2-Benzyl-5-benzylamino-bicyclo[2.2.1]heptan-2-ol

Cecilia Olsson, Sara Helgesson, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1484*

$[\alpha]_D^{20} = -45$ (*c* 0.55, $CHCl_3$), >99% ee
Source of chirality: enzymatic resolution
Absolute configuration: (1*S*,2*S*,4*S*,5*S*)



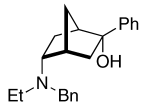
$C_{24}H_{25}ON$

(1*S*,2*S*,4*S*,5*S*)-5-Benzylamino-2-(1-naphthyl)-bicyclo[2.2.1]heptan-2-ol

Cecilia Olsson, Sara Helgesson, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1484*

$[\alpha]_D^{20} = +20$ (*c* 3.0, $CHCl_3$), >99% ee
Source of chirality: enzymatic resolution
Absolute configuration: (1*R*,2*R*,4*R*,5*R*)



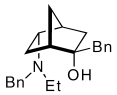
$C_{22}H_{27}ON$

(1*R*,2*R*,4*R*,5*R*)-5-(*N*-Benzyl-*N*-ethyl-amino)-2-phenyl-bicyclo[2.2.1]heptan-2-ol

Cecilia Olsson, Sara Helgesson, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1484*

$[\alpha]_D^{20} = -21$ (*c* 1.3, $CHCl_3$), 98% ee
Source of chirality: enzymatic resolution
Absolute configuration: (1*S*,2*R*,4*S*,5*S*)



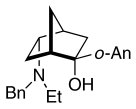
$C_{23}H_{29}ON$

(1*S*,2*R*,4*S*,5*S*)-2-Benzyl-5-(*N*-benzyl-*N*-ethyl-amino)-bicyclo[2.2.1]heptan-2-ol

Cecilia Olsson, Sara Helgesson, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1484*

$[\alpha]_D^{20} = +21$ (*c* 2.5, $CHCl_3$), 99% ee
Source of chirality: enzymatic resolution
Absolute configuration: (1*S*,2*S*,4*S*,5*S*)



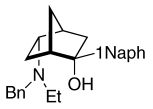
$C_{23}H_{29}O_2N$

(1*S*,2*S*,4*S*,5*S*)-5-(*N*-Benzyl-*N*-ethyl-amino)-2-(2-methoxy-phenyl)-bicyclo[2.2.1]heptan-2- ol

Cecilia Olsson, Sara Helgesson, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1484*

$[\alpha]_D^{20} = -1.5$ (*c* 1.4, $CHCl_3$), >99% ee
Source of chirality: enzymatic resolution
Absolute configuration: (1*S*,2*S*,4*S*,5*S*)



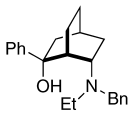
$C_{26}H_{29}ON$

(1*S*,2*S*,4*S*,5*S*)-5-(*N*-Benzyl-*N*-ethyl-amino)-2-(1-naphthyl)-bicyclo[2.2.1]heptan-2-ol

Cecilia Olsson, Sara Helgesson, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1484*

$[\alpha]_D^{20} = +165$ (*c* 0.6, $CHCl_3$), 99% ee
Source of chirality: Baker's yeast reduction
Absolute configuration: (1*R*,2*R*,4*S*,6*S*)



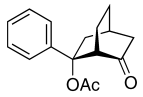
$C_{23}H_{29}ON$

(1*R*,2*R*,4*S*,6*S*)-6-(*N*-Benzyl-*N*-ethyl-amino)-2-phenyl-bicyclo[2.2.2]octan-2-ol

Cecilia Olsson, Sara Helgesson, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1484*

$[\alpha]_D^{20} = -48$ (*c* 0.4, $CHCl_3$), 99% ee
Source of chirality: Baker's yeast reduction
Absolute configuration: (1*S*,2*R*,4*R*)

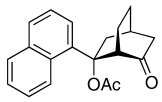


$C_{16}H_{18}O_3$
(1*S*,2*R*,4*R*)-2-Acetoxy-6-oxo-2-phenyl-bicyclo[2.2.2]octane

Cecilia Olsson, Sara Helgesson, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1484*

$[\alpha]_D^{20} = -28$ (*c* 0.6, $CHCl_3$), 99% ee
Source of chirality: Baker's yeast reduction
Absolute configuration: (1*S*,2*R*,4*R*)

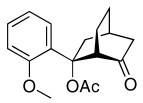


$C_{20}H_{20}O_3$
(1*S*,2*R*,4*R*)-2-Acetoxy-6-oxo-2-(1-naphthyl)-bicyclo[2.2.2]octane

Cecilia Olsson, Sara Helgesson, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1484*

$[\alpha]_D^{20} = +24$ (*c* 0.25, $CHCl_3$), 99% ee
Source of chirality: Baker's yeast reduction
Absolute configuration: (1*S*,2*R*,4*R*)

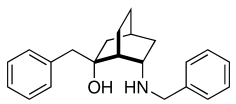


$C_{17}H_{20}O_4$
(1*S*,2*R*,4*R*)-2-Acetoxy-6-oxo-2-(2-methoxy-phenyl)-bicyclo[2.2.2]octane

Cecilia Olsson, Sara Helgesson, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1484*

$[\alpha]_D^{20} = +88$ (*c* 0.65, $CHCl_3$), 99% ee
Source of chirality: Baker's yeast reduction
Absolute configuration: (1*R*,2*S*,4*S*,6*S*)

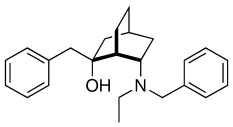


$C_{22}H_{27}ON$
(1*R*,2*S*,4*S*,6*S*)-6-Benzylamino-2-benzyl-bicyclo[2.2.2]octan-2-ol

Cecilia Olsson, Sara Helgesson, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1484*

$[\alpha]_D^{20} = +170$ (*c* 0.5, $CHCl_3$), 99% ee
Source of chirality: Baker's yeast reduction
Absolute configuration: (1*R*,2*S*,4*S*,5*S*)



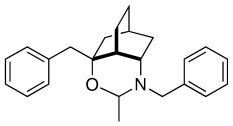
$C_{24}H_{31}ON$

(1*R*,2*S*,4*S*,6*S*)-6-(*N*-Benzyl-*N*-ethyl-amino)-2-benzyl-bicyclo[2.2.2]octan-2-ol

Cecilia Olsson, Sara Helgesson, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1484*

$[\alpha]_D^{20} = +4$ (*c* 0.5, $CHCl_3$), 99% ee
Source of chirality: Baker's yeast reduction
Absolute configuration: (1*S*,2*R*,3*S*)



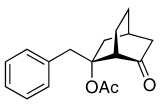
$C_{24}H_{29}ON$

(1*S*,2*R*,3*S*)-3,6-Dibenzyl-5-methyl-4-oxa-6-aza-tricyclo[5.3.1.$0^{3,8}$]undecane

Cecilia Olsson, Sara Helgesson, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1484*

$[\alpha]_D^{20} = +51$ (*c* 0.8, $CHCl_3$), 99% ee
Source of chirality: Baker's yeast reduction
Absolute configuration: (1*S*,2*S*,4*R*)



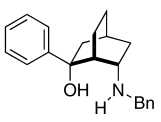
$C_{17}H_{20}O_3$

(1*S*,2*S*,4*R*)-2-Acetoxy-6-oxo-2-benzyl-bicyclo[2.2.2]octane

Cecilia Olsson, Sara Helgesson, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1484*

$[\alpha]_D^{20} = +129$ (*c* 1.2, $CHCl_3$), 99% ee
Source of chirality: Baker's yeast reduction
Absolute configuration: (1*R*,2*R*,4*S*,6*S*)



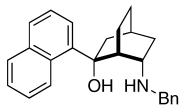
$C_{21}H_{25}ON$

(1*R*,2*R*,4*S*,6*S*)-6-Benzylamino-2-phenyl-bicyclo[2.2.2]octan-2-ol

Cecilia Olsson, Sara Helgesson, Torbjörn Frejd*

Tetrahedron: Asymmetry *19 (2008) 1484*

$[\alpha]_D^{20} = +13$ (*c* 0.45, $CHCl_3$), 99% ee
Source of chirality: Baker's yeast reduction
Absolute configuration: (1*R*,2*R*,4*S*,6*S*)



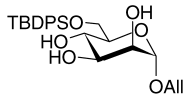
$C_{25}H_{27}ON$

(1*R*,2*R*,4*S*,6*S*)-6-Benzylamino-2-(1-naphthyl)-bicyclo[2.2.2]octan-2-ol

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*

$[\alpha]_D^{20} = <1$ (*c* 0.6, $CHCl_3$)
Source of chirality: D-(+)-mannose



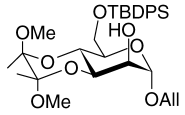
$C_{25}H_{34}O_6Si$

Allyl 6-*O*-*tert*-butyldiphenylsilyl-α-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*

$[\alpha]_D^{20} = +118.0$ (*c* 0.5, $CHCl_3$)
Absolute configuration: (2′*S*,3′*S*)
Source of chirality: D-(+)-mannose



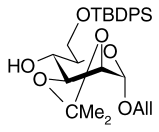
$C_{31}H_{44}O_8Si$

(2′*S*,3′*S*)-Allyl 3,4-*O*-(2′,3′-dimethoxybutane-2′,3′-diyl)-6-*O*-*tert*-butyldiphenylsilyl-α-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*

$[\alpha]_D^{20} = +2.6$ (*c* 0.4, $CHCl_3$)
Source of chirality: D-(+)-mannose



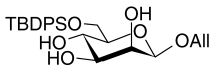
$C_{28}H_{38}O_6Si$

Allyl 6-*O*-*tert*-butyldiphenylsilyl-2,3-*O*-isopropylidene-α-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*

$[\alpha]_D^{20} = -49.5$ (*c* 0.6, $CHCl_3$)
Source of chirality: D-(+)-mannose



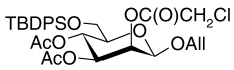
$C_{25}H_{34}O_6Si$

Allyl 6-*O*-*tert*-butyldiphenylsilyl-β-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*

$[\alpha]_D^{20} = -18.8$ (*c* 0.43 $CHCl_3$)
Source of chirality: D-(+)-mannose



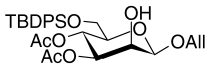
$C_{31}H_{39}ClO_9Si$

Allyl 3,4-di-*O*-acetyl-6-*O*-*tert*-butyldiphenylsilyl-2-*O*-chloroacetyl-β-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*

$[\alpha]_D^{20} = -20.6$ (*c* 0.5, $CHCl_3$)
Source of chirality: D-(+)-mannose



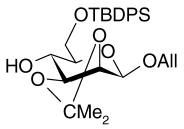
$C_{29}H_{38}O_8Si$

Allyl 3,4-di-*O*-acetyl-6-*O*-*tert*-butyldiphenylsilyl-β-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*

$[\alpha]_D^{20} = -54.1$ (*c* 0.3, $CHCl_3$)
Source of chirality: D-(+)-mannose



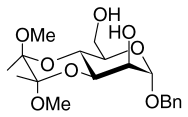
$C_{28}H_{38}O_6Si$

Allyl 6-*O*-*tert*-butyldiphenylsilyl-2,3-*O*-isopropylidene-β-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*

$[\alpha]_D^{20} = +202.8$ (c 0.5, $CHCl_3$)
Source of chirality: D-(+)-mannose



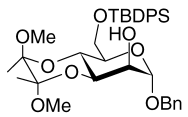
$C_{19}H_{28}O_8$

(2′*S*,3′*S*)-Benzyl 3,4-*O*-(2′,3′-dimethoxybutane-2′,3′-diyl)-α-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*

$[\alpha]_D^{20} = +124.7$ (c 0.7, $CHCl_3$)
Source of chirality: D-(+)-mannose



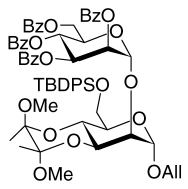
$C_{35}H_{46}O_8Si$

(2′*S*,3′*S*)-Benzyl 3,4-*O*-(2′,3′-dimethoxybutane-2′,3′-diyl)-6-*O*-*tert*-butyldiphenylsilyl-α-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*

$[\alpha]_D^{20} = +7.0$ (c 0.4, $CHCl_3$)
Source of chirality: D-(+)-mannose



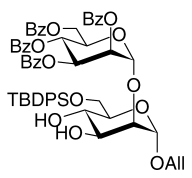
$C_{65}H_{70}O_{17}Si$

Allyl 2,3,4,6-tetra-*O*-benzoyl-α-D-mannopyranosyl-(1→2)-6-*O*-*tert*-butyldiphenylsilyl-3,4-*O*-(2′,3′-dimethoxybutane-2′,3′-diyl)-α-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*

$[\alpha]_D^{20} = -19.6$ (c 0.3, $CHCl_3$)
Source of chirality: D-(+)-mannose

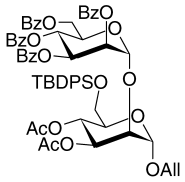


$C_{59}H_{60}O_{15}Si$

Allyl 2,3,4,6-tetra-*O*-benzoyl-α-D-mannopyranosyl-(1→2)-6-*O*-*tert*-butyldiphenylsilyl-α-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*



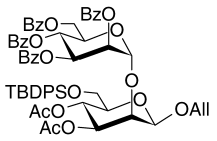
$[\alpha]_D^{20} = -23.2$ (c 0.5, chloroform)
Source of chirality: D-(+)-mannose

$C_{63}H_{64}O_{17}Si$

Allyl 2,3,4,6-tetra-*O*-benzoyl-α-D-mannopyranosyl-(1→2)-3,4-di-*O*-acetyl-6-*O*-*tert*-butyldiphenylsilyl-α-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*



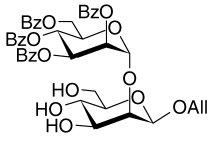
$[\alpha]_D^{20} = -37.0$ (c 0.5, $CHCl_3$)
Source of chirality: D-(+)-mannose

$C_{63}H_{64}O_{17}Si$

Allyl 2,3,4,6-tetra-*O*-benzoyl-α-D-mannopyranosyl-(1→2)-3,4-di-*O*-acetyl-6-*O*-*tert*-butyldiphenylsilyl-β-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*



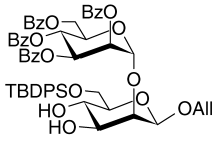
$[\alpha]_D^{20} = -46.3$ (c 0.3, $CHCl_3$)
Source of chirality: D-(+)-mannose

$C_{43}H_{42}O_{15}$

Allyl 2,3,4,6-tetra-*O*-benzoyl-α-D-mannopyranosyl-(1→2)-β-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*



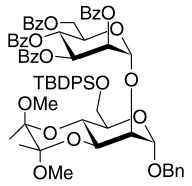
$[\alpha]_D^{20} = -30.7$ (c 0.3, $CHCl_3$)
Source of chirality: D-(+)-mannose

$C_{59}H_{60}O_{15}Si$

Allyl 2,3,4,6-tetra-*O*-benzoyl-α-D-mannopyranosyl-(1→2)-6-*O*-*tert*-butyldiphenylsilyl-β-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*



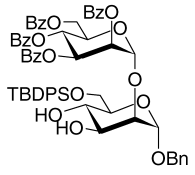
$[\alpha]_D^{20} = +14.7$ (c 0.4, $CHCl_3$)
Source of chirality: D-(+)-mannose

$C_{69}H_{72}O_{17}Si$

Benzyl 2,3,4,6-tetra-*O*-benzoyl-α-D-mannopyranosyl-(1→2)-6-*O*-*tert*-butyldiphenylsilyl-3,4-*O*-(2′,3′-dimethoxybutane-2′,3′-diyl)-α-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*



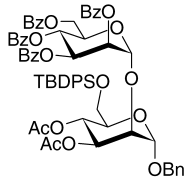
$[\alpha]_D^{20} = -9.4$ (c 0.3, $CHCl_3$)
Source of chirality: D-(+)-mannose

$C_{63}H_{62}O_{15}Si$

Benzyl 2,3,4,6-tetra-*O*-benzoyl-α-D-mannopyranosyl-(1→2)-6-*O*-*tert*-butyldiphenylsilyl-α-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*



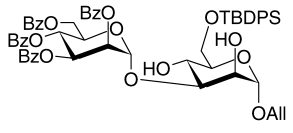
$[\alpha]_D^{20} = -5.2$ (c 0.4, chloroform)
Source of chirality: D-(+)-mannose

$C_{67}H_{66}O_{17}Si$

Benzyl 2,3,4,6-tetra-*O*-benzoyl-α-D-mannopyranosyl-(1→2)-3,4-di-*O*-acetyl-6-*O*-*tert*-butyldiphenylsilyl-α-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*



$[\alpha]_D^{20} = -17.7$ (c 0.6, $CHCl_3$)
Source of chirality: D-(+)-mannose

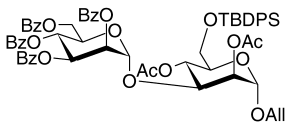
$C_{59}H_{60}O_{15}Si$

Allyl 2,3,4,6-tetra-*O*-benzoyl-α-D-mannopyranosyl-(1→3)-6-*O*-*tert*-butyldiphenylsilyl-α-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*

$[\alpha]_D^{20} = -7.4$ (*c* 2.85, $CHCl_3$)
Source of chirality: D-(+)-mannose



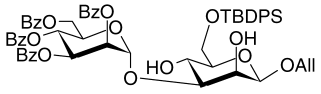
$C_{63}H_{64}O_{17}Si$

Allyl 2,3,4,6-tetra-*O*-benzoyl-α-D-mannopyranosyl-(1→3)-2,4-di-*O*-acetyl-6-*O*-*tert*-butyldiphenylsilyl-α-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*

$[\alpha]_D^{20} = -31.0$ (*c* 0.6, $CHCl_3$)
Source of chirality: D-(+)-mannose



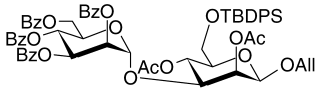
$C_{59}H_{60}O_{15}Si$

Allyl 2,3,4,6-tetra-*O*-benzoyl-α-D-mannopyranosyl-(1→3)-6-*O*-*tert*-butyldiphenylsilyl-β-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*

$[\alpha]_D^{20} = -31.9$ (*c* 1.8, $CHCl_3$)
Source of chirality: D-(+)-mannose



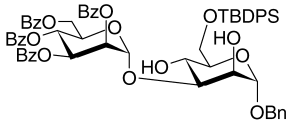
$C_{63}H_{64}O_{17}Si$

Allyl 2,3,4,6-tetra-*O*-benzoyl-α-D-mannopyranosyl-(1→3)-2,4-di-*O*-acetyl-6-*O*-*tert*-butyldiphenylsilyl-β-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*

$[\alpha]_D^{20} = -10.4$ (*c* 0.6, $CHCl_3$)
Source of chirality: D-(+)-mannose

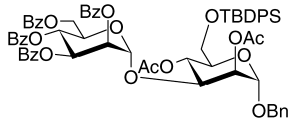


$C_{63}H_{62}O_{15}Si$

Benzyl 2,3,4,6-tetra-*O*-benzoyl-α-D-mannopyranosyl-(1→3)-6-*O*-*tert*-butyldiphenylsilyl-α-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*



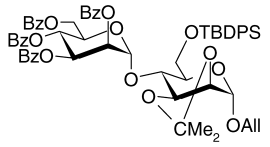
$[\alpha]_D^{20} = -3.0$ (c 0.6, $CHCl_3$)
Source of chirality: D-(+)-mannose

$C_{67}H_{66}O_{17}Si$

Benzyl 2,3,4,6-tetra-*O*-benzoyl-α-D-mannopyranosyl-(1→3)-2,4-di-*O*-acetyl-6-*O*-*tert*-butyldiphenylsilyl-α-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*



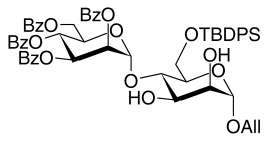
$[\alpha]_D^{20} = -3.5$ (c 0.25, $CHCl_3$)
Source of chirality: D-(+)-mannose

$C_{62}H_{64}O_{15}Si$

Allyl 2,3,4,6-tetra-*O*-benzoyl-α-D-mannopyranosyl-(1→4)-6-*O*-*tert*-butyldiphenylsilyl-2,3-*O*-isopropylidene-α-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*



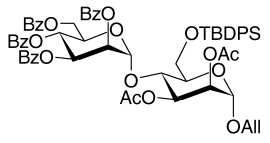
$[\alpha]_D^{20} = +10.9$ (c 0.3, $CHCl_3$)
Source of chirality: D-(+)-mannose

$C_{59}H_{60}O_{15}Si$

Allyl 2,3,4,6-tetra-*O*-benzoyl-α-D-mannopyranosyl-(1→4)-6-*O*-*tert*-butyldiphenylsilyl-α-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*



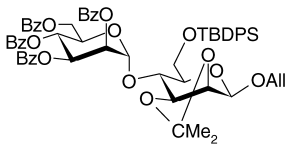
$[\alpha]_D^{20} = +8.0$ (c 0.4, chloroform)
Source of chirality: D-(+)-mannose

$C_{63}H_{64}O_{17}Si$

Allyl 2,3,4,6-tetra-*O*-benzoyl-α-D-mannopyranosyl-(1→4)-2,3-di-*O*-acetyl-6-*O*-*tert*-butyldiphenylsilyl-α-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*



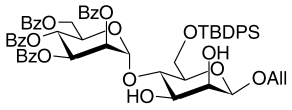
$[\alpha]_D^{20} = -30.3$ (c 0.4, $CHCl_3$)
Source of chirality: D-(+)-mannose

$C_{62}H_{64}O_{15}Si$

Allyl 2,3,4,6-tetra-*O*-benzoyl-α-D-mannopyranosyl-(1→4)-6-*O*-*tert*-butyldiphenylsilyl-2,3-*O*-isopropylidene-β-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*



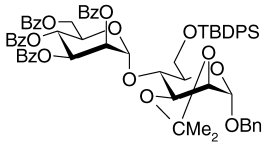
$[\alpha]_D^{20} = -29.7$ (c 0.35, $CHCl_3$)
Source of chirality: D-(+)-mannose

$C_{59}H_{60}O_{15}Si$

Allyl 2,3,4,6-tetra-*O*-benzoyl-α-D-mannopyranosyl-(1→4)-6-*O*-*tert*-butyldiphenylsilyl-β-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*



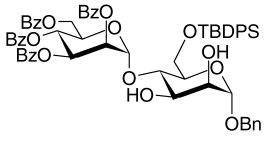
$[\alpha]_D^{20} = +11.6$ (c 0.3, $CHCl_3$)
Source of chirality: D-(+)-mannose

$C_{66}H_{66}O_{15}Si$

Benzyl 2,3,4,6-tetra-*O*-benzoyl-α-D-mannopyranosyl-(1→4)-6-*O*-*tert*-butyldiphenylsilyl-2,3-*O*-isopropylidene-α-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*



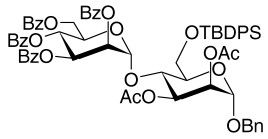
$[\alpha]_D^{20} = +19.7$ (c 0.3, $CHCl_3$)
Source of chirality: D-(+)-mannose

$C_{63}H_{62}O_{15}Si$

Benzyl 2,3,4,6-tetra-*O*-benzoyl-α-D-mannopyranosyl-(1→4)-6-*O*-*tert*-butyldiphenylsilyl-α-D-mannopyranoside

Piotr Cmoch, Zbigniew Pakulski*

Tetrahedron: Asymmetry *19 (2008) 1494*



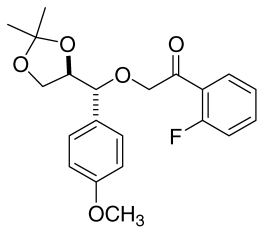
$[\alpha]_D^{20} = +16.7$ (c 0.4, chloroform)
Source of chirality: D-(+)-mannose

$C_{67}H_{66}O_{17}Si$

Benzyl 2,3,4,6-tetra-*O*-benzoyl-α-D-mannopyranosyl-(1→4)-2,3-di-*O*-acetyl-6-*O*-*tert*-butyldiphenylsilyl-α-D-mannopyranoside

Minsun Chang, Tae Hyun Kim, Hee-Doo Kim*

Tetrahedron: Asymmetry *19 (2008) 1504*



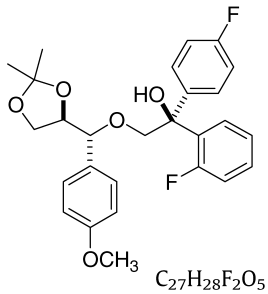
Ee = 99%
$[\alpha]_D^{24} = -68.6$ (c 0.11, $CHCl_3$)
Source of chirality: D-mannitol and stereoselective synthesis
Absolute configuration: (1′*R*,4″*R*)

$C_{21}H_{23}FO_5$

2-{[(*R*)-[(4*R*)-2,2-Dimethyl-1,3-dioxolan-4-yl](4-methoxyphenyl)methyl]oxy}-1-(2-fluorophenyl)ethan-1-one

Minsun Chang, Tae Hyun Kim, Hee-Doo Kim*

Tetrahedron: Asymmetry *19 (2008) 1504*



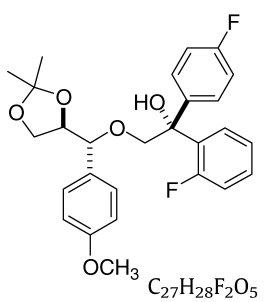
Ee = 99%
$[\alpha]_D^{23} = -32.9$ (c 0.95, $CHCl_3$)
Source of chirality: D-mannitol and stereoselective synthesis
Absolute configuration: (1*S*,1′*R*,4″*R*)

$C_{27}H_{28}F_2O_5$

2-{[(*R*)-[(4*R*)-2,2-Dimethyl-1,3-dioxolan-4-yl](4-methoxyphenyl)methyl]oxy}-(1*S*)-1-(2-fluorophenyl)-1-(4-fluorophenyl)ethanol

Minsun Chang, Tae Hyun Kim, Hee-Doo Kim*

Tetrahedron: Asymmetry *19 (2008) 1504*



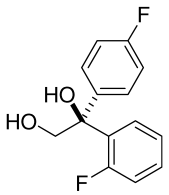
Ee = 99%
$[\alpha]_D^{23} = -28.2$ (c 0.66, $CHCl_3$)
Source of chirality: D-mannitol and stereoselective synthesis
Absolute configuration: (1*R*,1′*R*,4″*R*)

$C_{27}H_{28}F_2O_5$

2-{[(*R*)-[(4*R*)-2,2-Dimethyl-1,3-dioxolan-4-yl](4-methoxyphenyl)methyl]oxy}-(1*R*)-1-(2-fluorophenyl)-1-(4-fluorophenyl)ethanol

Minsun Chang, Tae Hyun Kim, Hee-Doo Kim*

Tetrahedron: Asymmetry *19 (2008) 1504*



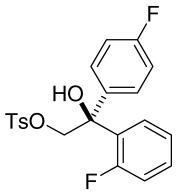
$C_{14}H_{12}F_2O_2$

(*S*)-1-(2-Fluorophenyl)-1-(4-fluorophenyl)ethane-1,2-diol

Ee = 96%
$[\alpha]_D^{22} = -25.6$ (*c* 0.8, $CHCl_3$)
Source of chirality: D-mannitol and stereoselective synthesis
Absolute configuration: (*S*)

Minsun Chang, Tae Hyun Kim, Hee-Doo Kim*

Tetrahedron: Asymmetry *19 (2008) 1504*



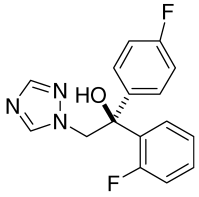
$C_{21}H_{18}F_2O_4S$

(*S*)-Toluene-4-sulfonic acid 2-(4-fluorophenyl)-2-(2-fluorophenyl)-2-hydroxy ethyl ester

Ee = 96%
$[\alpha]_D^{24} = -26.7$ (*c* 0.12, $CHCl_3$)
Source of chirality: D-mannitol and stereoselective synthesis
Absolute configuration: (*S*)

Minsun Chang, Tae Hyun Kim, Hee-Doo Kim*

Tetrahedron: Asymmetry *19 (2008) 1504*



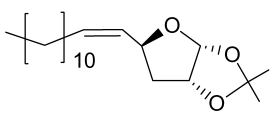
$C_{16}H_{13}F_2N_3O$

(*S*)-(+)-Flutriafol

Ee = 96%
$[\alpha]_D^{23} = +21.8$ (*c* 0.2, $CHCl_3$)
Source of chirality: D-mannitol and stereoselective synthesis
Absolute configuration: (*S*)

Vangaru Suresh, Jondoss Jon Paul Selvam, Karuturi Rajesh, Yenamandra Venkateswarlu*

Tetrahedron: Asymmetry *19 (2008) 1509*



$C_{20}H_{36}O_3$

(3a*R*,5*S*,6a*R*)-2,2-Dimethyl-5-[(*Z*)-1-tridecenyl] perhydrofuro[2,3-*d*][1,3]dioxole

$[\alpha]_D = -10.5$ (*c* 0.92, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (3a*R*,5*S*,6a*R*)

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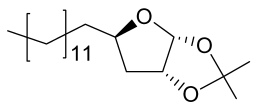

$C_{20}H_{38}O_3$

(3a*R*,5*R*,6a*R*)-2,2-Dimethyl-5-tridecyl perhydrofuro[2,3-*d*][1,3]dioxole

$[\alpha]_D = -12.3$ (*c* 1.7, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (3a*R*,5*R*,6a*R*)

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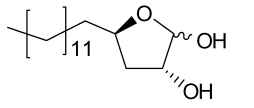

$C_{17}H_{34}O_3$

(3*R*,5*R*)-5-Tridecyltetrahydro-2,3-furandiol

$[\alpha]_D = +5.1$ (*c* 0.5, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (3*R*,5*R*)

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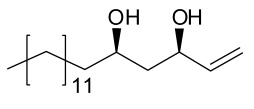

$C_{18}H_{36}O_2$

(3*R*,5*R*)-1-Octadecene-3,5-diol

$[\alpha]_D = +3.2$ (*c* 0.87, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (3*R*,5*R*)

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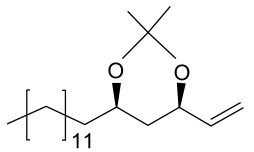

$C_{21}H_{40}O_3$

(4*R*,6*R*)-2,2-Dimethyl-4-tridecyl-6-vinyl-1,3-dioxane

$[\alpha]_D = +1.25$ (*c* 0.68, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (4*R*,6*R*)

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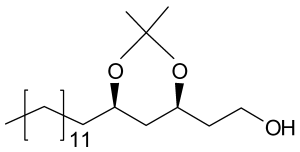

$C_{21}H_{42}O_3$

2-[(4*S*,6*R*)-2,2-Dimethyl-6-tridecyl-1,3-dioxane-4yl]-1-ethanol

$[\alpha]_D = +25$ (*c* 0.68, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (4*S*,6*R*)

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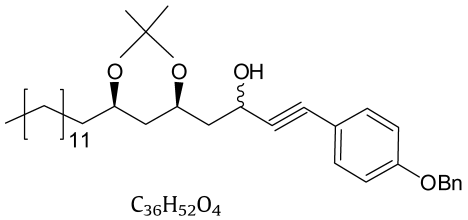

$C_{36}H_{52}O_4$

4-[4-(Benzyloxy)phenyl]-1-[(4*S*,6*R*)-2,2-dimethyl-6-tridecyl-1,3-dioxane-4-yl]-3-butyn-2-ol

$[\alpha]_D = -28$ (*c* 0.68, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (4*S*,6*R*)

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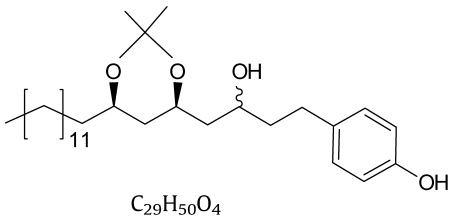

$C_{29}H_{50}O_4$

4-{(3*S*)-4-[(4*S*,6*R*)-2,2-Dimethyl-6-tridecyl1,3-dioxan-4-yl]-3-hydroxybutyl}phenol

$[\alpha]_D = -25$ (*c* 0.68, $CHCl_3$)
Source of chirality: D-glucose, chiral alkynylation
Absolute configuration: (3*S*,4*S*,6*R*)

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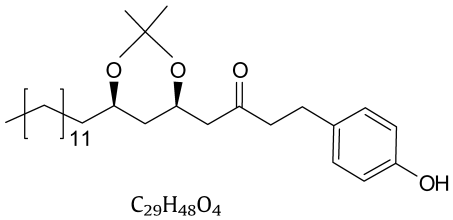

$C_{29}H_{48}O_4$

1-[(4*R*,6*R*)-2,2-Dimethyl-6-tridecyl-1,3-dioxane-4-yl]-4-(4-hydroxyphenyl)-2-butanonel

$[\alpha]_D = -3.9$ (*c* 0.55, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (4*R*,6*R*)

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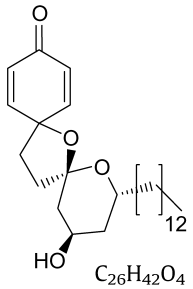

$C_{26}H_{42}O_4$

Aculeatin A

$[\alpha]_D = -5.2$ (*c* 0.73, $CHCl_3$)
Source of chirality: D-glucose, spirocyclization
Absolute configuration: (2*R*,4*R*,6*R*)

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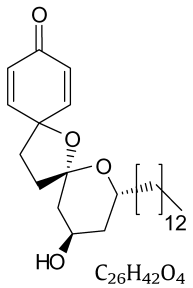
Tetrahedron: Asymmetry *19 (2008) 1509*



$C_{26}H_{42}O_4$

Aculeatin B

$[\alpha]_D = +54$ (*c* 0.2, $CHCl_3$)
Source of chirality: D-glucose, spirocyclization
Absolute configuration: (2*R*,4*R*,6*S*)