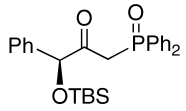
Haydée Rojas-Cabrera, Julio M. Hernández-Pérez, Minhhuy Hô, Eugenio Hernández-Fernández and Mario Ordóñez*

Tetrahedron: Asymmetry *19 (2008) 161*



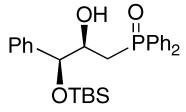
$C_{27}H_{33}O_3PSi$

(*S*)-1-[(*tert*-Butyldimethylsilyl)oxy]-3-(diphenylphosphinoyl)-1-phenylpropan-2-one

Ee > 98%
$[\alpha]_D = +20.9$ (*c* 2.5, $CHCl_3$)
Source of chirality: (*S*)-mandelic acid
Absolute configuration: (*S*)

Haydée Rojas-Cabrera, Julio M. Hernández-Pérez, Minhhuy Hô, Eugenio Hernández-Fernández and Mario Ordóñez*

Tetrahedron: Asymmetry *19 (2008) 161*



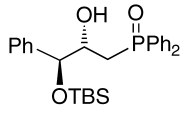
$C_{27}H_{35}O_3PSi$

(1*S*,2*R*)-1-[(*tert*-Butyldimethylsilyl)oxy]-3-(diphenylphosphinoyl)-1-phenylpropan-2-ol

Ee > 97%
$[\alpha]_D = +33.4$ (*c* 2.5, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*S*,2*R*)

Haydée Rojas-Cabrera, Julio M. Hernández-Pérez, Minhhuy Hô, Eugenio Hernández-Fernández and Mario Ordóñez*

Tetrahedron: Asymmetry *19 (2008) 161*



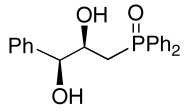
$C_{27}H_{35}O_3PSi$

(1*S*,2*S*)-1-[(*tert*-Butyldimethylsilyl)oxy]-3-(diphenylphosphinoyl)-1-phenylpropan-2-ol

De > 97%
$[\alpha]_D = +49.7$ (*c* 4.0, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*S*,2*S*)

Haydée Rojas-Cabrera, Julio M. Hernández-Pérez, Minhhuy Hô, Eugenio Hernández-Fernández and Mario Ordóñez*

Tetrahedron: Asymmetry *19 (2008) 161*



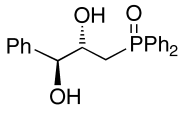
$C_{21}H_{21}O_3P$

(1*S*,2*R*)-3-(Diphenylphosphinoyl)-1-phenylpropane-1,2-diol

De > 97%
$[\alpha]_D = -1.8$ (*c* 0.7, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*S*,2*R*)

Haydée Rojas-Cabrera, Julio M. Hernández-Pérez, Minhhuy Hô, Eugenio Hernández-Fernández and Mario Ordóñez*

Tetrahedron: Asymmetry *19 (2008) 161*



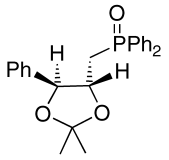
De > 97%
$[\alpha]_D = +45.7$ (*c* 2.4, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*S*,2*S*)

$C_{21}H_{21}O_3P$

(1*S*,2*S*)-3-(Diphenylphosphinoyl)-1-phenylpropane-1,2-diol

Haydée Rojas-Cabrera, Julio M. Hernández-Pérez, Minhhuy Hô, Eugenio Hernández-Fernández and Mario Ordóñez*

Tetrahedron: Asymmetry *19 (2008) 161*



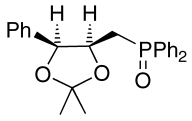
De > 98%
$[\alpha]_D = +5.5$ (*c* 1.5, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (4*S*,5*R*)

$C_{24}H_{25}O_3P$

(4*S*,5*R*)-2,2-Dimethyl-4-phenyl-5-(diphenylphosphinoyl methyl)-1,3-dioxolane

Haydée Rojas-Cabrera, Julio M. Hernández-Pérez, Minhhuy Hô, Eugenio Hernández-Fernández and Mario Ordóñez*

Tetrahedron: Asymmetry *19 (2008) 161*



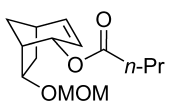
De > 98%
$[\alpha]_D = +66.6$ (*c* 1.5, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (4*S*,5*S*)

$C_{24}H_{25}O_3P$

(4*S*,5*S*)-2,2-Dimethyl-4-phenyl-5-(diphenylphosphinoyl methyl)-1,3-dioxolane

Shinichiro Ito, Ayako Tosaka, Keisuke Hanada, Masatoshi Shibuya, Kunio Ogasawara and Yoshiharu Iwabuchi*

Tetrahedron: Asymmetry *19 (2008) 176*



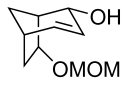
Ee = 99%
$[\alpha]_D^{27} = +57.8$ (*c* 1.00, $CHCl_3$)
Source of chirality: chiral resolution
Absolute configuration: (1*S*,2*S*,5*R*,7*R*)

$C_{14}H_{22}O_4$

(1*S*,2*S*,5*R*,7*R*)-Butyric acid 7-methoxymethoxybicyclo[3.2.1]oct-3-en-2-yl ester

Shinichiro Ito, Ayako Tosaka, Keisuke Hanada, Masatoshi Shibuya, Kunio Ogasawara and Yoshiharu Iwabuchi*

Tetrahedron: Asymmetry *19 (2008) 176*



Ee = 99%
$[\alpha]_D^{29} = +78.1$ (*c* 0.15, $CHCl_3$)
Source of chirality: chiral resolution
Absolute configuration: (1*S*,2*R*,5*S*,7*S*)

$C_{10}H_{16}O_3$
(1*S*,2*R*,5*S*,7*S*)-7-Methoxymethoxybicyclo[3.2.1]oct-3-en-2-ol

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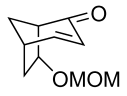
Shinichiro Ito, Ayako Tosaka, Keisuke Hanada, Masatoshi Shibuya, Kunio Ogasawara and Yoshiharu Iwabuchi*

Tetrahedron: Asymmetry *19 (2008) 176*



Ee = 99%
$[\alpha]_D^{30} = +212.7$ (*c* 0.24, $CHCl_3$)
Source of chirality: chiral resolution
Absolute configuration: (1*R*,5*S*,7*S*)

$C_{10}H_{14}O_3$
(1*R*,5*S*,7*S*)-7-Methoxymethoxybicyclo[3.2.1]oct-3-en-2-one

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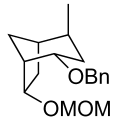
Shinichiro Ito, Ayako Tosaka, Keisuke Hanada, Masatoshi Shibuya, Kunio Ogasawara and Yoshiharu Iwabuchi*

Tetrahedron: Asymmetry *19 (2008) 176*



Ee = 99%
$[\alpha]_D^{23} = -87.6$ (*c* 0.5, $CHCl_3$)
Source of chirality: chiral resolution
Absolute configuration: (1*R*,2*S*,4*S*,5*R*,6*R*)

$C_{18}H_{26}O_3$
(1*R*,2*S*,4*S*,5*R*,6*R*)-4-Benzyloxy-6-methoxymethoxy-2-methylbicyclo[3.2.1]octane

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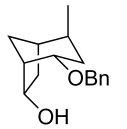
Shinichiro Ito, Ayako Tosaka, Keisuke Hanada, Masatoshi Shibuya, Kunio Ogasawara and Yoshiharu Iwabuchi*

Tetrahedron: Asymmetry *19 (2008) 176*

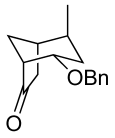


Ee = 99%
$[\alpha]_D^{27} = +24.7$ (*c* 1.2, $CHCl_3$)
Source of chirality: chiral resolution
Absolute configuration: (1*R*,2*S*,4*S*,5*S*,6*R*)

$C_{16}H_{22}O_2$
(1*R*,2*S*,4*S*,5*S*,6*R*)-4-Benzyloxy-2-methylbicyclo[3.2.1]octan-6-ol

Shinichiro Ito, Ayako Tosaka, Keisuke Hanada, Masatoshi Shibuya, Kunio Ogasawara and Yoshiharu Iwabuchi*

Tetrahedron: Asymmetry *19 (2008) 176*



Ee = 99%
$[\alpha]_D^{23} = +140.1$ (*c* 2.0, $CHCl_3$)
Source of chirality: chiral resolution
Absolute configuration: (1*R*,2*S*,4*S*,5*R*)

$C_{16}H_{20}O_2$
(1*R*,2*S*,4*S*,5*R*)-4-Benzyloxy-2-methylbicyclo[3.2.1]octan-6-one

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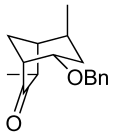
Shinichiro Ito, Ayako Tosaka, Keisuke Hanada, Masatoshi Shibuya, Kunio Ogasawara and Yoshiharu Iwabuchi*

Tetrahedron: Asymmetry *19 (2008) 176*



Ee = 99%
$[\alpha]_D^{23} = +121.9$ (*c* 0.7, $CHCl_3$)
Source of chirality: chiral resolution
Absolute configuration: (1*S*,2*S*,4*S*,5*R*,7*S*)

$C_{17}H_{22}O_2$
(1*S*,2*S*,4*S*,5*R*,7*S*)-4-Benzyloxy-2,7-dimethylbicyclo[3.2.1]octan-6-one

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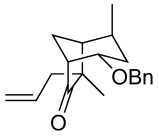
Shinichiro Ito, Ayako Tosaka, Keisuke Hanada, Masatoshi Shibuya, Kunio Ogasawara and Yoshiharu Iwabuchi*

Tetrahedron: Asymmetry *19 (2008) 176*



Ee = 99%
$[\alpha]_D^{26} = +74.5$ (*c* 0.7, $CHCl_3$)
Source of chirality: chiral resolution
Absolute configuration: (1*R*,2*S*,4*S*,5*R*,7*S*)

$C_{20}H_{26}O_2$
(1*S*,2*S*,4*S*,5*R*,7*S*)-7-Allyl-4-benzyloxy-2,7-dimethylbicyclo[3.2.1]octan-6-one

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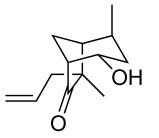
Shinichiro Ito, Ayako Tosaka, Keisuke Hanada, Masatoshi Shibuya, Kunio Ogasawara and Yoshiharu Iwabuchi*

Tetrahedron: Asymmetry *19 (2008) 176*

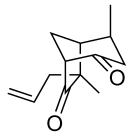


Ee = 99%
$[\alpha]_D^{31} = -32.2$ (*c* 0.4, $CHCl_3$)
Source of chirality: chiral resolution
Absolute configuration: (1*R*,2*S*,4*S*,5*R*,7*S*)

$C_{13}H_{20}O_2$
(1*R*,2*S*,4*S*,5*R*,7*S*)-7-Allyl-4-hydroxy-2,7-dimethylbicyclo[3.2.1]octan-6-one

Shinichiro Ito, Ayako Tosaka, Keisuke Hanada, Masatoshi Shibuya, Kunio Ogasawara and Yoshiharu Iwabuchi*

Tetrahedron: Asymmetry *19 (2008) 176*

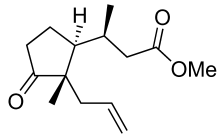


Ee = 99%
$[\alpha]_D^{31} = -201.5$ (*c* 0.8, $CHCl_3$)
Source of chirality: chiral resolution
Absolute configuration: (1*R*,4*S*,5*S*,6*S*)

$C_{13}H_{18}O_2$
(1*R*,4*S*,5*S*,6*S*)-6-Allyl-4,6-dimethylbicyclo[3.2.1]octane-2,7-dione

Shinichiro Ito, Ayako Tosaka, Keisuke Hanada, Masatoshi Shibuya, Kunio Ogasawara and Yoshiharu Iwabuchi*

Tetrahedron: Asymmetry *19 (2008) 176*

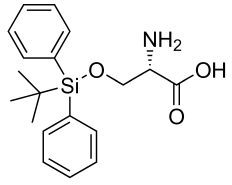


Ee = 99%
$[\alpha]_D^{31} = -101.5$ (*c* 1.3, $CHCl_3$)
Source of chirality: chiral resolution
Absolute configuration: (*S*,1*R*,2*S*)

$C_{14}H_{22}O_3$
(*S*)-Methyl 3-{(1*S*,2*S*)-2-Allyl-2-methyl-3-oxocyclopentyl}butanoate

Yong-Chua Teo,* Jun-Jie Lau and Man-Chao Wu

Tetrahedron: Asymmetry *19 (2008) 186*

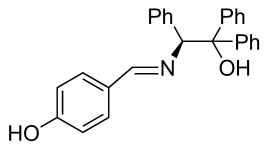


$[\alpha]_D^{23} = +2.6$ (*c* 1.94, MeOH)
Source of chirality: *Z*-Serine-OH
Absolute configuration: (*S*)

$C_{19}H_{25}NO_3Si$
(2*S*)-2-Benzyloxycarbonylamino-3-(*tert*-butyl-diphenyl-silanyloxy)-propionic acid

Chao Chen, Liang Hong, Bangzhi Zhang and Rui Wang*

Tetrahedron: Asymmetry *19 (2008) 191*

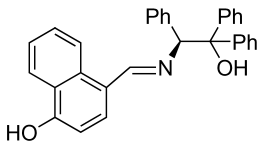


$[\alpha]_D^{18} = -241$ (*c* 4.3, THF)
Source of chirality: L-phenylglycine
Absolute configuration: (*S*)

$C_{27}H_{23}NO_2$
4-((*E*)-((*S*)-2-Hydroxy-1,2,2-triphenylethylimino)methyl)phenol

Chao Chen, Liang Hong, Bangzhi Zhang and Rui Wang*

Tetrahedron: Asymmetry *19 (2008) 191*

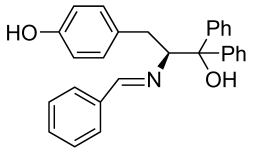


$[\alpha]_D^{18} = -223$ (*c* 0.29, DMF)
Source of chirality: L-phenylglycine
Absolute configuration: (*S*)

$C_{31}H_{25}NO_2$
4-((*E*)-((*S*)-2-Hydroxy-1,2,2-triphenylethylimino)methyl)naphthalen-1-ol

Chao Chen, Liang Hong, Bangzhi Zhang and Rui Wang*

Tetrahedron: Asymmetry *19 (2008) 191*

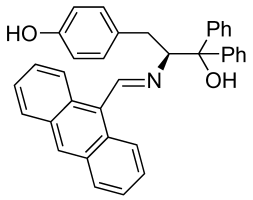


$[\alpha]_D^{18} = -196$ (*c* 6.5, THF)
Source of chirality: L-tyrosine
Absolute configuration: (*S*)

$C_{28}H_{25}NO_2$
4-((*S*,*E*)-2-(Benzylideneamino)-3-hydroxy-3,3-diphenylpropyl)phenol

Chao Chen, Liang Hong, Bangzhi Zhang and Rui Wang*

Tetrahedron: Asymmetry *19 (2008) 191*

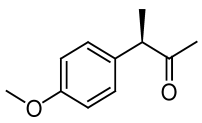


$[\alpha]_D^{20} = +97$ (*c* 0.52, $CHCl_3$)
Source of chirality: L-tyrosine
Absolute configuration: (*S*)

$C_{36}H_{29}NO_2$
4-((*S*,*E*)-2-((Anthracen-10-yl)methyleneamino)-3-hydroxy-3,3-diphenylpropyl)phenol

Cristina Rodríguez, Gonzalo de Gonzalo, Daniel E. Torres Pazmiño, Marco W. Fraaije and Vicente Gotor*

Tetrahedron: Asymmetry *19 (2008) 197*

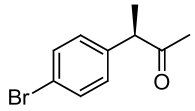


Ee = 44% (GC, Cydex B)
$[\alpha]_D^{25} = -22.7$ (*c* 1.12, $CHCl_3$)
Source of chirality: enzymatic oxidation
Absolute configuration: (*R*)

$C_{11}H_{14}O_2$
(*R*)-3-(4-Methoxyphenyl)butan-2-one

Cristina Rodríguez, Gonzalo de Gonzalo, Daniel E. Torres Pazmiño, Marco W. Fraaije and Vicente Gotor*

Tetrahedron: Asymmetry *19 (2008) 197*



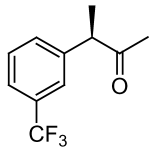
$C_{10}H_{11}BrO$

(*R*)-3-(4-Bromophenyl)butan-2-one

Ee = 24% (GC, RtβDEXse)
$[\alpha]_D^{25} = -17.1$ (*c* 1.50, $CHCl_3$)
Source of chirality: enzymatic oxidation
Absolute configuration: (*R*)

Cristina Rodríguez, Gonzalo de Gonzalo, Daniel E. Torres Pazmiño, Marco W. Fraaije and Vicente Gotor*

Tetrahedron: Asymmetry *19 (2008) 197*



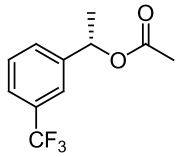
$C_{11}H_{11}F_3O$

(*R*)-3-(3-Trifluoromethylphenyl)butan-2-one

Ee = 60% (GC, RtβDEXse)
$[\alpha]_D^{25} = -38.7$ (*c* 1.15, $CHCl_3$)
Source of chirality: enzymatic oxidation
Absolute configuration: (*R*)

Cristina Rodríguez, Gonzalo de Gonzalo, Daniel E. Torres Pazmiño, Marco W. Fraaije and Vicente Gotor*

Tetrahedron: Asymmetry *19 (2008) 197*



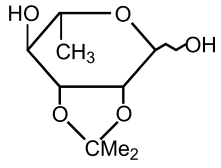
$C_{11}H_{11}F_3O_2$

(*S*)-1-(3-Trifluoromethylphenyl)ethyl acetate

Ee = 69% (GC, RtβDEXse)
$[\alpha]_D^{25} = +78.7$ (*c* 0.95, $CHCl_3$)
Source of chirality: enzymatic oxidation
Absolute configuration: (*S*)

Zuzana Hricovíniová

Tetrahedron: Asymmetry *19 (2008) 204*



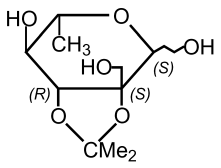
$C_9H_{16}O_5$

6-Deoxy-2,3-*O*-isopropylidene-L-*manno*-pyranose

Ee = 100%
$[\alpha]_D = -11.0$ (*c* 1.0, acetone)
Source of chirality: 6-deoxy-L-mannose (L-rhamnose)
Absolute configuration: (2*S*,3*S*,4*S*,5*S*)

Zuzana Hricovíniová

Tetrahedron: Asymmetry *19 (2008) 204*



$C_{10}H_{18}O_6$

6-Deoxy-2,3-*O*-isopropylidene-2-*C*-(hydroxymethyl)-L-*manno*-pyranose

Ee = 100%

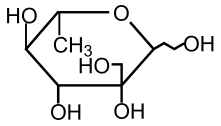
$[\alpha]_D = -18.0$ (*c* 1.0, acetone)

Source of chirality: 6-deoxy-L-mannose (L-rhamnose)

Absolute configuration: (2*S*,3*S*,4*S*,5*S*)

Zuzana Hricovíniová

Tetrahedron: Asymmetry *19 (2008) 204*



$C_7H_{14}O_6$

6-Deoxy-2-*C*-(hydroxymethyl)-L-mannose

Ee = 100%

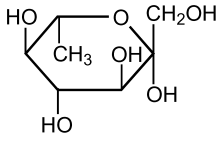
$[\alpha]_D = -12.0$ (*c* 1.0, H_2O)

Source of chirality: 6-deoxy-L-mannose (L-rhamnose)

Absolute configuration: (2*S*,3*S*,4*R*,5*S*)

Zuzana Hricovíniová

Tetrahedron: Asymmetry *19 (2008) 204*



$C_7H_{14}O_6$

7-Deoxy-L-*gluco*-heptulose

Ee = 100%

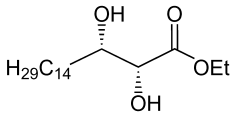
$[\alpha]_D = -40.0$ to -38.0 (*c* 1, H_2O)

Source of chirality: 6-deoxy-L-mannose (L-rhamnose)

Absolute configuration: (1*R*,2*R*,3*S*,4*R*,5*S*)

K. Venkatesan and K. V. Srinivasan*

Tetrahedron: Asymmetry *19 (2008) 209*



$C_{19}H_{38}O_4$

(2*R*,3*S*)-2,3-Dihydroxyheptadecanoic acid ethyl ester

Ee 97%

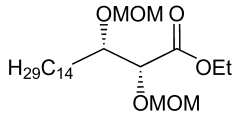
$[\alpha]_D^{25} = -7.1$ (*c* 0.8, $CHCl_3$)

Source of chirality: Sharpless asymmetric dihydroxylation

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

K. Venkatesan and K. V. Srinivasan*

Tetrahedron: Asymmetry *19 (2008) 209*



$C_{23}H_{46}O_6$

(2*R*,3*S*)-2,3-Bis(methoxymethoxy)heptadecanoic acid ethyl ester

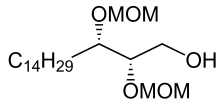
$[\alpha]_D^{25} = +43.6$ (*c* 1.0, $CHCl_3$)

Source of chirality: Sharpless asymmetric dihydroxylation

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

K. Venkatesan and K. V. Srinivasan*

Tetrahedron: Asymmetry *19 (2008) 209*



$C_{21}H_{44}O_5$

(2*S*,3*S*)-2,3-Bis(methoxymethoxy)heptadecan-1-ol

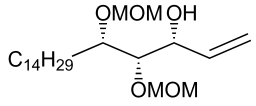
$[\alpha]_D^{25} = -10.5$ (*c* 1.0, $CHCl_3$)

Source of chirality: Sharpless asymmetric dihydroxylation

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

K. Venkatesan and K. V. Srinivasan*

Tetrahedron: Asymmetry *19 (2008) 209*



$C_{23}H_{46}O_5$

(3*R*,4*S*,5*S*)-4,5-Bis(methoxymethoxy)-nonadec-1-en-3-ol

De >95%

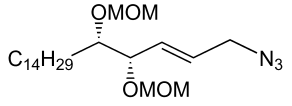
$[\alpha]_D^{25} = +1.85$ (*c* 0.56, $CHCl_3$)

Source of chirality: Sharpless asymmetric dihydroxylation, Chelation controlled Grignard reaction

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

K. Venkatesan and K. V. Srinivasan*

Tetrahedron: Asymmetry *19 (2008) 209*



$C_{23}H_{45}N_3O_4$

trans-(4*S*,5*S*)-1-Azido-4,5-bis(methoxymethoxy)-nonadec-2-ene

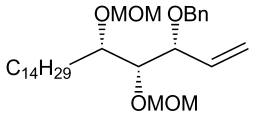
$[\alpha]_D^{25} = +8.25$ (*c* 0.15, $CHCl_3$)

Source of chirality: Sharpless asymmetric dihydroxylation

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

K. Venkatesan and K. V. Srinivasan*

Tetrahedron: Asymmetry *19 (2008) 209*



$C_{30}H_{52}O_5$

1-(((3*R*,4*R*,5*S*)-4,5-Bis(methoxymethoxy)-nonadec-1-en-3-yloxy)methyl)benzene

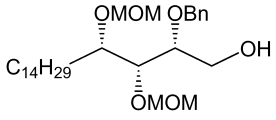
$[\alpha]_D^{25} = -2.1$ (*c* 0.80, $CHCl_3$)

Source of chirality: Sharpless asymmetric dihydroxylation, Chelation controlled Grignard reaction

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

K. Venkatesan and K. V. Srinivasan*

Tetrahedron: Asymmetry *19 (2008) 209*



$C_{29}H_{52}O_6$

(2*R*,3*R*,4*S*)-2-(Benzyloxy)-3,4-bis(methoxymethoxy)-octadecan-1-ol

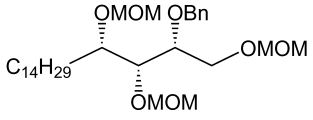
$[\alpha]_D^{25} = -15.5$ (*c* 2.0, $CHCl_3$)

Source of chirality: Sharpless asymmetric dihydroxylation, Chelation controlled Grignard reaction

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

K. Venkatesan and K. V. Srinivasan*

Tetrahedron: Asymmetry *19 (2008) 209*



$C_{31}H_{56}O_7$

1-(((2*R*,3*R*,4*S*)-1,3,4-Tris(methoxymethoxy)-octadecan-2-yloxy)methyl)benzene

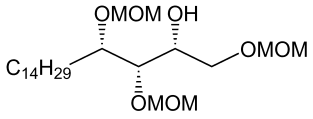
$[\alpha]_D^{25} = +5$ (*c* 0.5, $CHCl_3$)

Source of chirality: Sharpless asymmetric dihydroxylation, Chelation controlled Grignard reaction

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

K. Venkatesan and K. V. Srinivasan*

Tetrahedron: Asymmetry *19 (2008) 209*



$C_{24}H_{50}O_7$

(2*R*,3*S*,4*S*)-1,3,4-Tris(methoxymethoxy)octadecan-2-ol

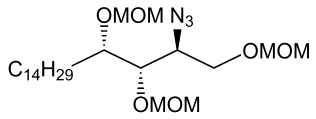
$[\alpha]_D^{25} = -2.3$ (*c* 1.6, $CHCl_3$)

Source of chirality: Sharpless asymmetric dihydroxylation, Chelation controlled Grignard reaction

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

K. Venkatesan and K. V. Srinivasan*

Tetrahedron: Asymmetry *19 (2008) 209*



$C_{24}H_{49}N_3O_6$

(2*S*,3*S*,4*S*)-2-Azido-1,3,4-tris(methoxymethoxy)octadecane

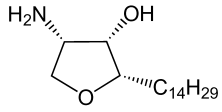
$[\alpha]_D^{25} = +7$ (*c* 0.5, $CHCl_3$)

Source of chirality: Sharpless asymmetric dihydroxylation, Chelation controlled Grignard reaction

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

K. Venkatesan and K. V. Srinivasan*

Tetrahedron: Asymmetry *19 (2008) 209*



$C_{18}H_{37}NO_2$

(2*S*,3*S*,4*S*)-4-Amino-tetrahydro-2-tetradecylfuran-3-ol (jaspine B)

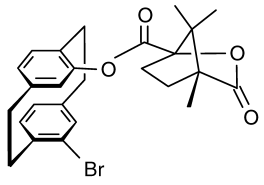
$[\alpha]_D^{25} = +17.7$ (*c* 0.40, $CHCl_3$)

Source of chirality: Sharpless asymmetric dihydroxylation, Chelation controlled Grignard reaction

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

Roman Zhuravsky, Zoya Starikova, Evgenii Vorontsov and Valeria Rozenberg*

Tetrahedron: Asymmetry *19 (2008) 216*



$C_{26}H_{27}BrO_4$

4-Bromo-12-camphanoyloxy[2.2]paracyclophane

Ee >99%

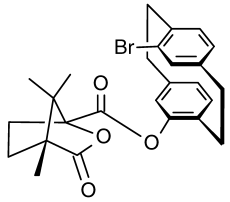
$[\alpha]_D^{20} = -54.8$ (*c* 0.75, C_6H_6)

Source of chirality: optical resolution

Absolute configuration: (R_p,*S*)

Roman Zhuravsky, Zoya Starikova, Evgenii Vorontsov and Valeria Rozenberg*

Tetrahedron: Asymmetry *19 (2008) 216*



$C_{26}H_{27}BrO_4$

4-Bromo-12-camphanoyloxy[2.2]paracyclophane

Ee >99%

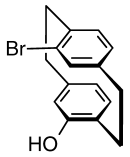
$[\alpha]_D^{20} = +19.0$ (*c* 0.97, C_6H_6)

Source of chirality: optical resolution

Absolute configuration: (S_p,*S*)

Roman Zhuravsky, Zoya Starikova, Evgenii Vorontsov and Valeria Rozenberg*

Tetrahedron: Asymmetry *19 (2008) 216*



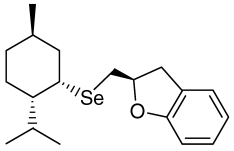
$C_{16}H_{15}BrO$

4-Bromo-12-hydroxy[2.2]paracyclophane

Ee >99%
$[\alpha]_D^{20} = +24.4$ (*c* 0.80, C_6H_6)
Source of chirality: (S_p,*S*)-4-bromo-12-camphanoyl-oxy[2.2]paracyclophane
Absolute configuration: (S_p)

Zbigniew Rafiński, Jacek Ścianowski* and Andrzej Wojtczak

Tetrahedron: Asymmetry *19 (2008) 223*



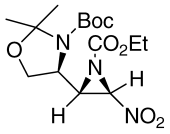
$C_{19}H_{28}OSe$

(*R*)-2-(((1*S*,2*S*,5*R*)-2-Isopropyl-5-methylcyclohexylselanyl)methyl)-2,3-dihydrobenzofuran

De >98%
$[\alpha]_D^{20} = +80.8$ (*c* 1.48, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (2*R*,1′*S*,2′*S*,5′*R*)

Stefania Fioravanti,* Fabio Marchetti,* Lucio Pellacani,* Luca Ranieri and Paolo A. Tardella*

Tetrahedron: Asymmetry *19 (2008) 231*



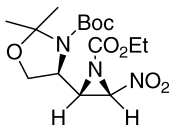
$C_{15}H_{25}N_3O_7$

tert-Butyl (4*S*)-4-[(2′*S*,3′*S*)-1′-(ethoxycarbonyl)-3′-nitroaziridin-2′-yl]-2,2-dimethyloxazolidine-3-carboxylate

De >99%
$[\alpha]_D = +2.2$ (*c* 1.0, $CHCl_3$)
Source of chirality: chemical reaction
Absolute configuration: (4*S*,2′*S*,3′*S*)

Stefania Fioravanti,* Fabio Marchetti,* Lucio Pellacani,* Luca Ranieri and Paolo A. Tardella*

Tetrahedron: Asymmetry *19 (2008) 231*



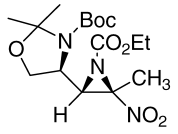
$C_{15}H_{25}N_3O_7$

tert-Butyl (4*S*)-4-[(2′*S*,3′*R*)-1′-(ethoxycarbonyl)-3′-nitroaziridin-2′-yl]-2,2-dimethyloxazolidine-3-carboxylate

De >99%
$[\alpha]_D = +1.9$ (*c* 1.0, $CHCl_3$)
Source of chirality: chemical reaction
Absolute configuration: (4*S*,2′*S*,3′*R*)

Stefania Fioravanti,* Fabio Marchetti,* Lucio Pellacani,* Luca Ranieri and Paolo A. Tardella*

Tetrahedron: Asymmetry *19 (2008) 231*



$C_{16}H_{27}N_3O_7$

De >99%

$[\alpha]_D = +1.9$ (*c* 1.0, $CHCl_3$)

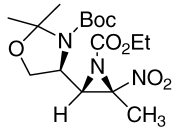
Source of chirality: chemical reaction

Absolute configuration: (4*S*,2′*S*,3′*S*)

tert-Butyl (4*S*)-4-[(2′*S*,3′*S*)-1′-(ethoxycarbonyl)-3′-methyl-3′-nitroaziridin-2′-yl]-2,2-dimethyloxazolidine-3-carboxylate

Stefania Fioravanti,* Fabio Marchetti,* Lucio Pellacani,* Luca Ranieri and Paolo A. Tardella*

Tetrahedron: Asymmetry *19 (2008) 231*



$C_{16}H_{27}N_3O_7$

De >99%

$[\alpha]_D = +2.15$ (*c* 1.0, $CHCl_3$)

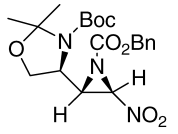
Source of chirality: chemical reaction

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

tert-Butyl (4*S*)-4-[(2′*S*,3′*R*)-1′-(ethoxycarbonyl)-3′-methyl-3′-nitroaziridin-2′-yl]-2,2-dimethyloxazolidine-3-carboxylate

Stefania Fioravanti,* Fabio Marchetti,* Lucio Pellacani,* Luca Ranieri and Paolo A. Tardella*

Tetrahedron: Asymmetry *19 (2008) 231*



$C_{20}H_{27}N_3O_7$

De >99%

$[\alpha]_D = +2.7$ (*c* 1.0, $CHCl_3$)

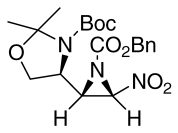
Source of chirality: chemical reaction

Absolute configuration: (4*S*,2′*S*,3′*S*)

tert-Butyl (4*S*)-4-{(2′*S*,3′*S*)-1′-[(phenylmethoxy)carbonyl]-3′-nitroaziridin-2′-yl}-2,2-dimethyloxazolidine-3-carboxylate

Stefania Fioravanti,* Fabio Marchetti,* Lucio Pellacani,* Luca Ranieri and Paolo A. Tardella*

Tetrahedron: Asymmetry *19 (2008) 231*



$C_{20}H_{27}N_3O_7$

De >99%

$[\alpha]_D = +2.0$ (*c* 1.0, $CHCl_3$)

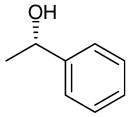
Source of chirality: chemical reaction

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

tert-Butyl (4*S*)-4-{(2′*S*,3′*R*)-1′-[(phenylmethoxy)carbonyl]-3′-nitroaziridin-2′-yl}-2,2-dimethyloxazolidine-3-carboxylate

Csaba Csajági, Gábor Szatzker, Enikő Rita Tőke, László Ürge,* Ferenc Darvas and László Poppe*

Tetrahedron: Asymmetry *19 (2008) 237*

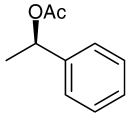


$C_8H_{10}O$
(*S*)-1-Phenylethanol

Ee = 98.5% (by CG on chiral column)
$[\alpha]_D^{22} = -62.8$ (*c* 1.0, $CHCl_3$)
Source of chirality: lipase-catalyzed kinetic resolution
Absolute configuration: (1*S*)

Csaba Csajági, Gábor Szatzker, Enikő Rita Tőke, László Ürge,* Ferenc Darvas and László Poppe*

Tetrahedron: Asymmetry *19 (2008) 237*

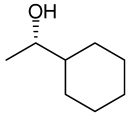


$C_{10}H_{12}O_2$
(*R*)-1-Phenylethyl acetate

Ee = 99.1% (by CG on chiral column)
$[\alpha]_D^{22} = +125.3$ (*c* 1.0, $CHCl_3$)
Source of chirality: lipase-catalyzed kinetic resolution
Absolute configuration: (1*R*)

Csaba Csajági, Gábor Szatzker, Enikő Rita Tőke, László Ürge,* Ferenc Darvas and László Poppe*

Tetrahedron: Asymmetry *19 (2008) 237*

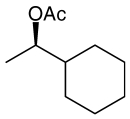


$C_8H_{16}O_2$
(*S*)-1-Cyclohexyethanol

Ee = 77.4% (by CG of on chiral column)
$[\alpha]_D^{22} = +2.0$ (*c* 1.0, $CHCl_3$)
Source of chirality: lipase-catalyzed kinetic resolution
Absolute configuration: (1*S*)

Csaba Csajági, Gábor Szatzker, Enikő Rita Tőke, László Ürge,* Ferenc Darvas and László Poppe*

Tetrahedron: Asymmetry *19 (2008) 237*

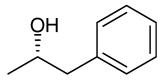


$C_{10}H_{18}O_2$
(*R*)-1-Cyclohexylethyl acetate

Ee = 99.0% (by CG on chiral column)
$[\alpha]_D^{22} = +7.1$ (*c* 1.0, $CHCl_3$)
Source of chirality: lipase-catalyzed kinetic resolution
Absolute configuration: (1*R*)

Csaba Csajági, Gábor Szatzker, Enikő Rita Tőke, László Ürge,* Ferenc Darvas and László Poppe*

Tetrahedron: Asymmetry *19 (2008) 237*



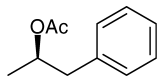
$C_9H_{12}O$

(*S*)-1-Phenylpropan-2-ol

Ee = 56.4% (by CG on chiral column)
$[\alpha]_D^{22} = +4.9$ (*c* 1.0, $CHCl_3$)
Source of chirality: lipase-catalyzed kinetic resolution
Absolute configuration: (1*S*)

Csaba Csajági, Gábor Szatzker, Enikő Rita Tőke, László Ürge,* Ferenc Darvas and László Poppe*

Tetrahedron: Asymmetry *19 (2008) 237*



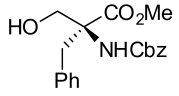
$C_{11}H_{14}O_2$

(*R*)-1-Phenylpropan-2-yl acetate

Ee = 85.1% (by CG on chiral column)
$[\alpha]_D^{22} = -23.3$ (*c* 1.0, $CHCl_3$)
Source of chirality: lipase-catalyzed kinetic resolution
Absolute configuration: (1*R*)

Marcello Di Giacomo,* Valerio Vinci, Massimo Serra and Lino Colombo*

Tetrahedron: Asymmetry *19 (2008) 247*



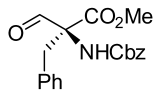
$C_{19}H_{21}NO_5$

(*S*)-Methyl 2-benzyl-2-(benzyloxycarbonylamino)-3-hydroxypropanoate

Ee >94%
$[\alpha]_D = -70.0$ (*c* 1.9, $CHCl_3$, 23 °C)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

Marcello Di Giacomo,* Valerio Vinci, Massimo Serra and Lino Colombo*

Tetrahedron: Asymmetry *19 (2008) 247*



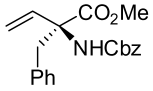
$C_{19}H_{19}NO_5$

(*S*)-Methyl 2-benzyl-2-(benzyloxycarbonylamino)-3-oxopropanoate

Ee >94%
$[\alpha]_D = -16.1$ (*c* 0.9, $CDCl_3$, 23 °C)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

Marcello Di Giacomo,* Valerio Vinci, Massimo Serra and Lino Colombo*

Tetrahedron: Asymmetry *19 (2008) 247*



$C_{20}H_{21}NO_4$

(*S*)-Methyl 2-benzyl-2-(benzyloxycarbonylamino)but-3-enoate

Ee >94%

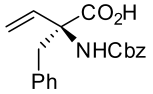
$[\alpha]_D = -37.6$ (*c* 1.1, $CDCl_3$, 23 °C)

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)

Marcello Di Giacomo,* Valerio Vinci, Massimo Serra and Lino Colombo*

Tetrahedron: Asymmetry *19 (2008) 247*



$C_{19}H_{19}NO_4$

(*S*)-2-Benzyl-2-(benzyloxycarbonylamino)but-3-enoic acid

Ee = 94%

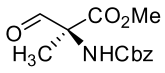
$[\alpha]_D = -30.9$ (*c* 1.0, $CDCl_3$, 23 °C)

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)

Marcello Di Giacomo,* Valerio Vinci, Massimo Serra and Lino Colombo*

Tetrahedron: Asymmetry *19 (2008) 247*



$C_{13}H_{15}NO_5$

(*S*)-Methyl 2-(benzyloxycarbonylamino)-2-methyl-3-oxopropanoate

Ee >94%

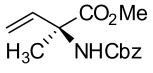
$[\alpha]_D = -19.2$ (*c* 1.0, $CDCl_3$, 23 °C)

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)

Marcello Di Giacomo,* Valerio Vinci, Massimo Serra and Lino Colombo*

Tetrahedron: Asymmetry *19 (2008) 247*



$C_{14}H_{17}NO_4$

(*S*)-Methyl 2-(benzyloxycarbonylamino)-2-methylbut-3-enoate

Ee >94%

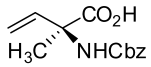
$[\alpha]_D = +3.5$ (*c* 1.7, $CDCl_3$, 23 °C)

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)

Marcello Di Giacomo,* Valerio Vinci, Massimo Serra and Lino Colombo*

Tetrahedron: Asymmetry *19 (2008) 247*



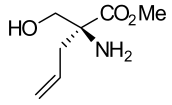
$C_{13}H_{15}NO_4$

(*S*)-2-(Benzyloxycarbonylamino)-2-methylbut-3-enoic acid

Ee = 94%
$[\alpha]_D = +7.2$ (*c* 1.0, $CDCl_3$, 23 °C)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

Marcello Di Giacomo,* Valerio Vinci, Massimo Serra and Lino Colombo*

Tetrahedron: Asymmetry *19 (2008) 247*



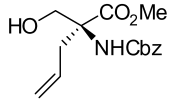
$C_7H_{13}NO_3$

(*S*)-Methyl 2-amino-2-(hydroxymethyl)pent-4-enoate

Ee >94%
$[\alpha]_D = +2.3$ (*c* 1.7, $CHCl_3$, 23 °C)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

Marcello Di Giacomo,* Valerio Vinci, Massimo Serra and Lino Colombo*

Tetrahedron: Asymmetry *19 (2008) 247*



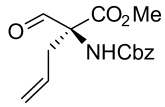
$C_{15}H_{19}NO_5$

(*S*)-Methyl 2-(benzyloxycarbonylamino)-2-(hydroxymethyl)pent-4-enoate

Ee >94%
$[\alpha]_D = -2.1$ (*c* 0.5, $CHCl_3$, 23 °C)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

Marcello Di Giacomo,* Valerio Vinci, Massimo Serra and Lino Colombo*

Tetrahedron: Asymmetry *19 (2008) 247*



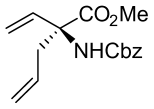
$C_{15}H_{17}NO_5$

(*S*)-Methyl 2-(benzyloxycarbonylamino)-2-formylpent-4-enoate

Ee >94%
$[\alpha]_D = -17.8$ (*c* 0.5, $CHCl_3$, 23 °C)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

Marcello Di Giacomo,* Valerio Vinci, Massimo Serra and Lino Colombo*

Tetrahedron: Asymmetry *19 (2008) 247*



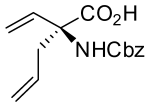
$C_{16}H_{19}NO_4$

(*S*)-Methyl 2-(benzyloxycarbonylamino)-2-vinylpent-4-enoate

Ee >94%
$[\alpha]_D = -17.6$ (*c* 0.8, $CHCl_3$, 23 °C)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

Marcello Di Giacomo,* Valerio Vinci, Massimo Serra and Lino Colombo*

Tetrahedron: Asymmetry *19 (2008) 247*



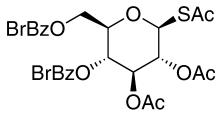
$C_{15}H_{17}NO_4$

(*S*)-2-(Benzyloxycarbonylamino)-2-vinylpent-4-enoic acid

Ee = 94%
$[\alpha]_D = -7.5$ (*c* 0.4, $CHCl_3$, 23 °C)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

Carlos A. Sanhueza, Rosa L. Dorta and Jesús T. Vázquez*

Tetrahedron: Asymmetry *19 (2008) 258*



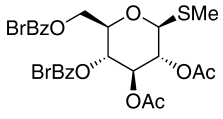
$C_{26}H_{24}Br_2O_{10}S$

2,3-Di-*O*-Acetyl-1-*S*-acetyl-4,6-bis-*O*-(4-bromobenzoyl)-1-thio-β-D-glucopyranose

$[\alpha]_D = +50.4$ (*c* 0.6, $CHCl_3$)
CD (CH_3CN) λ_{ext} nm ($\Delta\varepsilon$): 251 (+16.1), 233 (−6.3)
Source of chirality: D-(+)-glucose

Carlos A. Sanhueza, Rosa L. Dorta and Jesús T. Vázquez*

Tetrahedron: Asymmetry *19 (2008) 258*



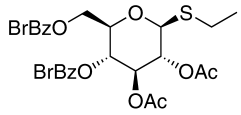
$C_{25}H_{24}Br_2O_9S$

Methyl 2,3-di-*O*-acetyl-4,6-bis-*O*-(4-bromobenzoyl)-1-thio-β-D-glucopyranoside

$[\alpha]_D = +6.0$ (*c* 0.8, $CHCl_3$)
CD (CH_3CN) λ_{ext} nm ($\Delta\varepsilon$): 251 (+15.1), 234 (−6.8)
Source of chirality: D-(+)-glucose

Carlos A. Sanhueza, Rosa L. Dorta and Jesús T. Vázquez*

Tetrahedron: Asymmetry *19 (2008) 258*



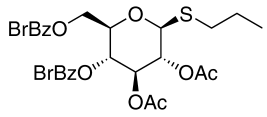
$[\alpha]_D = +1.7$ (*c* 1.0, $CHCl_3$)
CD (CH_3CN) λ_{ext} nm ($\Delta\varepsilon$): 251 (+14.6), 234 (−7.0)
Source of chirality: D-(+)-glucose

$C_{26}H_{26}Br_2O_9S$

Ethyl 2,3-di-*O*-acetyl-4,6-bis-*O*-(4-bromobenzoyl)-1-thio-β-D-glucopyranoside

Carlos A. Sanhueza, Rosa L. Dorta and Jesús T. Vázquez*

Tetrahedron: Asymmetry *19 (2008) 258*



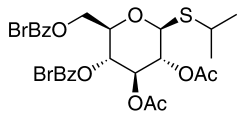
$[\alpha]_D = +1.9$ (*c* 0.1, $CHCl_3$)
CD (CH_3CN) λ_{ext} nm ($\Delta\varepsilon$): 251 (+13.8), 234 (−6.3)
Source of chirality: D-(+)-glucose

$C_{27}H_{28}Br_2O_9S$

Propyl 2,3-di-*O*-acetyl-4,6-bis-*O*-(4-bromobenzoyl)-1-thio-β-D-glucopyranoside

Carlos A. Sanhueza, Rosa L. Dorta and Jesús T. Vázquez*

Tetrahedron: Asymmetry *19 (2008) 258*



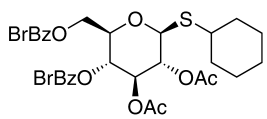
$[\alpha]_D = -6.3$ (*c* 0.7, $CHCl_3$)
CD (CH_3CN) λ_{ext} nm ($\Delta\varepsilon$): 251 (+13.1), 233(−6.5)
Source of chirality: D-(+)-glucose

$C_{27}H_{28}Br_2O_9S$

Isopropyl 2,3-di-*O*-acetyl-4,6-bis-*O*-(4-bromobenzoyl)-1-thio-β-D-glucopyranoside

Carlos A. Sanhueza, Rosa L. Dorta and Jesús T. Vázquez*

Tetrahedron: Asymmetry *19 (2008) 258*



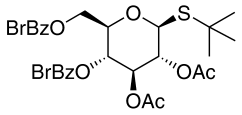
$[\alpha]_D = +3.9$ (*c* 0.9, $CHCl_3$)
CD (CH_3CN) λ_{ext} nm ($\Delta\varepsilon$): 251 (+11.0), 233 (−4.8)
Source of chirality: D-(+)-glucose

$C_{30}H_{32}Br_2O_9S$

Cyclohexyl 2,3-di-*O*-acetyl-4,6-bis-*O*-(4-bromobenzoyl)-1-thio-β-D-glucopyranoside

Carlos A. Sanhueza, Rosa L. Dorta and Jesús T. Vázquez*

Tetrahedron: Asymmetry *19 (2008) 258*



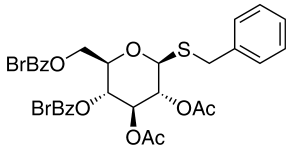
$[\alpha]_D = -13.7$ (*c* 0.6, $CHCl_3$)
CD (CH_3CN) λ_{ext} nm ($\Delta\varepsilon$): 252 (+9.2), 233 (−5.5)
Source of chirality: D-(+)-glucose

$C_{28}H_{30}Br_2O_9S$

tert-Butyl 2,3-di-*O*-acetyl-4,6-bis-*O*-(4-bromobenzoyl)-1-thio-β-D-glucopyranoside

Carlos A. Sanhueza, Rosa L. Dorta and Jesús T. Vázquez*

Tetrahedron: Asymmetry *19 (2008) 258*



$[\alpha]_D = -49.8$ (*c* 0.8, $CHCl_3$)
CD (CH_3CN) λ_{ext} nm ($\Delta\varepsilon$): 252 (+12.9), 234 (−8.5), 211 (−8.9)
Source of chirality: D-(+)-glucose

$C_{31}H_{28}Br_2O_9S$

Benzyl 2,3-di-*O*-acetyl-4,6-bis-*O*-(4-bromobenzoyl)-1-thio-β-D-glucopyranoside