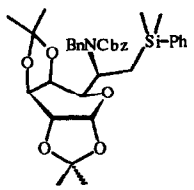
F.L. van Delft, M. de Kort, G.A. van der Marel and J.H. van Boom

Tetrahedron: Asymmetry **1994,** *5,* 2261



$C_{36}H_{45}NO_7Si$

D.e. = >97% (by 300 MHz ^{1}H NMR spectroscopy)

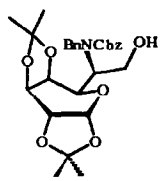
$[\alpha]_D^{20}$ -44.3 (c 1.0, $CHCl_3$)

Source of chirality: natural and asymm. synth. (nucleophilic addition)

Absolute configuration: 2*R*, 3*S*, 4*S*, 5*R*, 6*R*
(assigned *via* chemical conversion)

F.L. van Delft, M. de Kort, G.A. van der Marel and J.H. van Boom

Tetrahedron: Asymmetry **1994,** *5,* 2261



$C_{28}H_{35}NO_8$

D.e. = >97% (by 300 MHz ^{1}H NMR spectroscopy)

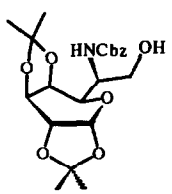
$[\alpha]_D^{20}$ -21.0 (c 1.0, $CHCl_3$)

Source of chirality: natural and asymm. synth. (nucleophilic addition)

Absolute configuration: 2*R*, 3*S*, 4*S*, 5*R*, 6*R*
(assigned *via* chemical conversion)

F.L. van Delft, M. de Kort, G.A. van der Marel and J.H. van Boom

Tetrahedron: Asymmetry **1994,** *5,* 2261



$C_{21}H_{29}NO_8$

D.e. = >97% (by 300 MHz ^{1}H NMR spectroscopy)

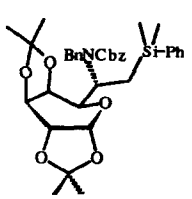
$[\alpha]_D^{20}$ -46.4 (c 1.0, $CHCl_3$)

Source of chirality: natural and asymm. synth. (nucleophilic addition)

Absolute configuration: 2*R*, 3*S*, 4*S*, 5*R*, 6*R*
(^{1}H NMR and optical rotation data correspond with those previously reported)

F.L. van Delft, M. de Kort, G.A. van der Marel and J.H. van Boom

Tetrahedron: Asymmetry **1994,** *5,* 2261



$C_{36}H_{45}NO_7Si$

D.e. = >97% (by 300 MHz ^{1}H NMR spectroscopy)

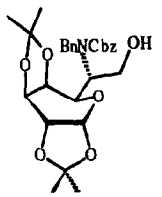
$[\alpha]_D^{20}$ -38.8 (c 1.0, $CHCl_3$)

Source of chirality: natural and asymm. synth. (nucleophilic addition)

Absolute configuration: 2*R*, 3*S*, 4*S*, 5*R*, 6*S*
(assigned *via* chemical conversion)

F.L. van Delft, M. de Kort, G.A. van der Marel and J.H. van Boom

Tetrahedron: Asymmetry **1994,** *5,* 2261



$C_{28}H_{35}NO_8$

D.e. = >97% (by 300 MHz ^{1}H NMR spectroscopy)

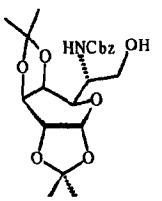
$[\alpha]_D^{20}$ -17.3 (c 1.0, $CHCl_3$)

Source of chirality: natural and asymm. synth. (nucleophilic addition)

Absolute configuration: 2*R*, 3*S*, 4*S*, 5*R*, 6*S*
(assigned *via* chemical conversion)

F.L. van Delft, M. de Kort, G.A. van der Marel and J.H. van Boom

Tetrahedron: Asymmetry **1994,** *5,* 2261



$C_{21}H_{29}NO_8$

D.e. = >97% (by 300 MHz ^{1}H NMR spectroscopy)

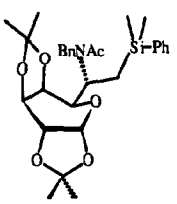
$[\alpha]_D^{20}$ -45.1 (c 2.0, $CHCl_3$)

Source of chirality: natural and asymm. synth. (nucleophilic addition)

Absolute configuration: 2*R*, 3*S*, 4*S*, 5*R*, 6*S*
(^{1}H NMR and optical rotation data correspond with those previously reported)

F.L. van Delft, M. de Kort, G.A. van der Marel and J.H. van Boom

Tetrahedron: Asymmetry **1994,** *5,* 2261



$C_{30}H_{41}NO_6Si$

D.e. = >97% (by 300 MHz ^{1}H NMR spectroscopy)

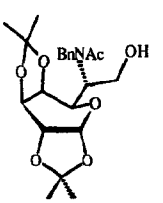
$[\alpha]_D^{20}$ -56.8 (c 2.0, $CHCl_3$)

Source of chirality: natural and asymm. synth. (nucleophilic addition)

Absolute configuration: 2*R*, 3*S*, 4*S*, 5*R*, 6*S*
(assigned *via* chemical conversion)

F.L. van Delft, M. de Kort, G.A. van der Marel and J.H. van Boom

Tetrahedron: Asymmetry **1994,** *5,* 2261



$C_{22}H_{31}NO_7$

D.e. = >97% (by 300 MHz ^{1}H NMR spectroscopy)

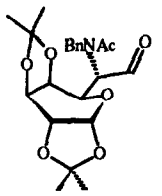
$[\alpha]_D^{20}$ -33.4 (c 2.0, $CHCl_3$)

Source of chirality: natural and asymm. synth. (nucleophilic addition)

Absolute configuration: 2*R*, 3*S*, 4*S*, 5*R*, 6*S*
(assigned *via* chemical conversion)

F.L. van Delft, M. de Kort, G.A. van der Marel and J.H. van Boom

Tetrahedron: Asymmetry **1994,** *5,* 2261



$C_{22}H_{29}NO_7$

D.e. = >97% (by 300 MHz ^{1}H NMR spectroscopy)

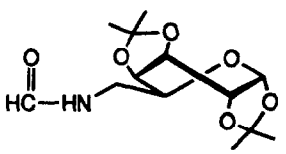
$[\alpha]_D^{20}$ -57.6 (c 1.5, $CHCl_3$)

Source of chirality: natural and asymm. synth. (nucleophilic addition)

Absolute configuration: 2*R*, 3*S*, 4*S*, 5*R*, 6*S*
(^{1}H NMR and optical rotation data correspond with those previously reported)

C. Ortiz Mellet, A. Moreno Marín, José M. García Fernández, and J. Fuentes

Tetrahedron: Asymmetry **1994,** *5,* 2313



E.e. = 100%

mp 100-101°C (EtOAc-petroleum ether); $[\alpha]_D$ = -9 (*c* 1, CH_2Cl_2)

Z/*E* ratio 1:0.13 (assigned by ^{1}H and ^{13}C NMR)

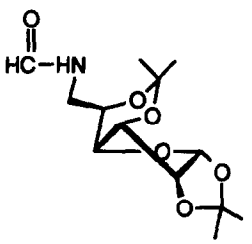
6-Deoxy-6-formamido-1,2:3,4-di-*O*-isopropylidene-α-D-galactopyranose

$C_{13}H_{21}NO_6$

Source of chirality: D-galactose as starting material

C. Ortiz Mellet, A. Moreno Marín, José M. García Fernández, and J. Fuentes

Tetrahedron: Asymmetry **1994,** *5,* 2313



E.e. = 100%

$[\alpha]_D$ = +26 (*c* 1, CH_2Cl_2)

Z/*E* ratio 1:0.38 (assigned by ^{1}H and ^{13}C NMR)

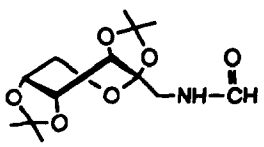
6-Deoxy-6-formamido-1,2:3,5-di-*O*-isopropylidene-α-D-glucofuranose

$C_{13}H_{21}NO_6$

Source of chirality: D-glucose as starting material

C. Ortiz Mellet, A. Moreno Marín, José M. García Fernández, and J. Fuentes

Tetrahedron: Asymmetry **1994,** *5,* 2313



E.e. = 100%

$[\alpha]_D$ = -18 (*c* 1, CH_2Cl_2)

Z/*E* ratio 1:0.45 (assigned by ^{1}H and ^{13}C NMR)

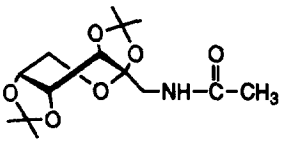
1-Deoxy-1-formamido-2,3:4,5-di-*O*-isopropylidene-β-D-fructopyranose

$C_{13}H_{21}NO_6$

Source of chirality: D-fructose as starting material

C. Ortiz Mellet, A. Moreno Marín, José M. García Fernández, and J. Fuentes

Tetrahedron: Asymmetry **1994,** *5,* 2313



E.e. = 100%

mp 105-106°C (EtOAc-hexane); $[\alpha]_D$ = -24 (*c* 1, CH_2Cl_2)

100% *Z* (assigned by ^1H and ^{13}C NMR)

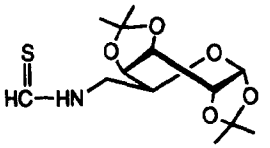
1-Deoxy-1-acetamido-2,3:4,5-di-*O*-isopropylidene-β-D-fructopyranose

$C_{14}H_{23}NO_6$

Source of chirality: D-fructose as starting material

C. Ortiz Mellet, A. Moreno Marín, José M. García Fernández, and J. Fuentes

Tetrahedron: Asymmetry **1994,** *5,* 2313



E.e. = 100%

$[\alpha]_D$ = +24 (*c* 1, CH_2Cl_2)

Z/*E* ratio 1:0.13 (assigned by ^1H and ^{13}C NMR)

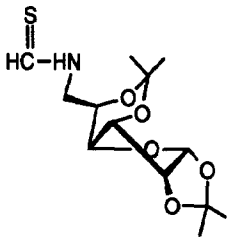
6-Deoxy-6-thioformamido-1,2:3,4-di-*O*-isopropylidene-α-D-galactopyranose

$C_{13}H_{21}NO_5S$

Source of chirality: D-galactose as starting material

C. Ortiz Mellet, A. Moreno Marín, José M. García Fernández, and J. Fuentes

Tetrahedron: Asymmetry **1994,** *5,* 2313



E.e. = 100%

$[\alpha]_D$ = +26 (*c* 1, CH_2Cl_2)

Z/*E* ratio 1:0.19 (assigned by ^1H and ^{13}C NMR)

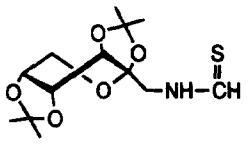
6-Deoxy-6-thioformamido-1,2:3,5-di-*O*-isopropylidene-α-D-glucofuranose

$C_{13}H_{21}NO_5S$

Source of chirality: D-glucose as starting material

C. Ortiz Mellet, A. Moreno Marín, José M. García Fernández, and J. Fuentes

Tetrahedron: Asymmetry **1994,** *5,* 2313



E.e. = 100%

$[\alpha]_D$ = -41 (*c* 1, CH_2Cl_2)

Z/*E* ratio 1:0.45 (assigned by ^1H and ^{13}C NMR)

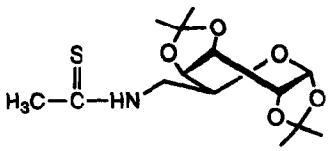
1-Deoxy-1-formamido-2,3:4,5-di-*O*-isopropylidene-β-D-fructopyranose

$C_{13}H_{21}NO_5S$

Source of chirality: D-fructose as starting material

C. Ortiz Mellet, A. Moreno Marín, José M. García Fernández, and J. Fuentes

Tetrahedron: Asymmetry **1994,** *5,* 2313



E.e. = 100%

$[\alpha]_D$ = +11.3 (*c* 1, CH_2Cl_2)

100% *Z* (assigned by ^1H and ^{13}C NMR)

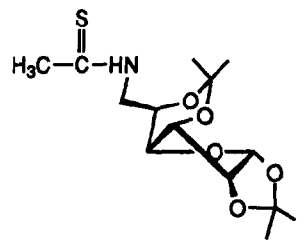
6-Deoxy-6-thioacetamido-1,2:3,4-di-*O*-isopropylidene-α-D-galactopyranose

$C_{14}H_{23}NO_5S$

Source of chirality: D-galactose as starting material

C. Ortiz Mellet, A. Moreno Marín, José M. García Fernández, and J. Fuentes

Tetrahedron: Asymmetry **1994,** *5,* 2313



E.e. = 100%

$[\alpha]_D$ = +46.5 (*c* 1, CH_2Cl_2)

100% *Z* (assigned by ^1H and ^{13}C NMR)

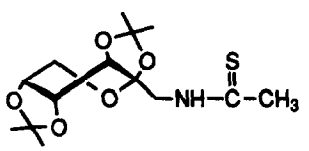
6-Deoxy-6-thioacetamido-1,2:3,5-di-*O*-isopropylidene-α-D-glucofuranose

$C_{14}H_{23}NO_5S$

Source of chirality: D-glucose as starting material

C. Ortiz Mellet, A. Moreno Marín, José M. García Fernández, and J. Fuentes

Tetrahedron: Asymmetry **1994,** *5,* 2313



E.e. = 100%

mp 124-125°C (EtOAc-hexane); $[\alpha]_D$ = -51 (*c* 1, CH_2Cl_2)

100% *Z* (assigned by ^1H and ^{13}C NMR)

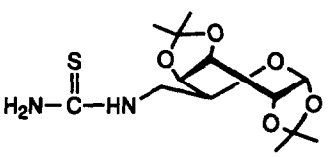
1-Deoxy-1-acetamido-2,3:4,5-di-*O*-isopropylidene-β-D-fructopyranose

$C_{14}H_{23}NO_5S$

Source of chirality: D-fructose as starting material

C. Ortiz Mellet, A. Moreno Marín, J.L. Jiménez Blanco, José M. García Fernández, and J. Fuentes

Tetrahedron: Asymmetry **1994,** *5,* 2325



E.e. = 100%

mp 187-188°C (ether); $[\alpha]_D$ = -5.5 (*c* 1, CH_2Cl_2)

Z/*E* ratio ($CDCl_3$) 1:0.48 (assigned by ^1H and ^{13}C NMR)

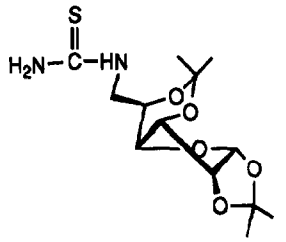
6-Deoxy-6-thioureido-1,2:3,4-di-*O*-isopropylidene-α-D-galactopyranose

$C_{13}H_{22}N_2O_5S$

Source of chirality: D-galactose as starting material

C. Ortiz Mellet, A. Moreno Marín, J.L. Jiménez Blanco, José M. García Fernández, and J. Fuentes

Tetrahedron: Asymmetry **1994**, *5*, 2325



E.e. = 100%

mp 165-166°C (ether); $[\alpha]_D$ = +4.5 (*c* 0.6, CH_2Cl_2)

Z/*E* ratio ($CDCl_3$) 0.73:1 (assigned by ^1H and ^{13}C NMR)

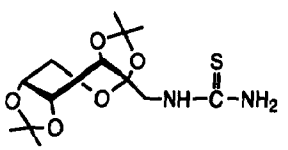
6-Deoxy-6-thioureido-1,2:3,5-di-*O*-isopropylidene-α-D-glucofuranose

$C_{13}H_{22}N_2O_5S$

Source of chirality: D-glucose as starting material

C. Ortiz Mellet, A. Moreno Marín, J.L. Jiménez Blanco, José M. García Fernández, and J. Fuentes

Tetrahedron: Asymmetry **1994**, *5*, 2325



E.e. = 100%

mp 111-113°C (ether); $[\alpha]_D$ = -47 (*c* 1, CH_2Cl_2)

Z/*E* ratio ($CDCl_3$) 0.73:1 (assigned by ^1H and ^{13}C NMR)

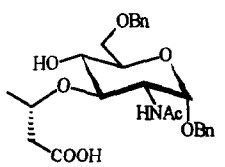
1-Deoxy-1-thioureido-2,3:4,5-di-*O*-isopropylidene-β-D-fructopyranose

$C_{13}H_{22}N_2O_5S$

Source of chirality: D-fructose as starting material

Bernd Becker and Joachim Thiem

Tetrahedron: Asymmetry **1994**, *5*, 2339



$C_{26}H_{33}NO_8$

E.e. = 100% (by ^1H-NMR, as methyl ester)

$[\alpha]_D^{20}$ +60 (*c* 1, methanol)

Source of chirality: natural and asymm. synth. (conjugate addition)

Absolute configuration: 2S (in side chain)
assigned by NOE spectra of the methyl ester

Benzyl 2-acetamido-6-O-benzyl-3-O-[2(S)-1-carboxy-isopropyl]-α-D-glucopyranoside

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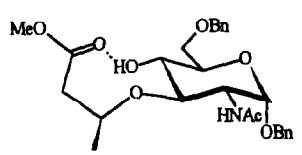
Bernd Becker and Joachim Thiem

Tetrahedron: Asymmetry **1994**, *5*, 2339



$C_{27}H_{33}NO_8$

E.e. = 100% (by ^1H-NMR)

$[\alpha]_D^{20}$ +44 (*c* 1.5, chloroform)

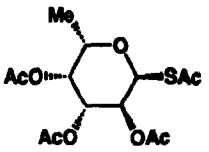
Source of chirality: natural and asymm. synth. (conjugate addition)

Absolute configuration: 2S (in side chain; assigned by NOE spectra)

Benzyl 2-acetamido-6-O-benzyl-3-O-[2(S)-1-carboxymethyl-isopropyl]-α-D-glucopyranoside

H. Hashimoto, K. Shimada, S. Horito

Tetrahedron: Asymmetry **1994,** *5,* 2351



d.e. 100%
$[\alpha]_D^{20}$ = -156 (c 0.52 in $CHCl_3$)
$J_{1,2}$ = 5.3 Hz (in $CDCl_3$ at 270 MHz)

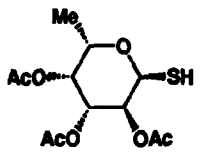
Source of chirality : L-fucose and asymmetric synthesis

$C_{14}H_{20}O_8S$

2,3,4-Tri-*O*-acetyl-1-*S*-acetyl-1-thio-α-L-fucopyranose

H. Hashimoto, K. Shimada, S. Horito

Tetrahedron: Asymmetry **1994,** *5,* 2351



d.e. 100%
$[\alpha]_D^{20}$ = -162 (c 1.0 in $CHCl_3$)
$J_{1,2}$ = 5.3 Hz (in $CDCl_3$ at 270 MHz)

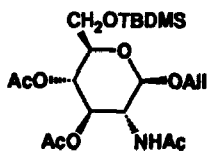
Source of chirality : L-fucose and asymmetric synthesis

$C_{12}H_{18}O_7S$

2,3,4-Tri-*O*-acetyl-1-thio-α-L-fucopyranose

H. Hashimoto, K. Shimada, S. Horito

Tetrahedron: Asymmetry **1994,** *5,* 2351



d.e. 100%
$[\alpha]_D^{20}$ = -3.2 (c 1.3 in $CHCl_3$)
$J_{1,2}$ = 8.6 Hz (in $CDCl_3$ at 270 MHz)

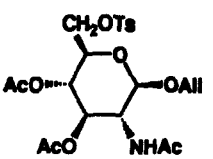
Source of chirality : L-fucose and asymmetric synthesis

$C_{21}H_{37}NO_8Si$

Allyl 2-acetamido-3,4-di-*O*-acetyl-6-*O*-*tert*-butyldimethylsilyl-2-deoxy-β-D-glucopyranoside

H. Hashimoto, K. Shimada, S. Horito

Tetrahedron: Asymmetry **1994,** *5,* 2351



d.e. 100%
$[\alpha]_D^{24}$ = -1.8 (c 1.3 in $CHCl_3$)
$J_{1,2}$ = 8.5 Hz (in $CDCl_3$ at 270 MHz)

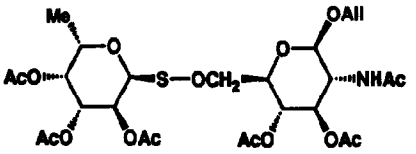
Source of chirality : L-fucose and asymmetric synthesis

$C_{22}H_{29}NO_{10}S$

Allyl 2-acetamido-3,4-di-*O*-acetyl-2-deoxy-6-*O*-*p*-toluenesulfonyl-β-D-glucopyranoside

H. Hashimoto, K. Shimada, S. Horito

Tetrahedron: Asymmetry **1994,** *5,* 2351



d.e. 100%
$[\alpha]_D^{24}$ = -127 (c 1.5 in $CHCl_3$)
$J_{1,2}$ = 8.5 Hz, $J_{1',2'}$ = 5.3 Hz (in $CDCl_3$ at 270 MHz)

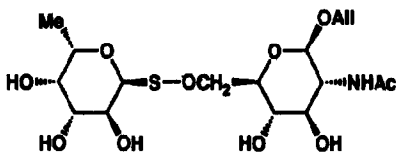
Source of chirality : L-fucose, D-glucosamine and asymmetric synthesis

$C_{27}H_{39}NO_{14}S$

Allyl 2-acetamido-3,4-di-*O*-acetyl-6-*S*-(2,3,4-tri-*O*-acetyl-α-L-fucopyranosyl)-2-deoxy-6-thio-β-D-glucopyranoside

H. Hashimoto, K. Shimada, S. Horito

Tetrahedron: Asymmetry **1994,** *5,* 2351



d.e. 100%
$[\alpha]_D^{24}$ = -132 (c 0.75 in $CHCl_3$)
$J_{1,2}$ = 8.6 Hz, $J_{1',2'}$ = 5.6 Hz (in $CDCl_3$ at 270 MHz)

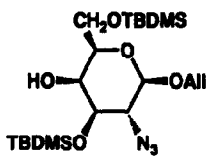
Source of chirality : L-fucose, D-glucosamine and asymmetric synthesis

$C_{17}H_{29}NO_9S$

Allyl 2-acetamido-2-deoxy-6-*S*-(α-L-fucopyranosyl)-6-thio-β-D-glucopyranoside

H. Hashimoto, K. Shimada, S. Horito

Tetrahedron: Asymmetry **1994,** *5,* 2351



d.e. 100%
$[\alpha]_D^{24}$ = +4.0 (c 1.9 in $CHCl_3$)
$J_{1,2}$ = 7.6 Hz (in $CDCl_3$ at 270 MHz)

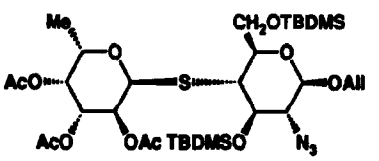
Source of chirality : D-galactose and asymmetric synthesis

$C_{21}H_{43}N_3O_5Si_2$

Allyl 2-azido-3,6-di-*O*-*tert*-butyldimethylsilyl-2-deoxy-β-D-galactopyranoside

H. Hashimoto, K. Shimada, S. Horito

Tetrahedron: Asymmetry **1994,** *5,* 2351



d.e. 100%
$[\alpha]_D^{23}$ = -123 (c 1.0 in $CHCl_3$)
$J_{1,2}$ = 7.3 Hz, $J_{3,4}$ = $J_{4,5}$ = 10.4 Hz,
$J_{1',2'}$ = 4.9 Hz (in $CDCl_3$ at 270 MHz)

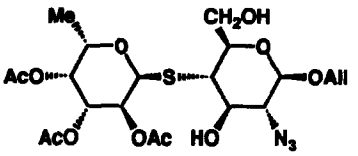
Source of chirality : L-fucose, D-galactose and asymmetric synthesis

$C_{33}H_{59}N_3O_{11}SSi_2$

Allyl 2-azido-3,6-di-*O*-*tert*-butyldimethylsilyl-4-*S*-(2,3,4-tri-*O*-acetyl-α-L-fucopyranosyl)-2-deoxy-4-thio-β-D-glucopyranoside

H. Hashimoto, K. Shimada, S. Horito

Tetrahedron: Asymmetry **1994**, *5*, 2351



d.e. 100%
$[\alpha]_D^{22}$ = -143 (c 1.9 in $CHCl_3$)
$J_{1,2}$ = 8.3 Hz, $J_{3,4}$ = 11.2 Hz, $J_{4,5}$ = 10.9 Hz,
$J_{1',2'}$ = 5.9 Hz (in $CDCl_3$ at 270 MHz)

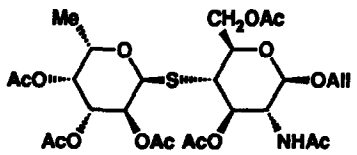
Source of chirality : L-fucose, D-galactose and asymmetric synthesis

$C_{25}H_{35}N_3O_{13}S$

Allyl 2-azido-3,6-di-*O*-acetyl-4-*S*-(2,3,4-tri-*O*-acetyl-α-L-fucopyranosyl)-2-deoxy-4-thio-β-D-glucopyranoside

H. Hashimoto, K. Shimada, S. Horito

Tetrahedron: Asymmetry **1994**, *5*, 2351



d.e. 100%
$[\alpha]_D^{24}$ = -150 (c 2.1 in $CHCl_3$)
$J_{1,2}$ = 8.6 Hz, $J_{3,4}$ = $J_{4,5}$ = 10.7 Hz,
$J_{1',2'}$ = 5.6 Hz (in $CDCl_3$ at 270 MHz)

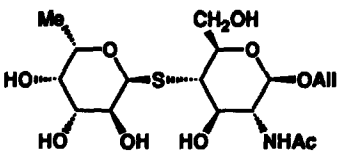
Source of chirality : L-fucose, D-galactose and asymmetric synthesis

$C_{27}H_{39}NO_{14}S$

Allyl 2-acetamido-3,6-di-*O*-acetyl-4-*S*-(2,3,4-tri-*O*-acetyl-α-L-fucopyranosyl)-2-deoxy-4-thio-β-D-glucoctopyranoside

H. Hashimoto, K. Shimada, S. Horito

Tetrahedron: Asymmetry **1994**, *5*, 2351



d.e. 100%
$[\alpha]_D^{24}$ = -219 (c 1.1 in $CHCl_3$)
$J_{1,2}$ = 8.6 Hz, $J_{3,4}$ = $J_{4,5}$ = 10.6 Hz,
$J_{1',2'}$ = 5.6 Hz (in $CDCl_3$ at 270 MHz)

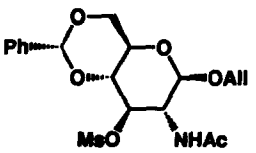
Source of chirality : L-fucose, D-galactose and asymmetric synthesis

$C_{17}H_{29}NO_9S$

Allyl 2-acetamido-2-deoxy-4-*S*-(α-L-fucopyranosyl)-4-thio-β-D-glucoctopyranoside

H. Hashimoto, K. Shimada, S. Horito

Tetrahedron: Asymmetry **1994**, *5*, 2351



d.e. 100%
$[\alpha]_D^{20}$ = -44 (c 0.78 in $CHCl_3$)
$J_{1,2}$ = 8.0 Hz (in $CDCl_3$ at 270 MHz)

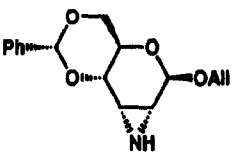
Source of chirality : L-fucose and asymmetric synthesis

$C_{19}H_{25}NO_8S$

Allyl 2-acetamido-4,6-*O*-benzylidene-2-deoxy-3-*O*-methanesulfonyl-β-D-glucopyranoside

H. Hashimoto, K. Shimada, S. Horito

Tetrahedron: Asymmetry **1994**, *5*, 2351



d.e. 100%
$[\alpha]_D^{23}$ = -5.0 (c 1.0 in $CHCl_3$)
$J_{1,2} < 0.5$ Hz, $J_{3,4} = 2.3$ Hz (in $CDCl_3$ at 270 MHz)

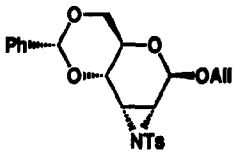
Source of chirality : D-glucosamine and asymmetric synthesis

$C_{16}H_{19}NO_4$

Allyl 4,6-*O*-benzylidene-2,3-dideoxy-2,3-epimino-β-D-allopyranoside

H. Hashimoto, K. Shimada, S. Horito

Tetrahedron: Asymmetry **1994**, *5*, 2351



d.e. 100%
$[\alpha]_D^{22}$ = -12.3 (c 0.43 in $CHCl_3$)
$J_{1,2} < 0.5$ Hz, $J_{3,4} = 2.3$ Hz (in $CDCl_3$ at 270 MHz)

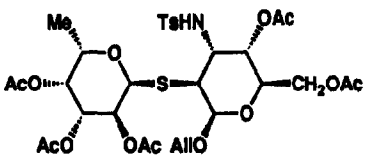
Source of chirality : D-glucosamine and asymmetric synthesis

$C_{23}H_{25}NO_6S$

Allyl 4,6-*O*-benzylidene-2,3-dideoxy-2,3-(*N*-*p*-toluenesulfonylepimino)-β-D-allopyranoside

H. Hashimoto, K. Shimada, S. Horito

Tetrahedron: Asymmetry **1994**, *5*, 2351



d.e. 100%
$[\alpha]_D^{24}$ = -87 (c 3.2 in $CHCl_3$)
$J_{1,2} = 2.0$ Hz, $J_{2,3} = 5.6$ Hz, $J_{3,4} = 4.3$ Hz,
$J_{1',2'} = 5.6$ Hz (in $CDCl_3$ at 270 MHz)

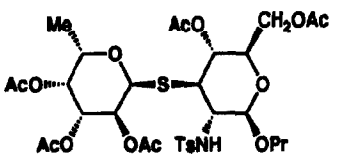
Source of chirality : L-fucose, D-glucosamine and asymmetric synthesis

$C_{32}H_{43}NO_{15}S_2$

Allyl 4,6-di-*O*-acetyl-2-*S*-(2,3,4-tri-*O*-acetyl-α-L-fucopyranosyl)-3-deoxy-2-thio-3-*p*-toluenesulfonamido-β-D-altropyranoside

H. Hashimoto, K. Shimada, S. Horito

Tetrahedron: Asymmetry **1994**, *5*, 2351



d.e. 100%
$[\alpha]_D^{24}$ = -98 (c 1.9 in $CHCl_3$)
$J_{1,2} = 7.3$ Hz, $J_{2,3} = 10.6$ Hz, $J_{3,4} = 10.2$ Hz,
$J_{1',2'} = 5.6$ Hz (in $CDCl_3$ at 270 MHz)

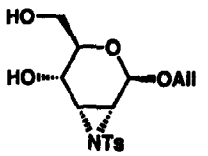
Source of chirality : L-fucose, D-glucosamine and asymmetric synthesis

$C_{32}H_{45}NO_{15}S_2$

n-Propyl 4,6-di-*O*-acetyl-3-*S*-(2,3,4-tri-*O*-acetyl-α-L-fucopyranosyl)-2-deoxy-3-thio-2-*p*-toluenesulfonamido-β-D-glucopyranoside

H. Hashimoto, K. Shimada, S. Horito

Tetrahedron: Asymmetry **1994**, *5*, 2351



d.e. 100%
$[\alpha]_D^{22}$ = -10.7 (c 3.0 in $CHCl_3$)
$J_{1,2} < 0.5$ Hz, $J_{3,4} = 3.5$ Hz (in $CDCl_3$ at 270 MHz)

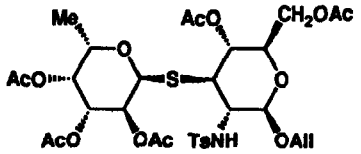
Source of chirality : D-glucosamine and asymmetric synthesis

$C_{16}H_{21}NO_6S$

Allyl 2,3-dideoxy-2,3-(*N*-*p*-toluenesulfonylepimino)-β-D-allopyranoside

H. Hashimoto, K. Shimada, S. Horito

Tetrahedron: Asymmetry **1994**, *5*, 2351



d.e. 100%
$[\alpha]_D^{27}$ = -100 (c 3.2 in $CHCl_3$)
$J_{1,2} = 7.6$ Hz, $J_{2,3} = 10.3$ Hz, $J_{3,4} = 10.1$ Hz,
$J_{1',2'} = 5.7$ Hz (in $CDCl_3$ at 270 MHz)

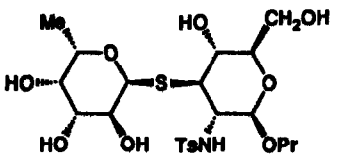
Source of chirality : L-fucose, D-glucosamine and asymmetric synthesis

$C_{32}H_{43}NO_{15}S_2$

Allyl 4,6-di-*O*-acetyl-3-*S*-(2,3,4-tri-*O*-acetyl-α-L-fucopyranosyl)-2-deoxy-3-thio-2-*p*-toluenesulfonamido-β-D-glucopyranoside

H. Hashimoto, K. Shimada, S. Horito

Tetrahedron: Asymmetry **1994**, *5*, 2351



d.e. 100%
$[\alpha]_D^{24}$ = -145 (c 1.1 in $CHCl_3$)
$J_{1,2} = 7.9$ Hz, H-3 (dd, $J = 9.9$, 11.6 Hz)
$J_{1',2'} = 5.4$ Hz (in $CDCl_3$ at 270 MHz)

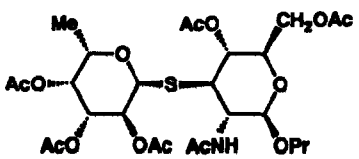
Source of chirality : L-fucose, D-glucosamine and asymmetric synthesis

$C_{22}H_{35}NO_{10}S_2$

n-Propyl-2-deoxy-3-*S*-(α-L-fucopyranosyl)-3-thio-2-*p*-toluenesulfonamido-β-D-glucopyranoside

H. Hashimoto, K. Shimada, S. Horito

Tetrahedron: Asymmetry **1994**, *5*, 2351



d.e. 100%
$[\alpha]_D^{24}$ = -119 (c 1.0 in $CHCl_3$)
$J_{1,2} = 7.9$ Hz, $J_{2,3} = 11.4$ Hz, $J_{3,4} = 11.5$ Hz,
$J_{1',2'} = 5.5$ Hz (in $CDCl_3$ at 270 MHz)

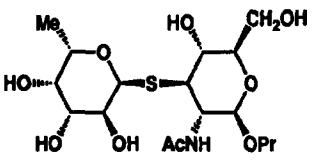
Source of chirality : L-fucose, D-glucosamine and asymmetric synthesis

$C_{27}H_{41}NO_{14}S$

n-Propyl-2-acetamido-4,6-di-*O*-acetyl-3-*S*-(2,3,4-tri-*O*-acetyl-α-L-fucopyranosyl)-2-deoxy-β-D-glucopyranoside

H. Hashimoto, K. Shimada, S. Horito

Tetrahedron: Asymmetry **1994,** *5,* 2351



d.e. 100%

$[\alpha]_D^{24}$ = -220 (c 0.45 in $CHCl_3$)

$J_{1,2}$ = 8.3 Hz, $J_{3,4}$ = 9.6 Hz, $J_{1',2'}$ = 5.6 Hz (in $CDCl_3$ at 270 MHz)

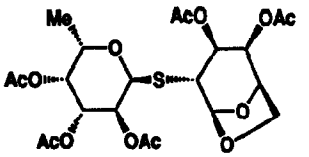
Source of chirality : L-fucose, D-glucosamine and asymmetric synthesis

$C_{17}H_{31}NO_9S$

n-Propyl 2-acetamido-2-deoxy-3-*S*-(α-L-fucopyranosyl)-β-D-glucopyranoside

H. Hashimoto, K. Shimada, S. Horito

Tetrahedron: Asymmetry **1994,** *5,* 2351



d.e. 100%

$[\alpha]_D^{24}$ = -187 (c 1.5 in $CHCl_3$)

$J_{2,3}$ = 1.0 Hz , $J_{3,4}$ = 5.0 Hz, $J_{1',2'}$ = 5.3 Hz (in $CDCl_3$ at 270 MHz)

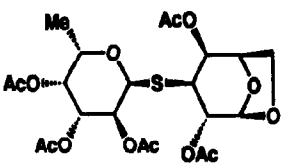
Source of chirality : L-fucose, D-galactose and asymmetric synthesis

$C_{22}H_{30}O_{13}S$

3,4-Di-*O*-acetyl-2-*S*-(2,3,4-tri-*O*-acetyl-α-L-fucopyranosyl)-1,6-anhydro-2-thio-β-D-galactopyranose

H. Hashimoto, K. Shimada, S. Horito

Tetrahedron: Asymmetry **1994,** *5,* 2351



d.e. 100%

$[\alpha]_D^{24}$ = -203 (c 0.76 in $CHCl_3$)

$J_{1,2}$ = 1.5 Hz, $J_{2,3}$ = 10.5 Hz, $J_{3,4}$ = 10.1 Hz, $J_{1',2'}$ = 5.0 Hz (in $CDCl_3$ at 270 MHz)

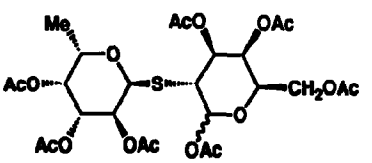
Source of chirality : L-fucose, D-glucosamine and asymmetric synthesis

$C_{22}H_{30}O_{13}S$

2,4-Di-*O*-acetyl-3-*S*-(2,3,4-tri-*O*-acetyl-α-L-fucopyranosyl)-1,6-anhydro-3-thio-β-D-idopyranose

H. Hashimoto, K. Shimada, S. Horito

Tetrahedron: Asymmetry **1994,** *5,* 2351



d.e. 76% (1α : 1β = 88 : 12)

$J_{1,2}$ = 3.6 Hz, $J_{2,3}$ = 11.5 Hz (1α-anomer), $J_{1',2'}$ = 4.6 Hz (in $CDCl_3$ at 270 MHz)

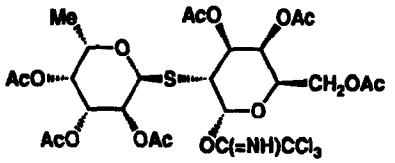
Source of chirality : L-fucose, D-glactose and asymmetric synthesis

$C_{26}H_{36}O_{16}S$

1,3,4,6-Tetra-*O*-acetyl-2-*S*-(2,3,4-tri-*O*-acetyl-α-L-fucopyranosyl)-2-thio-β-D-galactopyranose

H. Hashimoto, K. Shimada, S. Horito

Tetrahedron: Asymmetry **1994,** *5,* 2351



d.e. 100%

$[\alpha]_D$ = -84 (c 1.1 in $CHCl_3$)

$J_{1,2}$ = 3.3 Hz, $J_{2,3}$ = 11.7 Hz, $J_{1',2'}$ = 4.5 Hz (in $CDCl_3$ at 270 MHz)

Source of chirality : L-fucose, D-galactose and asymmetric synthesis

$C_{26}H_{34}C_{13}NO_{15}S$

O-{3,4,6-Tetra-*O*-acetyl-2-*S*-(2,3,4-tri-*O*-acetyl-α-L-fucopyranosyl)-2-thio-α-D-galactopyranosyl} trichloroacetimidate

H. Hashimoto, K. Shimada, S. Horito

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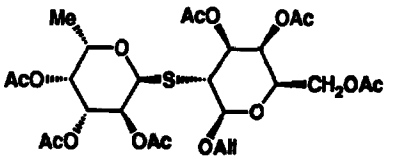

d.e. 100%

$[\alpha]_D^{21}$ = -189 (c 1.15 in $CHCl_3$)

$J_{1,2}$ = 9.1 Hz, $J_{2,3}$ = 11.8 Hz, $J_{1',2'}$ = 5.1 Hz (in $CDCl_3$ at 270 MHz)

Source of chirality : L-fucose, D-galactose and asymmetric synthesis

$C_{27}H_{38}O_{15}S$

Allyl 3,4,6-Tri-*O*-acetyl-2-*S*-(2,3,4-tri-*O*-acetyl-α-L-fucopyranosyl)-2-thio-β-D-galactopyranoside

H. Hashimoto, K. Shimada, S. Horito

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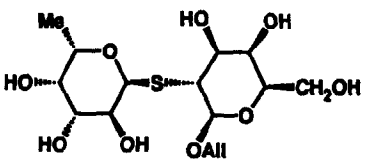


d.e. 100%

$[\alpha]_D^{21}$ = -177 (c 0.66 in $CHCl_3$)

$J_{1,2}$ = 8.9 Hz, $J_{2,3}$ = 10.9 Hz, $J_{1',2'}$ = 5.5 Hz (in $CDCl_3$ at 270 MHz)

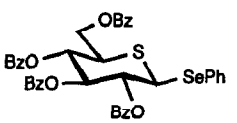
Source of chirality : L-fucose, D-galactose and asymmetric synthesis

$C_{15}H_{26}O_9S$

Allyl 2-*S*-(α-L-fucopyranosyl)-2-thio-β-D-galactopyranoside

S. Mehta, K. L. Jordan, T. Weimar, U. C. Kreis, R. J. Batchelor, F. W.B. Einstein and B. M. Pinto.

Tetrahedron: Asymmetry **1994,** *5,* 2367



$[\alpha]_D^{21}$ = +52 (c 0.5, CH_2Cl_2)

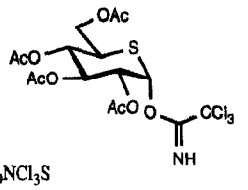
Source of chirality: natural

$C_{40}H_{32}O_8SSe$

Phenyl 2,3,4,6-tetra-*O*-benzoyl-1-seleno-5-thio-β-D-glucopyranoside

S. Mehta, K. L. Jordan, T. Weimar, U. C. Kreis, R. J. Batchelor, F. W.B. Einstein and B. M. Pinto.

Tetrahedron: Asymmetry **1994,** *5,* 2367



$[\alpha]_D^{20}$ = +217 (c 1.0, CH_2Cl_2)

Source of chirality: natural

$C_{19}H_{20}O_9NCl_3S$

O-(2,3,4,6-tetra-*O*-acetyl-5-thio-α-D-glucopyranosyl) trichloroacetimidate

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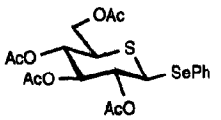
S. Mehta, K. L. Jordan, T. Weimar, U. C. Kreis, R. J. Batchelor, F. W.B. Einstein and B. M. Pinto.

Tetrahedron: Asymmetry **1994,** *5,* 2367



$[\alpha]_D^{22}$ = +10 (c 1.0, CH_2Cl_2)

Source of chirality: natural

$C_{20}H_{24}O_9SSe$

Phenyl 2,3,4,6-tetra-*O*-acetyl-1-seleno-5-thio-β-D-glucopyranoside

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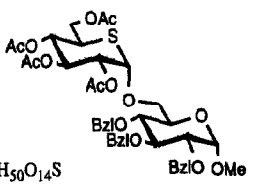
S. Mehta, K. L. Jordan, T. Weimar, U. C. Kreis, R. J. Batchelor, F. W.B. Einstein and B. M. Pinto.

Tetrahedron: Asymmetry **1994,** *5,* 2367



$[\alpha]_D^{20}$ = +151 (c 0.53, CH_2Cl_2)

Source of chirality: natural

$C_{42}H_{50}O_{14}S$

Methyl 2,3,4-tri-*O*-benzyl-6-*O*-(2,3,4,6-tetra-*O*-acetyl-5'-thio-α-D-glucopyranosyl)-α-D-glucopyranoside

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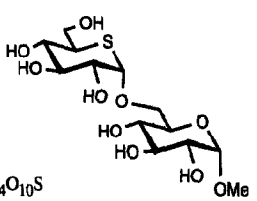
S. Mehta, K. L. Jordan, T. Weimar, U. C. Kreis, R. J. Batchelor, F. W.B. Einstein and B. M. Pinto.

Tetrahedron: Asymmetry **1994,** *5,* 2367



$[\alpha]_D^{20}$ = +319 (c 1.0, CH_3OH)

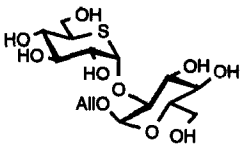
Source of chirality: natural

$C_{13}H_{24}O_{10}S$

Methyl 6-*O*-(5'-thio-α-D-glucopyranosyl)-α-D-glucopyranoside

Tetrahedron: Asymmetry **1994,** *5,* 2367

S. Mehta, K. L. Jordan, T. Weimar, U. C. Kreis, R. J. Batchelor, F. W.B. Einstein and B. M. Pinto.



$[\alpha]_D^{20}$ = +260 (c 1.0, CH_3OH)

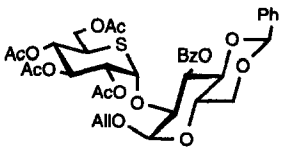
Source of chirality: natural

$C_{15}H_{26}O_{10}S$

Allyl 2-*O*-(5'-thio-α-D-glucopyranosyl)-α-D-glucopyranoside

Tetrahedron: Asymmetry **1994,** *5,* 2367

S. Mehta, K. L. Jordan, T. Weimar, U. C. Kreis, R. J. Batchelor, F. W.B. Einstein and B. M. Pinto.



$[\alpha]_D^{20}$ = +206 (c 1.0, CH_2Cl_2)

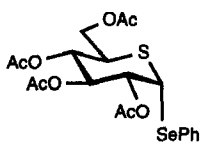
Source of chirality: natural

$C_{37}H_{42}O_{16}S$

Allyl 3-*O*-benzoyl-4,6-*O*-benzylidene-2-*O*-(2,3,4,6-tetra-*O*-acetyl-5'-thio-α-D-glucopyranosyl)-α-D-glucopyranoside

Tetrahedron: Asymmetry **1994,** *5,* 2367

S. Mehta, K. L. Jordan, T. Weimar, U. C. Kreis, R. J. Batchelor, F. W.B. Einstein and B. M. Pinto.



$[\alpha]_D^{21}$ = +288 (c 1.0, CH_2Cl_2)

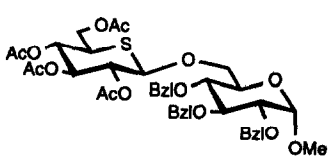
Source of chirality: natural

$C_{20}H_{24}O_9SSe$

Phenyl 2,3,4,6-tetra-*O*-acetyl-1-seleno-5-thio-α-D-glucopyranoside

Tetrahedron: Asymmetry **1994,** *5,* 2367

S. Mehta, K. L. Jordan, T. Weimar, U. C. Kreis, R. J. Batchelor, F. W.B. Einstein and B. M. Pinto.



$[\alpha]_D^{20}$ = +28 (c 1.1, CH_2Cl_2)

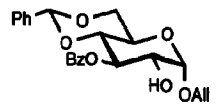
Source of chirality: natural

$C_{42}H_{50}O_{14}S$

Methyl 2,3,4-tri-*O*-benzyl-6-*O*-(2,3,4,6-tetra-*O*-acetyl-5'-thio-β-D-glucopyranosyl)-α-D-glucopyranoside

S. Mehta, K. L. Jordan, T. Weimar, U. C. Kreis, R. J. Batchelor, F. W.B. Einstein and B. M. Pinto.

Tetrahedron: Asymmetry **1994,** *5,* 2367



$[\alpha]_D^{20}$ = +55 (c 0.85, $CHCl_3$)

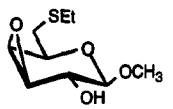
Source of chirality: natural

$C_{23}H_{24}O_7$

Allyl 3-*O*-benzoyl-4,6-*O*-benzylidene-α-D-glucopyranoside

T. L. Lowary and D. R. Bundle

Tetrahedron: Asymmetry **1994,** *5,* 2397



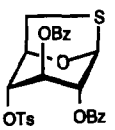
$[\alpha]_D^{22}$ -116.6 (*c* 0.9, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration 1R, 2R, 3S, 4R, 5S

$C_9H_{16}O_4S$

Methyl 3,4 anhyro-6-*S*-ethyl-β-D-galactopyranoside

T. L. Lowary and D. R. Bundle

Tetrahedron: Asymmetry **1994,** *5,* 2397



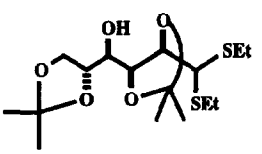
$[\alpha]_D^{22}$ +36.8 (*c* 1.1, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration 1S, 2R, 3S, 4S, 5S

$C_{27}H_{24}O_8S_2$

2,3 di-*O*-benzoyl-4-*O*-toluensesulfonyl-1,6 thioanhydro-D-glucopyranose

Tony K. M. Shing

Tetrahedron: Asymmetry **1994,** *5,* 2405



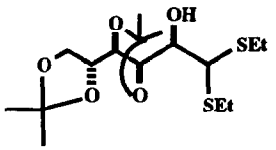
$[\alpha]_D^{22}$ - 47.8 (*c* 2.0, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: 2R,3S,4R,5R

$C_{16}H_{30}O_5S_2$

2,3:5,6-Di-*O*-isopropylidene-D-glucose diethyl dithioacetal

Tony K. M. Shing

Tetrahedron: Asymmetry **1994,** *5,* 2405

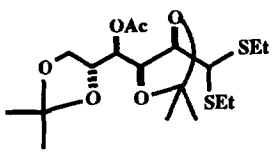


$[\alpha]_D^{22}$ + 15.0 (*c* 1.5, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: 2R,3S,4R,5R

$C_{16}H_{30}O_5S_2$
3,4:5,6-Di-*O*-isopropylidene-D-glucose diethyl dithioacetal

Tony K. M. Shing

Tetrahedron: Asymmetry **1994,** *5,* 2405

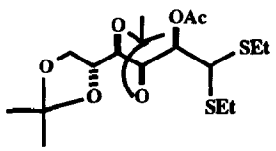


$[\alpha]_D^{22}$ - 31.4 (*c* 1.4, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: 2R,3S,4R,5R

$C_{18}H_{32}O_6S_2$
4-*O*-Acetyl-2,3:5,6-di-*O*-isopropylidene-D-glucose diethyl dithioacetal

Tony K. M. Shing

Tetrahedron: Asymmetry **1994,** *5,* 2405

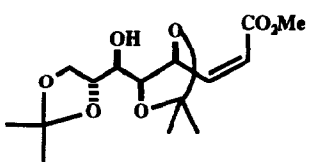


$[\alpha]_D^{20}$ - 10.1 (*c* 1.2, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: 2R,3S,4R,5R

$C_{18}H_{32}O_6S_2$
2-*O*-Acetyl-3,4:5,6-di-*O*-isopropylidene-D-glucose diethyl dithioacetal

Tony K. M. Shing

Tetrahedron: Asymmetry **1994,** *5,* 2405

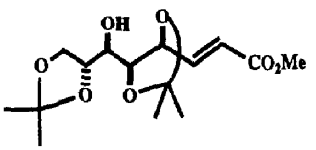


$[\alpha]_D^{22}$ + 67.5 (*c* 1.0, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: 4S,5R,6R,7R

$C_{15}H_{24}O_7$
Z-Methyl 2,3-dideoxy-4,5:7,8-di-*O*-isopropylidene-D-*gluco*-oct-2-enonate

Tony K. M. Shing

Tetrahedron: Asymmetry **1994,** *5,* 2405

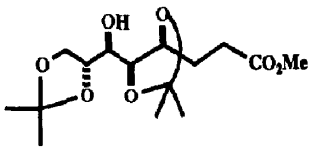


$[\alpha]_D^{21}$ - 22.2 (*c* 1.2, MeOH)
Source of chirality: D-glucose
m.p. 79 °C
Absolute configuration: 4S,5R,6R,7R

$C_{15}H_{24}O_7$
E-Methyl 2,3-dideoxy-4,5:7,8-di-*O*-isopropylidene-D-*gluco*-oct-2-enonate

Tony K. M. Shing

Tetrahedron: Asymmetry **1994,** *5,* 2405

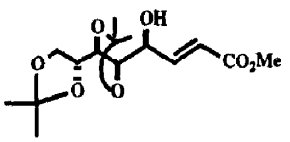


$[\alpha]_D^{20}$ - 29.3 (*c* 1.2, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: 4S,5R,6R,7R

$C_{15}H_{26}O_7$
Methyl 2,3-dideoxy-4,5:7,8-di-*O*-isopropylidene-D-*gluco*-octonate

Tony K. M. Shing

Tetrahedron: Asymmetry **1994,** *5,* 2405

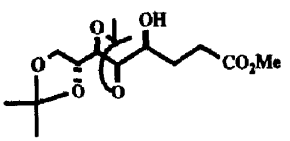


$[\alpha]_D^{18}$ - 24.2 (*c* 1.2, $CHCl_3$)
Source of chirality: D-glucose
m.p. 77-77.5 °C
Absolute configuration: 4S,5R,6R,7R

$C_{15}H_{24}O_7$
E-Methyl 2,3-dideoxy-5,6:7,8-di-*O*-isopropylidene-D-*gluco*-oct-2-enonate

Tony K. M. Shing

Tetrahedron: Asymmetry **1994,** *5,* 2405

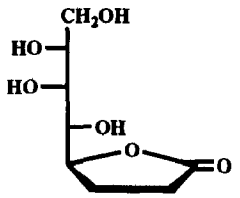


$[\alpha]_D^{19}$ + 0.3 (*c* 1.1, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: 4S,5R,6R,7R

$C_{15}H_{26}O_7$
Methyl 2,3-dideoxy-5,6:7,8-di-*O*-isopropylidene-D-*gluco*-octonate

Tony K. M. Shing

Tetrahedron: Asymmetry **1994,** *5,* 2405

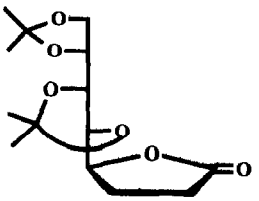


$[\alpha]_D^{18}$ + 45.3 (*c* 0.6, H_2O)
Source of chirality: D-glucose
m.p. 135—137 °C
Absolute configuration: 4S,5R,6R,7R

$C_8H_{14}O_6$
2,3-Dideoxy-D-*gluco*-octono-1,4-lactone

Tony K. M. Shing

Tetrahedron: Asymmetry **1994,** *5,* 2405

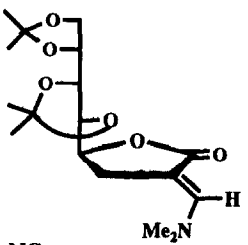


$[\alpha]_D^{22}$ + 40.4 (*c* 0.8, $CHCl_3$)
Source of chirality: D-glucose
m.p. 93 °C
Absolute configuration: 4S,5R,6R,7R

$C_{14}H_{22}O_6$
2,3-Dideoxy-5,6:7,8-di-O-isopropylidene-D-*gluco*-octono-1,4-lactone

Tony K. M. Shing

Tetrahedron: Asymmetry **1994,** *5,* 2405

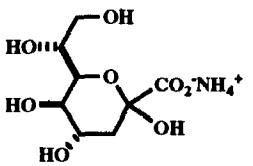


$[\alpha]_D^{23}$ + 128.3 (*c* 1.1, $CHCl_3$)
Source of chirality: D-glucose
m.p. 126—127 °C
Absolute configuration: 4S,5R,6R,7R

$C_{17}H_{26}NO_6$
2,3-Dideoxy-2-(dimethylaminomethylene)-5,6:7,8-di-O-isopropylidene-D-*gluco*-octono-1,4-lactone

Tony K. M. Shing

Tetrahedron: Asymmetry **1994,** *5,* 2405

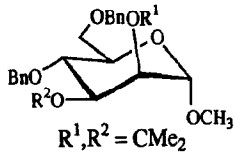


$[\alpha]_D^{23}$ + 16.5 (*c* 0.7, H_2O)
Source of chirality: D-glucose
Absolute configuration: 4S,5R,6R,7R

$C_8H_{17}NO_8$
Ammonium 3-deoxy-D-*gluco*-oct-2-ulosonate

S.H. Khan, J.Ø. Duus, S.C. Crawley, M.M. Palcic, and O. Hindsgaul

Tetrahedron: Asymmetry **1994,** *5,* 2415



$R^1,R^2 = CMe_2$

$C_{24}H_{30}O_6$

E.e. = 100%

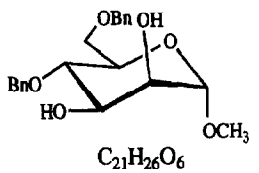
$[\alpha]_D$ +33.3 (c 4.8, $CHCl_3$)

Source of chirality: D-mannose as starting material

Methyl 2,3-O-isopropylidine-4,6-di-O-benzyl-α-D-mannopyranoside

S.H. Khan, J.Ø. Duus, S.C. Crawley, M.M. Palcic, and O. Hindsgaul

Tetrahedron: Asymmetry **1994,** *5,* 2415



$C_{21}H_{26}O_6$

E.e. = 100%

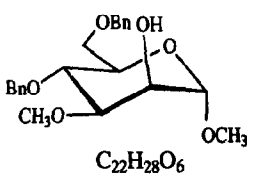
$[\alpha]_D$ +76.3 (c 1.3, $CHCl_3$)

Source of chirality: D-mannose as starting material

Methyl 4,6-di-O-benzyl-α-D-mannopyranoside

S.H. Khan, J.Ø. Duus, S.C. Crawley, M.M. Palcic, and O. Hindsgaul

Tetrahedron: Asymmetry **1994,** *5,* 2415



$C_{22}H_{28}O_6$

E.e. = 100%

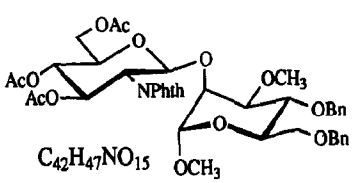
$[\alpha]_D$ +82.9 (c 2.9, $CHCl_3$)

Source of chirality: D-mannose as starting material

Methyl 3-O-methyl-4,6-di-O-benzyl-α-D-mannopyranoside

S.H. Khan, J.Ø. Duus, S.C. Crawley, M.M. Palcic, and O. Hindsgaul

Tetrahedron: Asymmetry **1994,** *5,* 2415



$C_{42}H_{47}NO_{15}$

E.e. = 100%

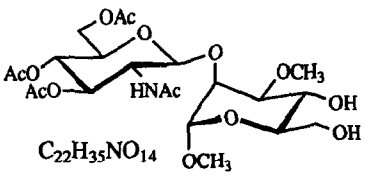
$[\alpha]_D$ +5.1 (c 1,$CHCl_3$)

Source of chirality: D-mannose and D-glucosamine as starting materials

Methyl O-(2-phthalimido-3,4,6-tri-O-acetyl-2-deoxy-β-D-glucopyranosyl)-(1→2)-3-O-methyl-4,6-di-O-benzyl-α-D-mannopyranoside

S.H. Khan, J.Ø. Duus, S.C. Crawley, M.M. Palcic, and O. Hindsgaul

Tetrahedron: Asymmetry **1994,** *5,* 2415

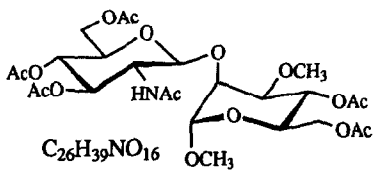


E.e. = 100%
$[\alpha]_D$ -13 (c 0.6, $CHCl_3$)
Source of chirality: D-mannose and D-glucosamine as starting materials

Methyl O-(2-acetamido-3,4,6-tri-O-acetyl-2-deoxy-β-D-glucopyranosyl)-(1→2)-3-O-methyl-α-D-mannopyranoside

S.H. Khan, J.Ø. Duus, S.C. Crawley, M.M. Palcic, and O. Hindsgaul

Tetrahedron: Asymmetry **1994,** *5,* 2415

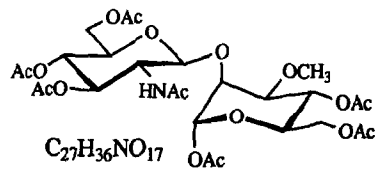


E.e. = 100%
$[\alpha]_D$ +8 (c 1.4,$CHCl_3$)
Source of chirality: D-mannose and D-glucosamine as starting materials

Methyl O-(2-acetamido-3,4,6-tri-O-acetyl-2-deoxy-β-D-glucopyranosyl)-(1→2)-3-O-methyl-4,6-di-O-acetyl-α-D-mannopyranoside

S.H. Khan, J.Ø. Duus, S.C. Crawley, M.M. Palcic, and O. Hindsgaul

Tetrahedron: Asymmetry **1994,** *5,* 2415

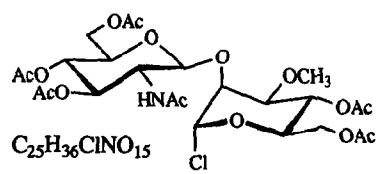


E.e. = 100%
$[\alpha]_D$ +7 (c 2.2, $CHCl_3$)
Source of chirality: D-mannose and D-glucosamine as starting materials

O-(2-Acetamido-3,4,6-tri-O-acetyl-2-deoxy-β-D-glucopyranosyl)-(1→2)-1,4,6-tri-O-acetyl-3-O-methyl-α-D-mannopyranose

S.H. Khan, J.Ø. Duus, S.C. Crawley, M.M. Palcic, and O. Hindsgaul

Tetrahedron: Asymmetry **1994,** *5,* 2415

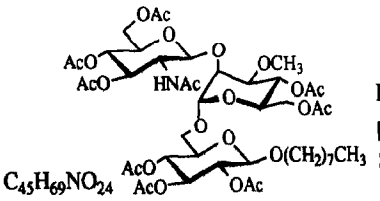


E.e. = 100%
$[\alpha]_D$ +35.5 (c 1.2, $CHCl_3$)
Source of chirality: D-mannose and D-glucosamine as starting materials

O-(2-Acetamido-3,4,6-tri-O-acetyl-2-deoxy-β-D-glucopyranosyl)-(1→2)-1,3,4-tri-O-acetyl-3-O-methyl-α-D-mannopyranosyl chloride

S.H. Khan, J.Ø. Duus, S.C. Crawley, M.M. Palcic, and O. Hindsgaul

Tetrahedron: Asymmetry **1994,** *5,* 2415



$C_{45}H_{69}NO_{24}$

E.e. = 100%

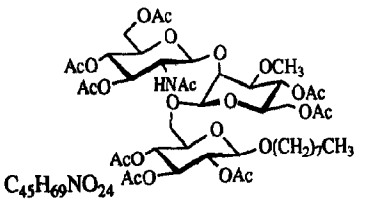
$[\alpha]_D$ +17.3 (c 0.2, $CHCl_3$)

Source of chirality: D-glucose, D-mannose and D-glucosamine as starting materials

Octyl O-(2-acetamido-3,4,6-tri-O-acetyl-2-deoxy-β-D-glucopyranosyl)-(1→2)-O-(3-O-methyl-4,6-di-O-acetyl-α-D-mannopyranosyl)-(1→6)-2,3,4-tri-O-acetyl-β-D-glucopyranoside

S.H. Khan, J.Ø. Duus, S.C. Crawley, M.M. Palcic, and O. Hindsgaul

Tetrahedron: Asymmetry **1994,** *5,* 2415



$C_{45}H_{69}NO_{24}$

E.e. = 100%

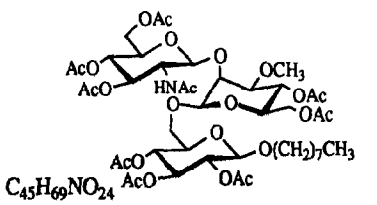
$[\alpha]_D$ -42.1 (c 0.3, $CHCl_3$)

Source of chirality: D-glucose, D-mannose and D-glucosamine as starting materials

Octyl O-(2-acetamido-3,4,6-tri-O-acetyl-2-deoxy-β-D-glucopyranosyl)-(1→2)-O-(3-O-methyl-4,6-di-O-acetyl-β-D-mannopyranosyl)-(1→6)-2,3,4-tri-O-acetyl-β-D-glucopyranoside

S.H. Khan, J.Ø. Duus, S.C. Crawley, M.M. Palcic, and O. Hindsgaul

Tetrahedron: Asymmetry **1994,** *5,* 2415



$C_{45}H_{69}NO_{24}$

E.e. = 100%

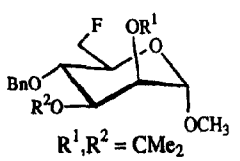
$[\alpha]_D$ -42.1 (c 0.3, $CHCl_3$)

Source of chirality: D-glucose, D-mannose, and D-glucosamine as starting materials

Octyl O-(2-acetamido-3,4,6-tri-O-acetyl-2-deoxy-β-D-glucopyranosyl)-(1→2)-O-(3-O-methyl-4,6-di-O-acetyl-β-D-mannopyranosyl)-(1→6)-2,3,4-tri-O-acetyl-β-D-glucopyranoside

S.H. Khan, J.Ø. Duus, S.C. Crawley, M.M. Palcic, and O. Hindsgaul

Tetrahedron: Asymmetry **1994,** *5,* 2415



$R^1,R^2 = CMe_2$

$C_{17}H_{23}FO_5$

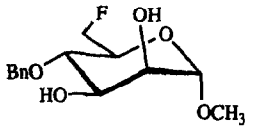
E.e. = 100%

$[\alpha]_D$ +52.7 (c 1.6, $CHCl_3$)

Source of chirality: D-mannose as starting material

Methyl 4-O-benzyl-6-deoxy-6-fluoro-2,3-O-isopropylidene-α-D-mannopyranoside

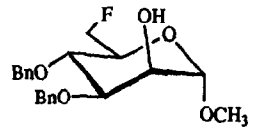
S.H. Khan, J.Ø. Duus, S.C. Crawley, M.M. Palcic, and O. Hindsgaul | *Tetrahedron: Asymmetry* **1994,** *5,* 2415



E.e. = 100%
$[\alpha]_D$ +47 (c 0.1, $CHCl_3$)
Source of chirality: D-mannose as starting material

Methyl 4-O-benzyl-6-deoxy-6-fluoro-α-D-mannopyranoside

S.H. Khan, J.Ø. Duus, S.C. Crawley, M.M. Palcic, and O. Hindsgaul | *Tetrahedron: Asymmetry* **1994,** *5,* 2415

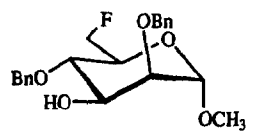


$C_{21}H_{25}FO_5$

E.e. = 100%
$[\alpha]_D$ +41.2 (c 0.2, $CHCl_3$)
Source of chirality: D-mannose as starting material

Methyl 3,4-di-O-benzyl-6-deoxy-6-fluoro-α-D-mannopyranoside

S.H. Khan, J.Ø. Duus, S.C. Crawley, M.M. Palcic, and O. Hindsgaul | *Tetrahedron: Asymmetry* **1994,** *5,* 2415

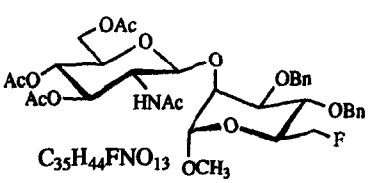


$C_{21}H_{25}FO_5$

E.e. = 100%
$[\alpha]_D$ +11.3 (c 1.5, $CHCl_3$)
Source of chirality: D-mannose as starting material

Methyl 2,4-di-O-benzyl-6-deoxy-6-fluoro-α-D-mannopyranoside

S.H. Khan, J.Ø. Duus, S.C. Crawley, M.M. Palcic, and O. Hindsgaul | *Tetrahedron: Asymmetry* **1994,** *5,* 2415

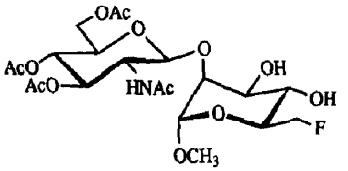


$C_{35}H_{44}FNO_{13}$

E.e. = 100%
$[\alpha]_D$ -2.3 (c 1.1, $CHCl_3$)
Source of chirality: D-mannose and D-glucosamine as starting materials

Methyl O-(2-acetamido-3,4,6-tri-O-acetyl-2-deoxy-β-D-glucopyranosyl)-(1→2)-3,4-di-O-benzyl-6-deoxy-6-fluoro-α-D-mannopyranosie

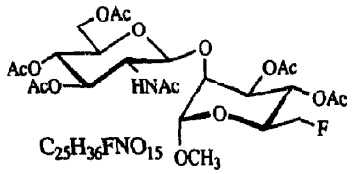
S.H. Khan, J.Ø. Duus, S.C. Crawley, M.M. Palcic, and O. Hindsgaul | *Tetrahedron: Asymmetry* **1994,** *5,* 2415



E.e. = 100%
$[\alpha]_D$ +9.6 (c 1.5, $CHCl_3$)
Source of chirality: D-mannose and D-glucosamine as starting materials

Methyl O-(2-acetamido-3,4,6-tri-O-acetyl-2-deoxy-β-D-glucopyranosyl)-(1→2)-6-deoxy-6-fluoro-α-D-mannopyranoside

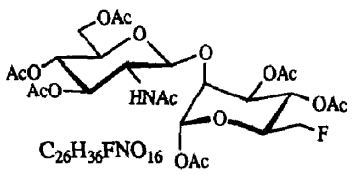
S.H. Khan, J.Ø. Duus, S.C. Crawley, M.M. Palcic, and O. Hindsgaul | *Tetrahedron: Asymmetry* **1994,** *5,* 2415



E.e. = 100%
$[\alpha]_D$ -0.6 (c 1.2, $CHCl_3$)
Source of chirality: D-mannose and D-glucosamine as starting materials

Methyl 2-O-(2-acetamido-3,4,6-tri-O-acetyl-2-deoxy-β-D-glucopyranosyl)-(1→2)-3,4-di-O-acetyl-6-deoxy-6-fluoro-α-D-mannopyranoside

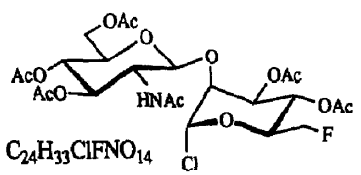
S.H. Khan, J.Ø. Duus, S.C. Crawley, M.M. Palcic, and O. Hindsgaul | *Tetrahedron: Asymmetry* **1994,** *5,* 2415



E.e. = 100%
$[\alpha]_D$ -0.3 (c 1.6, $CHCl_3$)
Source of chirality: D-mannose and D-glucosamine as starting materials

O-(2-Acetamido-3,4,6-tri-O-acetyl-2-deoxy-β-D-glucopyranosyl)-(1→2)-1,3,4-tri-O-acetyl-6-deoxy-6-fluoro-α-D-mannopyranoside

S.H. Khan, J.Ø. Duus, S.C. Crawley, M.M. Palcic, and O. Hindsgaul | *Tetrahedron: Asymmetry* **1994,** *5,* 2415

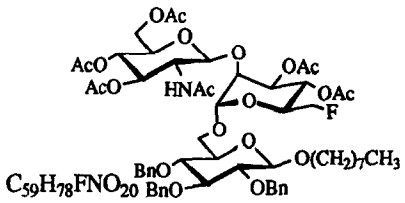


E.e. = 100%
$[\alpha]_D$ +45.5 (c 0.8, $CHCl_3$)
Source of chirality: D-mannose and D-glucosamine as starting materials

O-(2-Acetamido-3,4,6-tri-O-acetyl-2-deoxy-β-D-glucopyranosyl)-(1→2)-3,4-di-O-acetyl-6-deoxy-6-fluoro-α-D-mannopyranosyl chloride

S.H. Khan, J.Ø. Duus, S.C. Crawley, M.M. Palcic, and O. Hindsgaul

Tetrahedron: Asymmetry **1994,** *5,* 2415



$C_{59}H_{78}FNO_{20}$

E.e. = 100%

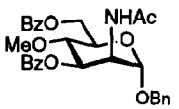
$[\alpha]_D$ +15.3 (c 1.4, $CHCl_3$)

Source of chirality: D-glucose, D-mannose and D-glucosamine as starting materials

Octyl O-(2-acetamido-3,4,6-tri-O-acetyl-2-deoxy-β-D-glucopyranosyl-(1→2)-O-(3,4-di-O-acetyl-6-deoxy-6-fluoro-α-D-mannopyranosyl)-(1→6)-2,3,4-tri-O-benzyl-β-D-glucopyranoside

Randall L. Halcomb, Wolfgang Fitz and Chi-Huey Wong

Tetrahedron: Asymmetry **1994,** *5,* 2437



$[\alpha]^{25}_D = +65.2$(c1.2,$CHCl_3$)

Source of chirality: *N*-acetyl-D-mannosamine

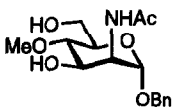
Absolute configuration 1*S*,2*S*,3*R*,4*R*,5*R*

$C_{30}H_{31}NO_8$

phenylmethyl 2-acetylamino-3,6-di-*O*-benzoyl-2-deoxy-4-*O*-methyl-α-D-mannopyranoside

Randall L. Halcomb, Wolfgang Fitz and Chi-Huey Wong

Tetrahedron: Asymmetry **1994,** *5,* 2437



$[\alpha]^{25}_D = +119$(c1.2,$CHCl_3$)

Source of chirality: *N*-acetyl-D-mannosamine

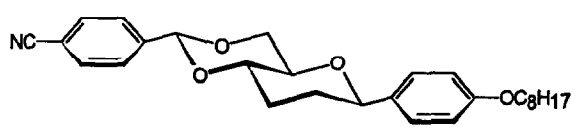
Absolute configuration 1*S*,2*S*,3*R*,4*S*,5*R*

$C_{16}H_{23}NO_6$

phenylmethyl 2-acetylamino-2-deoxy-4-*O*-methyl-α-D-mannopyranoside

V. Vill, H.-W. Tunger, H. Stegemeyer, K. Diekmann

Tetrahedron: Asymmetry **1994,** *5,* 2443



$C_{28}H_{35}O_4N$

E. e. = 100 %

$[\alpha]^{20}_D = +33$ (c = 0.1, $CHCl_3$)

Source of chirality: tri-O-acetyl-D-glucal

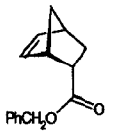
Absolute configuration: 1S,3R,6R,8R

(assigned by ^1H NMR studies)

(1S,3R,6R,8R)-3-(4''-cyanophenyl)-8-(4'-octoxyphenyl)-2,4,7-trioxabicyclo[4.4.0]decane

M. R. Banks, J. I. G. Cadogan, I. Gosney, S. Gaur, P. K. G. Hodgson

Tetrahedron: Asymmetry **1994**, *5*, 2447



$C_{15}H_{16}O_2$

endo D.e. = 82% [from ^{1}H NMR of precursor]

Absolute configuration: 3S, 4S, 6S

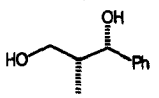
$[\alpha]_D^{22} = -114$ (c 0.41, CH_2Cl_2)

Source of chirality: prepared from (5S, 9S)-*N*-(acryloyl)-4-aza-5,9:6,10-di-*O*-isopropylidene-2,8-dioxabicyclo[4.3.0]nonan-3-one and cyclopentadiene

Benzyl (3S, 4S, 6S)-bicyclo[2.2.1]heptene-4-carboxylate

M. R. Banks, J. I. G. Cadogan, I. Gosney, S. Gaur, P. K. G. Hodgson

Tetrahedron: Asymmetry **1994**, *5*, 2447



$C_9H_{14}O_2$

D.e. = 82% [from ^{1}H NMR of precursor]

Absolute configuration: 1S, 2R

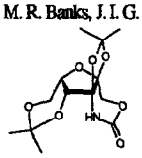
$[\alpha]_D^{25} = -53.5$ (c 0.48, $CHCl_3$)

Source of chirality: prepared from (5S, 9S)-*N*-propionyl-4-aza-5,9:6,10-di-*O*-isopropylidene-2,8-dioxabicyclo[4.3.0]nonan-3-one and benzaldehyde

(1S, 2R)-1-Phenyl-2-methylpropane-1,3-diol

M. R. Banks, J. I. G. Cadogan, I. Gosney, S. Gaur, P. K. G. Hodgson

Tetrahedron: Asymmetry **1994**, *5*, 2447



$C_{12}H_{19}NO_7$

Absolute configuration: 5S, 9R

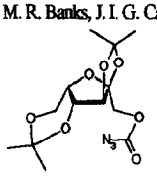
$[\alpha]_D^{24} = +21.6$ (c 2.26, CH_2Cl_2)

Source of chirality: 2,3:4,6-di-*O*-isopropylidene-2-keto-L-gulonic acid

(5S, 9S)-4-Aza-5,9:6,10-di-*O*-isopropylidene-2,8-dioxabicyclo[4.3.0]nonan-3-one

M. R. Banks, J. I. G. Cadogan, I. Gosney, S. Gaur, P. K. G. Hodgson

Tetrahedron: Asymmetry **1994**, *5*, 2447



$C_{13}H_{19}N_3O_7$

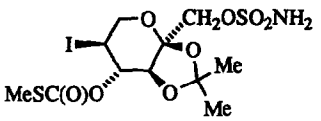
Absolute configuration: 2S

$[\alpha]_D^{24} = -47.1$ (c 1.94, CH_2Cl_2)

Source of chirality: 2,3:4,6-di-*O*-isopropylidene-2-keto-L-gulonic acid

2,3:4,6-Di-*O*-isopropylidene-2-keto-L-gulofuranose-2-methylazidoformate

M. J. Costanzo, H. R. Almond, Jr., A. D. Gauthier, and B. E. Maryanoff * | *Tetrahedron: Asymmetry* **1994,** *5,* 2459



$C_{11}H_{18}INO_8S_2$
5-Deoxy-5-iodo-2,3-*O*-(1-methylethylidene)-4-(methylthiocarbonyl)-α-L-sorbopyranose Sulfamate

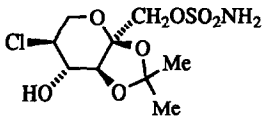
$[\alpha]_D^{25}$ +39.4 (*c* 1.00, MeOH)

Source of chirality: prepared from D-fructose

$^3S_0$ conformer predominates in solution and solid states.

Relative and absolute stereochemistry were confirmed by X-ray crystallography.

M. J. Costanzo, H. R. Almond, Jr., A. D. Gauthier, and B. E. Maryanoff * | *Tetrahedron: Asymmetry* **1994,** *5,* 2459



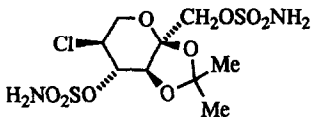
$C_9H_{16}ClNO_7S$
5-Chloro-5-deoxy-2,3-*O*-(1-methylethylidene)-α-L-sorbopyranose Sulfamate

$[\alpha]_D^{25}$ +7.7 (*c* 1.00, MeOH)
Source of chirality: prepared from D-fructose

$^3S_0$ conformer predominates in solution (^{1}H NMR).

Contained 0.14 equiv of 5-chloro-5-deoxy-2,3-*O*-(1-methylethylidene)-4-sulfamoyl-α-L-sorbopyranose sulfamate (•0.14 $C_9H_{17}ClN_2O_9S_2$).

M. J. Costanzo, H. R. Almond, Jr., A. D. Gauthier, and B. E. Maryanoff * | *Tetrahedron: Asymmetry* **1994,** *5,* 2459



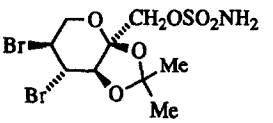
$C_9H_{17}ClN_2O_9S_2$
5-Chloro-5-deoxy-2,3-*O*-(1-methylethylidene)-4-sulfamoyl-α-L-sorbopyranose Sulfamate

$[\alpha]_D^{20}$ +20.4 (*c* 1.00, MeOH)
Source of chirality: prepared from D-fructose

$^3S_0$ conformer predominates in solution (^{1}H NMR).

Contained 0.67 equiv of 5-chloro-5-deoxy-2,3-*O*-(1-methylethylidene)-α-L-sorbopyranose sulfamate (•0.67 $C_9H_{16}ClNO_7S$).

M. J. Costanzo, H. R. Almond, Jr., A. D. Gauthier, and B. E. Maryanoff * | *Tetrahedron: Asymmetry* **1994,** *5,* 2459



$C_9H_{15}Br_2NO_6S$
4,5-Dibromo-4,5-dideoxy-2,3-*O*-(1-methylethylidene)-α-L-sorbopyranose Sulfamate

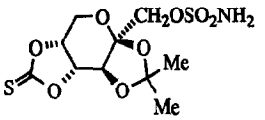
$[\alpha]_D^{25}$ +20.1 (*c* 1.00, MeOH)
Source of chirality: prepared from D-fructose

$^3S_0$ conformer predominates in solution (^{1}H NMR).

Contained 0.24 equiv of the presumed 4,5-dibromo-4,5-dideoxy-2,3-*O*-(1-methylethylidene)-β-D-tagatopyranose sulfamate isomer by proton and carbon NMR.

M. J. Costanzo, H. R. Almond, Jr., A. D. Gauthier, and B. E. Maryanoff *

Tetrahedron: Asymmetry **1994,** *5,* 2459



$[\alpha]_D^{20}$ -75.1 (*c* 1.75, MeOH)

Source of chirality: prepared from D-fructose

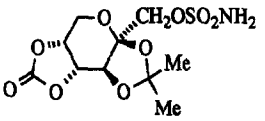
$^3S_0$ conformer predominates in solution (^{1}H NMR).

$C_{10}H_{15}NO_8S_2$

2,3-*O*-(1-Methylethylidene)-4,5-*O*-thiocarbonyl-β-D-fructopyranose Sulfamate

M. J. Costanzo, H. R. Almond, Jr., A. D. Gauthier, and B. E. Maryanoff *

Tetrahedron: Asymmetry **1994,** *5,* 2459



$[\alpha]_D^{20}$ -45.5 (*c* 0.48, MeOH)

Source of chirality: prepared from D-fructose

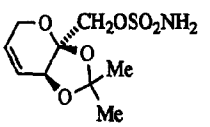
$^3S_0$ conformer predominates in solution (^{1}H NMR).

$C_{10}H_{15}NO_9S$

2,3-*O*-(1-Methylethylidene)-4,5-*O*-carbonyl-β-D-fructopyranose Sulfamate

M. J. Costanzo, H. R. Almond, Jr., A. D. Gauthier, and B. E. Maryanoff *

Tetrahedron: Asymmetry **1994,** *5,* 2459



$[\alpha]_D^{25}$ -0.9 (*c* 1.13, MeOH)

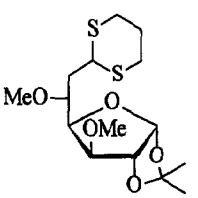
Source of chirality: prepared from D-fructose

$C_9H_{15}NO_6S$

4,5-Dideoxy-2,3-*O*-(1-methylethylidene)-β-D-fruct-4-enopyranose Sulfamate

Karsten Krohn*, Stephan Gringard, and Guido Börner

Tetrahedron: Asymmetry **1994,** *5,* 2485



$[\alpha]_D^{20}$ = +21.1(c 1.05, $CHCl_3$)

Source of chirality: D-Glucose

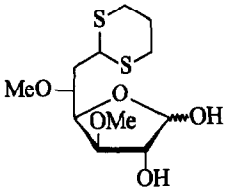
Absolute configuration: 1R,2R,3S,4R,5R

$C_{15}H_{26}O_5S_2$

6-Deoxy-6-*C*-(1,3-dithiane-2-yl)-1,2-*O*-isopropylidene-3,5-di-*O*-methyl-α-D-glucofuranoside

Karsten Krohn*, Stephan Gringard, and Guido Börner

Tetrahedron: Asymmetry **1994,** *5,* 2485



$[\alpha]_D^{20}$ = +20.85(c 0.95, $CHCl_3$)

Source of chirality: D-Glucose

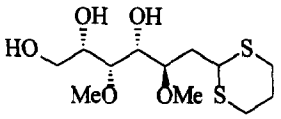
Absolute configuration: 1S,2R,3S,4R,5R

$C_{12}H_{22}O_5S_2$

6-Deoxy-6-*C*-(1,3-dithiane-2-yl)-3,5-di-*O*-methyl-α-(and β-)-D-glucofuranose

Karsten Krohn*, Stephan Gringard, and Guido Börner

Tetrahedron: Asymmetry **1994,** *5,* 2485



$[\alpha]_D^{25}$ = −5.5(c 1.01, $CHCl_3$)

Source of chirality: D-Glucose

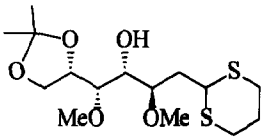
Absolute configuration: 3R,4R,5R,6S

$C_{12}H_{24}O_5S_2$

2-Deoxy-3,5-di-*O*-methyl-L-*manno*-heptose Trimethylene Dithioacetal

Karsten Krohn*, Stephan Gringard, and Guido Börner

Tetrahedron: Asymmetry **1994,** *5,* 2485



$[\alpha]_D^{20}$ = −8.8(c 0.985, $CHCl_3$)

Source of chirality: D-Glucose

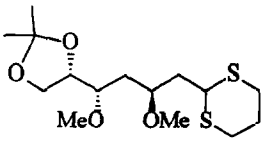
Absolute configuration: 3R,4R,5R,6S

$C_{15}H_{28}O_5S_2$

2-Deoxy-6,7-*O*-isopropylidene-3,5-di-*O*-methyl-L-*manno*-heptose Trimethylene Dithioacetal

Karsten Krohn*, Stephan Gringard, and Guido Börner

Tetrahedron: Asymmetry **1994,** *5,* 2485



$[\alpha]_D^{20}$ = −23.7(c 1.13, $CHCl_3$)

Source of chirality: D-Glucose

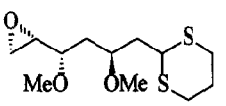
Absolute configuration: 3S,5S,6S

$C_{15}H_{28}O_4S_2$

2,4-Dideoxy-6,7-*O*-isopropylidene-3,5-di-*O*-methyl-L-*xylo*-heptose Trimethylene Dithioacetal

Karsten Krohn*, Stephan Gringard, and Guido Börner

Tetrahedron: Asymmetry **1994**, *5*, 2485



$C_{12}H_{22}O_3S_2$

6,7-Anhydro-2,4-dideoxy-3,5-di-*O*-methyl-L-*xylo*-heptose Trimethylene Dithioacetal

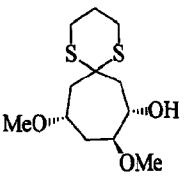
$[\alpha]_D^{20} = -8.63$(c 1.10, $CHCl_3$)

Source of chirality: D-Glucose

Absolute configuration: 3S,5S,6S

Karsten Krohn*, Stephan Gringard, and Guido Börner

Tetrahedron: Asymmetry **1994**, *5*, 2485



$C_{12}H_{22}O_3S_2$

9,11-Dimethoxy-1,5-dithia-spiro[5,6]dodecan-8-ol

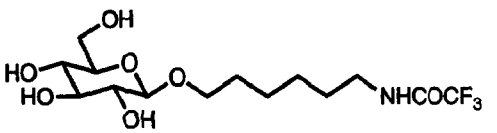
$[\alpha]_D^{23} = +3.4$(c 0.41, $CHCl_3$)

Source of chirality: D-Glucose

Absolute configuration: 8S,9S,11S

G. Vic and D.H.G. Crout

Tetrahedron: Asymmetry **1994**, *5*, 2513



6'-Trifluoroacetamidohexyl-*O*-β-D-glucopyranoside

E.e. = 100%

$[\alpha]_D^{27} = -17.1$ (c 0.29, MeOH)

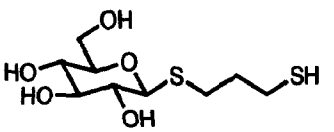
Source of chirality: natural

Absolute configuration: 1R, 2R, 3S, 4R, 5R

(from D-glucose as starting material)

G. Vic and D.H.G. Crout

Tetrahedron: Asymmetry **1994**, *5*, 2513



3'-Thiopropyl-*S*-β-D-glucopyranoside

E.e. = 100%

$[\alpha]_D^{27} = -49.6$ (c 0.38, MeOH)

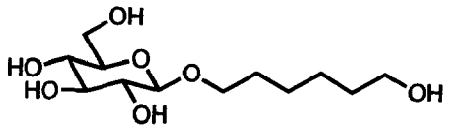
Source of chirality: natural

Absolute configuration: 1R, 2R, 3S, 4R, 5R

(from D-glucose as starting material)

G. Vic and D.H.G. Crout

Tetrahedron: Asymmetry **1994,** *5,* 2513

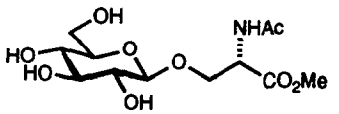


6'-Hydroxyhexyl-*O*-β-D-glucopyranoside

E.e. = 100%
$[\alpha]_D^{27}$ = -31.6 (c 0.28, H_2O)
Source of chirality: natural
Absolute configuration: 1R, 2R, 3S, 4R, 5R
(from D-glucose as starting material)

A. Baker, N.J. Turner, and M.C. Webberley

Tetrahedron: Asymmetry **1994,** *5,* 2517



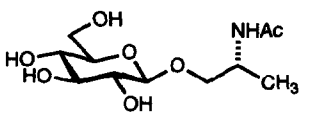
$C_{12}H_{21}NO_9$

1-*O*-β-D-[Methyl (2*S*)-N-acetamido-3-hydroxypropanoate]-glucopyranoside

D.e. = >99%
$[\alpha]_D^{26}$ = -112.3 (c = 2, MeOH)

A. Baker, N.J. Turner, and M.C. Webberley

Tetrahedron: Asymmetry **1994,** *5,* 2517



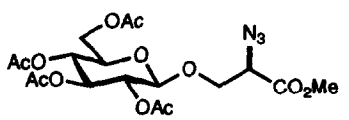
$C_{11}H_{20}NO_7$

1-*O*-β-D-[(2*R*)-N-acetamidopropanol]-glucopyranoside

D.e. = >99%
$[\alpha]_D^{24}$ = +11.7 (c = 0.9, MeOH)

A. Baker, N.J. Turner, and M.C. Webberley

Tetrahedron: Asymmetry **1994,** *5,* 2517



$C_{18}H_{25}N_3O_{12}$

1-*O*-β-D-[Methyl (2*R*)-azido-3-hydroxypropanoate]-glucopyranosyl tetra-*O*-acetate

D.e. = 70%
$[\alpha]_D^{23}$ = -9 (c = 1, $CHCl_3$)

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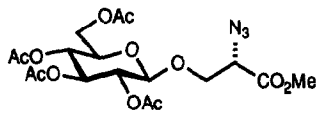
Tetrahedron: Asymmetry **1994,** *5,* 2517



D.e. = 80%

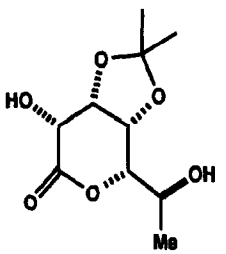
$[\alpha]_D^{23}$ = -13 (c = 1, $CHCl_3$)

$C_{18}H_{25}N_3O_{12}$

1-*O*-β-D-[Methyl (2*S*)-azido-3-hydroxypropanoate]-glucopyranosyl tetra-*O*-acetate

J. R. Wheatley, A. R. Beacham, P. M. de Q. Lilley, D. J. Watkin and G. W. J. Fleet

Tetrahedron: Asymmetry **1994,** *5,* 2523



E.e. = 100%

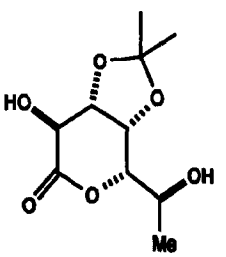
$[\alpha]_D^{24}$ = -89.9 (*c*, 1.05 in $CHCl_3$)

7-Deoxy-3,4-*O*-isopropylidene-L-*glycero*-L-*talo*-heptono-1,5-lactone
$C_{10}H_{16}O_6$

Source of chirality: L-rhamnose as starting material

J. R. Wheatley, A. R. Beacham, P. M. de Q. Lilley, D. J. Watkin and G. W. J. Fleet

Tetrahedron: Asymmetry **1994,** *5,* 2523



E.e. = 100%

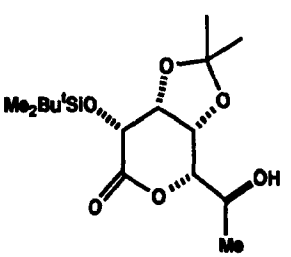
$[\alpha]_D^{23}$ = -114.8 (*c*, 1.5 in $CHCl_3$)

7-Deoxy-3,4-*O*-isopropylidene-L-*glycero*-L-*galacto*-heptono-1,5-lactone
$C_{10}H_{16}O_6$

Source of chirality: L-rhamnose as starting material

J. R. Wheatley, A. R. Beacham, P. M. de Q. Lilley, D. J. Watkin and G. W. J. Fleet

Tetrahedron: Asymmetry **1994,** *5,* 2523



E.e. = 100%

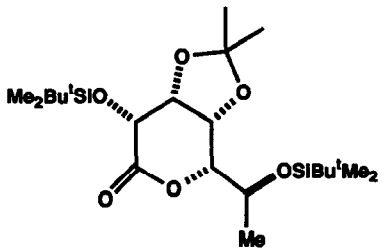
$[\alpha]_D^{25}$ = -45.1 (*c*, 1.05 in $CHCl_3$)

2-*O*-*tert*-Butyldimethylsilyl-7-deoxy-3,4-*O*-isopropylidene-L-*glycero*-L-*talo*-heptono-1,5-lactone
$C_{16}H_{30}O_6Si$

Source of chirality: L-rhamnose as starting material

J. R. Wheatley, A. R. Beacham, P. M. de Q. Lilley, D. J. Watkin and G. W. J. Fleet

Tetrahedron: Asymmetry **1994,** *5,* 2523



E.e. = 100%

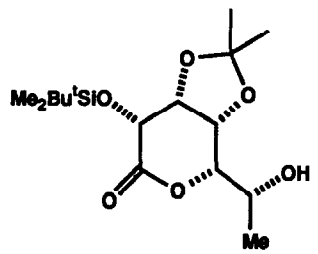
$[\alpha]_D^{25}$ = -32.5 (*c*, 1.1 in $CHCl_3$)

7-Deoxy-2,6-di-*O*-*tert*-butyldimethylsilyl-3,4-*O*-isopropylidene-L-*glycero*-L-*talo*-heptono-1,5-lactone
$C_{22}H_{44}O_6Si_2$

Source of chirality: L-rhamnose as starting material

J. R. Wheatley, A. R. Beacham, P. M. de Q. Lilley, D. J. Watkin and G. W. J. Fleet

Tetrahedron: Asymmetry **1994,** *5,* 2523



E.e. = 100%

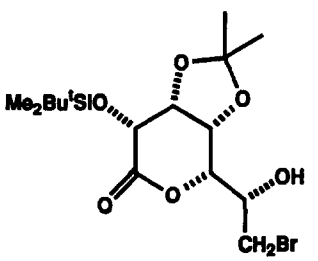
$[\alpha]_D^{20}$ = -37.8 (*c*, 0.5 in $CHCl_3$)

2-*O*-*tert*-Butyldimethylsilyl-7-deoxy-3,4-*O*-isopropylidene-D-*glycero*-L-*talo*-heptono-1,5-lactone
$C_{16}H_{30}O_6Si$

Source of chirality: D-gulonolactone as starting material

J. R. Wheatley, A. R. Beacham, P. M. de Q. Lilley, D. J. Watkin and G. W. J. Fleet

Tetrahedron: Asymmetry **1994,** *5,* 2523



E.e. = 100%

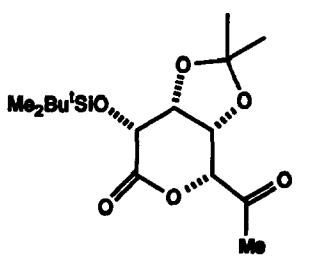
$[\alpha]_D^{20}$ = -26.8 (*c*, 1.2 in $CHCl_3$)

7-Bromo-2-*O*-*tert*-butyldimethylsilyl-7-deoxy-3,4-*O*-isopropylidene-D-*glycero*-L-*talo*-heptono-1,5-lactone
$C_{16}H_{29}BrO_6Si$

Source of chirality: D-gulonolactone as starting material

J. R. Wheatley, A. R. Beacham, P. M. de Q. Lilley, D. J. Watkin and G. W. J. Fleet

Tetrahedron: Asymmetry **1994,** *5,* 2523



E.e. = 100%

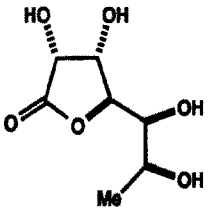
$[\alpha]_D^{20}$ = +23.9 (*c*, 1.0 in $CHCl_3$)

2-*O*-*tert*-Butyldimethylsilyl-7-deoxy-3,4-*O*-isopropylidene-L-*talo*-6-heptulosono-1,5-lactone
$C_{16}H_{28}O_6Si$

Source of chirality: D-gulonolactone or L-rhamnose as alternative starting materials

J. R. Wheatley, A. R. Beacham, P. M. de Q. Lilley, D. J. Watkin and G. W. J. Fleet

Tetrahedron: Asymmetry **1994**, *5*, 2523



E.e. = 100%

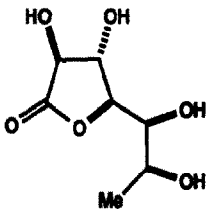
$[\alpha]_D^{22} = +51.4$ (*c*, 1.0 in MeOH)

7-Deoxy-L-*glycero*-L-*talo*-heptono-1,4-lactone
$C_7H_{12}O_6$

Source of chirality: L-rhamnose as starting material

J. R. Wheatley, A. R. Beacham, P. M. de Q. Lilley, D. J. Watkin and G. W. J. Fleet

Tetrahedron: Asymmetry **1994**, *5*, 2523



E.e. = 100%

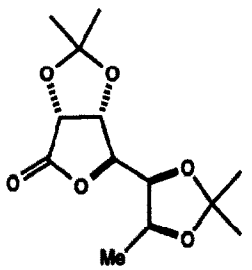
$[\alpha]_D^{22} = +82.8$ (*c*, 0.75 in MeOH)

7-Deoxy-L-*glycero*-L-*galacto*-heptono-1,4-lactone
$C_7H_{12}O_6$

Source of chirality: L-rhamnose as starting material

J. R. Wheatley, A. R. Beacham, P. M. de Q. Lilley, D. J. Watkin and G. W. J. Fleet

Tetrahedron: Asymmetry **1994**, *5*, 2523



E.e. = 100%

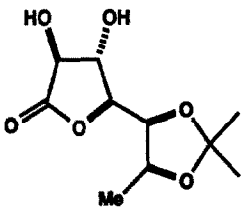
$[\alpha]_D^{25} = +19.8$ (*c*, 1.05 in $CHCl_3$)

7-Deoxy-2,3:5,6-di-*O*-isopropylidene-L-*glycero*-L-*talo*-heptono-1,4-lactone
$C_{13}H_{20}O_6$

Source of chirality: L-rhamnose as starting material

J. R. Wheatley, A. R. Beacham, P. M. de Q. Lilley, D. J. Watkin and G. W. J. Fleet

Tetrahedron: Asymmetry **1994**, *5*, 2523



E.e. = 100%

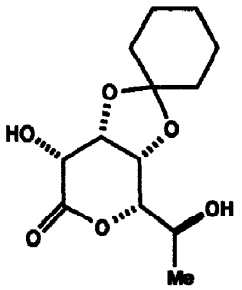
$[\alpha]_D^{25} = +97.8$ (*c*, 1.05 in $CHCl_3$)

7-Deoxy-5,6-*O*-isopropylidene-L-*glycero*-L-*galacto*-heptono-1,4-lactone
$C_{10}H_{16}O_6$

Source of chirality: L-rhamnose as starting material

J. R. Wheatley, A. R. Beacham, P. M. de Q. Lilley, D. J. Watkin and G. W. J. Fleet

Tetrahedron: Asymmetry **1994**, *5*, 2523



E.e. = 100%

$[\alpha]_D^{22}$ = -74.5 (*c*, 1.2 in $CHCl_3$)

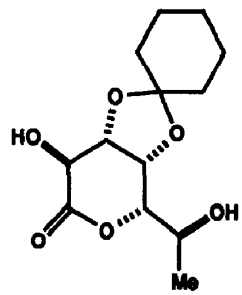
3,4-*O*-Cyclohexylidene-7-deoxy-L-*glycero*-L-*talo*-heptono-1,5-lactone

$C_{13}H_{20}O_6$

Source of chirality: L-rhamnose as starting material

J. R. Wheatley, A. R. Beacham, P. M. de Q. Lilley, D. J. Watkin and G. W. J. Fleet

Tetrahedron: Asymmetry **1994**, *5*, 2523



E.e. = 100%

$[\alpha]_D^{22}$ = -98.2 (*c*, 1.05 in $CHCl_3$)

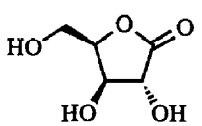
3,4-*O*-Cyclohexylidene-7-deoxy-L-*glycero*-L-*galacto*-heptono-1,5-lactone

$C_{13}H_{20}O_6$

Source of chirality: L-rhamnose as starting material

So-Yeop Han, Madeleine M. Joullié*, Valery V. Fokin and Nicos A. Petasis*

Tetrahedron: Asymmetry **1994**, *5*, 2535



$C_5H_7O_5$

L-Arabinono-1,4-lactone

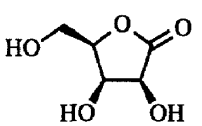
$[\alpha]_D^{22}$ = –74.0 (c 0.54, H_2O)

Source of chirality: L-(+)-arabinose

Absolute configuration: 2R, 3R, 4R

So-Yeop Han, Madeleine M. Joullié*, Valery V. Fokin and Nicos A. Petasis*

Tetrahedron: Asymmetry **1994**, *5*, 2535



$C_5H_7O_5$

D-Lyxono-1,4-lactone

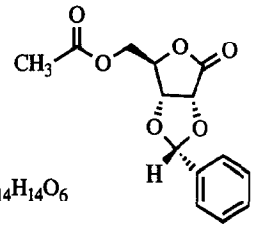
$[\alpha]_D^{22}$ = +79.1 (c 0.54, H_2O)

Source of chirality: D-lyxose

Absolute configuration: 2S, 3R, 4R

So-Yeop Han, Madeleine M. Joullié*, Valery V. Fokin and Nicos A. Petasis*

Tetrahedron: Asymmetry **1994**, *5*, 2535



$C_{14}H_{14}O_6$

5-O-Acetyl-2,3-O-(R)-benzylidene-D-ribono-1,4-lactone

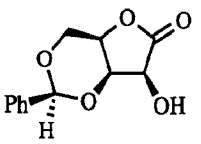
$[\alpha]_D^{22} = -72.5$ (c 1.48, $CHCl_3$)

Source of chirality: D-ribose

Absolute configuration: 2R, 3R, 4R, 6R

So-Yeop Han, Madeleine M. Joullié*, Valery V. Fokin and Nicos A. Petasis*

Tetrahedron: Asymmetry **1994**, *5*, 2535



$C_{12}H_{12}O_5$

3,5-O-(S)-Benzylidene-D-lyxono-1,4-lactone

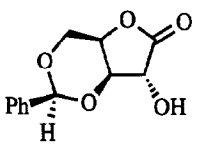
$[\alpha]_D^{22} = +31.1$ (c 0.23, acetone)

Source of chirality: D-lyxose

Absolute configuration: 2S, 3R, 4R, 6S

So-Yeop Han, Madeleine M. Joullié*, Valery V. Fokin and Nicos A. Petasis*

Tetrahedron: Asymmetry **1994**, *5*, 2535



$C_{12}H_{12}O_5$

3,5-O-(S)-Benzylidene-D-xylono-1,4-lactone

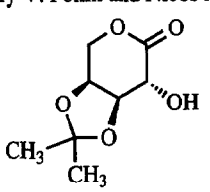
$[\alpha]_D^{22} = +81.1$ (c 0.46, $CHCl_3$)

Source of chirality: D-(+)-xylose

Absolute configuration: 2R, 3R, 4R, 6S

So-Yeop Han, Madeleine M. Joullié*, Valery V. Fokin and Nicos A. Petasis*

Tetrahedron: Asymmetry **1994**, *5*, 2535



$C_8H_{12}O_5$

3,5-O-Isopropylidene-L-arabinono-1,4-lactone

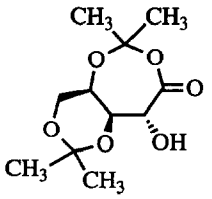
$[\alpha]_D^{22} = -9.8$ (c 1.8, methanol)

Source of chirality: D-(+)-xylose

Absolute configuration: 2R, 3R, 4S

So-Yeop Han, Madeleine M. Joullié*, Valery V. Fokin and Nicos A. Petasis*

Tetrahedron: Asymmetry **1994,** *5,* 2535



$C_{11}H_{18}O_6$

1,4:3,4-Di-O-isopropylidene-D-xylono-1,4-lactone

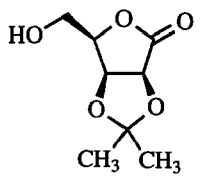
$[\alpha]_D^{22} = +29.1$ (c 0.39, $CHCl_3$)

Source of chirality: D-(+)-xylose

Absolute configuration: 2S, 3S, 4S

So-Yeop Han, Madeleine M. Joullié*, Valery V. Fokin and Nicos A. Petasis*

Tetrahedron: Asymmetry **1994,** *5,* 2535



$C_8H_{12}O_5$

2,3-O-Isopropylidene-D-lyxono-1,4-lactone

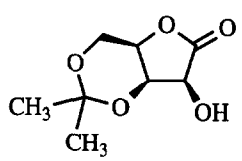
$[\alpha]_D^{22} = +92.3$ (c 0.37, acetone)

Source of chirality: D-lyxose

Absolute configuration: 2S, 3S, 4R

So-Yeop Han, Madeleine M. Joullié*, Valery V. Fokin and Nicos A. Petasis*

Tetrahedron: Asymmetry **1994,** *5,* 2535



$C_8H_{12}O_5$

3,5-O-Isopropylidene-D-lyxono-1,4-lactone

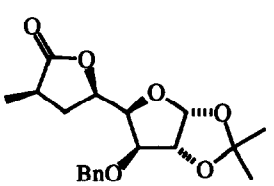
$[\alpha]_D^{22} = +30.4$ (c 0.27, acetone)

Source of chirality: D-lyxose

Absolute configuration: 2S, 3R, 4R

S.G. Davies, H.M. Kellie and R. Polywka

Tetrahedron: Asymmetry **1994,** *5,* 2563



$C_{19}H_{24}O_6$

7(*R*)-Methyl-3-*O*-benzyl-6,7-dideoxy-1,2-*O*-isopropylidene-α-D-*gluco*-octafuranurono-5,8-lactone

e.e. = 100%

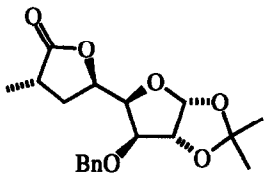
$[\alpha]_D^{20} = +37.5$ (c 3.20, $CHCl_3$)

Source of chirality: D-glucose and

(*R*)-[$(C_5H_5)Fe(CO)(PPh_3)COCH_2CH_3$]

S.G. Davies, H.M. Kellie and R. Polywka

Tetrahedron: Asymmetry **1994,** *5,* 2563



e.e. = 100%

$[\alpha]_D^{20}$ = -40.8 (c 0.18, $CHCl_3$)

Source of chirality: D-glucose and

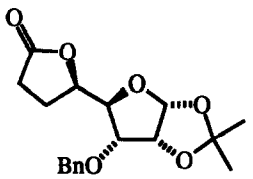
(*S*)-[$(C_5H_5)Fe(CO)(PPh_3)COCH_2CH_3$]

$C_{19}H_{24}O_6$

7(*S*)-Methyl-3-*O*-benzyl-6,7-dideoxy-1,2-*O*-isopropylidene-α-D-*gluco*-octafuranurono-5,8-lactone

S.G. Davies, H.M. Kellie and R. Polywka

Tetrahedron: Asymmetry **1994,** *5,* 2563



e.e. = 100%

$[\alpha]_D^{20}$ = +61.4 (c 0.07, $CHCl_3$)

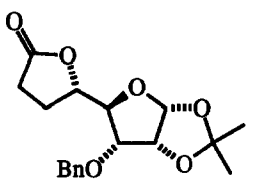
Source of chirality: D-glucose

$C_{18}H_{22}O_6$

3-*O*-Benzyl-6,7-dideoxy-1,2-*O*-isopropylidene-α-D-*allo*-octafuranurono-5,8-lactone

S.G. Davies, H.M. Kellie and R. Polywka

Tetrahedron: Asymmetry **1994,** *5,* 2563



e.e. = 100%

$[\alpha]_D^{20}$ = +63.6 (c 0.12, $CHCl_3$)

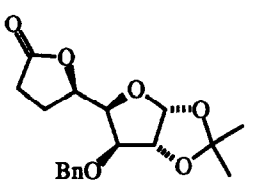
Source of chirality: D-glucose

$C_{18}H_{22}O_6$

3-*O*-Benzyl-6,7-dideoxy-1,2-*O*-isopropylidene-β-L-*talono*-octafuranurono-5,8-lactone

S.G. Davies, H.M. Kellie and R. Polywka

Tetrahedron: Asymmetry **1994,** *5,* 2563



e.e. = 100%

$[\alpha]_D^{20}$ = -50.3 (c 4.10, $CHCl_3$)

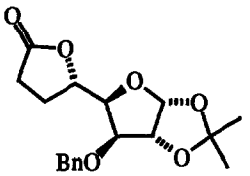
Source of chirality: D-glucose

$C_{18}H_{22}O_6$

3-*O*-Benzyl-6,7-dideoxy-1,2-*O*-isopropylidene-α-D-*gluco*-octafuranurono-5,8-lactone

S.G. Davies, H.M. Kellie and R. Polywka

Tetrahedron: Asymmetry **1994,** *5,* 2563



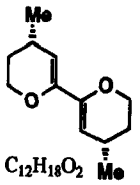
e.e. = 100%
$[\alpha]_D^{20}$ = -71.7 (c 0.18, $CHCl_3$)
Source of chirality: D-glucose

$C_{18}H_{22}O_6$

3-*O*-Benzyl-6,7-dideoxy-1,2-*O*-isopropylidene-β-L-*ido*-octafuranurono-5,8-lactone

P. J. Edwards, D. A. Entwistle, C. Genicot, S. V. Ley and G. Visentin

Tetrahedron: Asymmetry **1994,** *5,* 2609



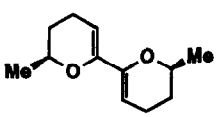
e.e.= 92% (by chiral G.C.)
$[\alpha]_D^{28}$ = -59.5 (c=0.39 in $CHCl_3$)
Source of chirality: enzymatic hydrolysis of *meso*-diester
Absolute configuration: 4*S*,4'*S*

$C_{12}H_{18}O_2$

(4*S*,4'*S*)-4,4'-Dimethyl-3,3'-dihydro-6,6'-bi-2*H*-pyran

P. J. Edwards, D. A. Entwistle, C. Genicot, S. V. Ley and G. Visentin

Tetrahedron: Asymmetry **1994,** *5,* 2609



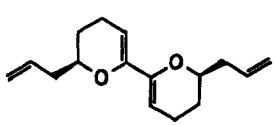
e.e.=100% (from (*S*)- lactic acid)
$[\alpha]_D^{25}$ = -94.9 (c=1.00 in $CHCl_3$)
Source of chirality: lactic acid
Absolute configuration: 2*S*,2'*S*

$C_{12}H_{18}O_2$

(2*S*,2'*S*)-2,2'-Dimethyl-3,3',4,4'-tetrahydro-6,6'-bi-2*H*-pyran

P. J. Edwards, D. A. Entwistle, C. Genicot, S. V. Ley and G. Visentin

Tetrahedron: Asymmetry **1994,** *5,* 2609



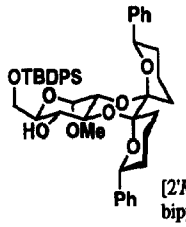
e.e.= 90% (by chiral G.C.)
$[\alpha]_D^{25}$ = -122.8 (c=1.10 in $CHCl_3$)
Source of chirality: enzymatic resolution
Absolute configuration: 2*R*,2'*R*

$C_{16}H_{22}O_2$

(2*R*,2'*R*)-2,2'-allyl-3,3',4,4'-tetrahydro-6,6'-bi-2*H*-pyran

P. J. Edwards, D. A. Entwistle, C. Genicot, S. V. Ley and G. Visentin

Tetrahedron: Asymmetry **1994,** *5,* 2609

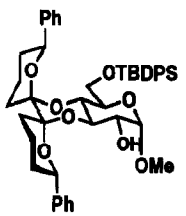


e.e.=100% (single diastereoisomer, based on sugar unit)
$[\alpha]_D^{25}$ = +36.2 (c=1.00 in $CHCl_3$)
Source of chirality: α-D-glucopyranoside sugar
Absolute configuration: 2'*R*,2"*R*,6'*R*,6"*R*-α-D

[2'*R*,2"*R*,6'*R*,6"*R*] Methyl 6-*O*-(*tert*-butyldiphenylsilyl)-2-*O*-3-*O*-(6',6"-diphenyloctahydro-2',2"-bipyran-2',2"-diyl)-α-D-glucopyranoside

P. J. Edwards, D. A. Entwistle, C. Genicot, S. V. Ley and G. Visentin

Tetrahedron: Asymmetry **1994,** *5,* 2609

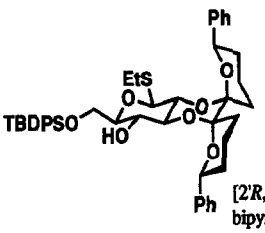


e.e.=100% (single diastereoisomer, based on sugar)
$[\alpha]_D^{25}$ = +63.0 (c=1.00 in $CHCl_3$)
Source of chirality: α-D-glucopyranoside sugar
Absolute configuration: 2'*S*,2"*S*,6'*S*,6"*S*-α-D

[2'*S*,2"*S*,6'*S*,6"*S*] Methyl 6-*O*-(*tert*-butyldiphenylsilyl)-3-*O*-4-*O*-(6',6"-diphenyloctahydro-2',2"-bipyran-2',2"-diyl)-α-D-glucopyranoside

P. J. Edwards, D. A. Entwistle, C. Genicot, S. V. Ley and G. Visentin

Tetrahedron: Asymmetry **1994,** *5,* 2609

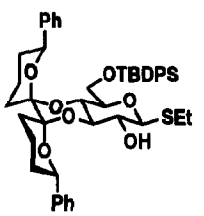


e.e.=100% (single diastereoisomer, based on sugar)
$[\alpha]_D^{25}$ = -23.8 (c=1.00 in $CHCl_3$)
Source of chirality: β-D-glucopyranoside sugar
Absolute configuration: 2'*R*,2"*R*,6'*R*,6"*R*-β-D

[2'*R*,2"*R*,6'*R*,6"*R*] Thioethyl 6-*O*-(*tert*-butyldiphenylsilyl)-2-*O*-3-*O*-(6',6"-diphenyloctahydro-2',2"-bipyran-2',2"-diyl)-β-D-glucopyranoside

P. J. Edwards, D. A. Entwistle, C. Genicot, S. V. Ley and G. Visentin

Tetrahedron: Asymmetry **1994,** *5,* 2609

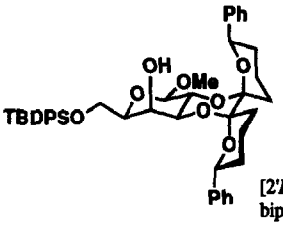


e.e.=100% (single diastereoisomer, based on sugar unit)
$[\alpha]_D^{25}$ = -9.4 (c=0.54 in $CHCl_3$)
Source of chirality: β-D-glucopyranoside sugar
Absolute configuration: 2'*S*,2"*S*,6'*S*,6"*S*-β-D

[2'*S*,2"*S*,6'*S*,6"*S*] Thioethyl 6-*O*-(*tert*-butyldiphenylsilyl)-3-*O*-4-*O*-(6',6"-diphenyloctahydro-2',2"-bipyran-2',2"-diyl)-β-D-glucopyranoside

P. J. Edwards, D. A. Entwistle, C. Genicot, S. V. Ley and G. Visentin

Tetrahedron: Asymmetry **1994,** *5,* 2609



e.e.=100% (single diastereoisomer, based on sugar unit)
$[\alpha]_D^{25}$ = -5.7 (c=1.00 in $CHCl_3$)
Source of chirality: β-D-galactopyranoside sugar
Absolute configuration: 2'*R*,2"*R*,6'*R*,6"*R*-β-D

[2'*R*,2"*R*,6'*R*,6"*R*] Methyl 6-*O*-(*tert*-butyldiphenylsilyl)-2-*O*-3-*O*-(6',6"-diphenyloctahydro-2',2"-bipyran-2',2"-diyl)-β-D-galactopyranoside

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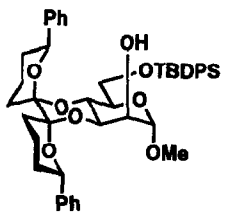

e.e.=100% (single diastereoisomer, based on sugar)
$[\alpha]_D^{25}$ = +28.1 (c=0.88 in $CHCl_3$)
Source of chirality: α-D-mannopyranoside sugar
Absolute configuration: 2'*S*,2"*S*,6'*S*,6"*S*-α-D

[2'*S*,2"*S*,6'*S*,6"*S*] Methyl 6-*O*-(*tert*-butyldiphenylsilyl)-3-*O*-4-*O*-(6',6"-diphenyloctahydro-2',2"-bipyran-2',2"-diyl)-α-D-mannopyranoside

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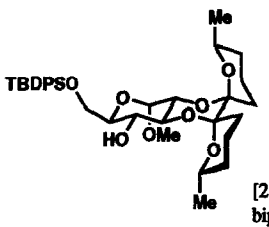

e.e.=100% (single diastereoisomer based on sugar unit)
$[\alpha]_D^{25}$ = -4.6 (c=1.5 in $CHCl_3$)
Source of chirality: α-D-glucopyranoside sugar
Absolute configuration: 2'*S*,2"*S*,6'*S*,6"*S*-α-D

[2'*S*,2"*S*,6'*S*,6"*S*] Methyl 6-*O*-(*tert*-butyldiphenylsilyl)-2-*O*-3-*O*-(6',6"-dimethyloctahydro-2',2"-bipyran-2',2"-diyl)-α-D-glucopyranoside

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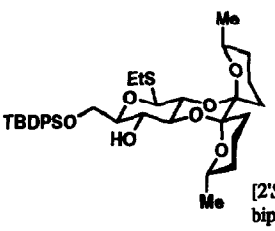

e.e.=100% (single diastereoisomer, based on sugar unit)
$[\alpha]_D^{25}$ = -55.6 (c=2.10 in $CHCl_3$)
Source of chirality: β-D-glucopyranoside sugar
Absolute configuration: 2'*S*,2"*S*,6'*S*,6"*S*-β-D

[2'*S*,2"*S*,6'*S*,6"*S*] Thioethyl 6-*O*-(*tert*-butyldiphenylsilyl)-2-*O*-3-*O*-(6',6"-dimethyloctahydro-2',2"-bipyran-2',2"-diyl)-β-D-glucopyranoside

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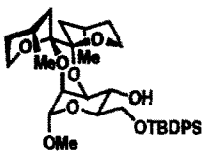

e.e.=100% (single diastereoisomer, based on sugar unit)
$[\alpha]_D^{25}$ = +60.5 (c=0.55 in $CHCl_3$)
Source of chirality: β-D-glucopyranoside sugar
Absolute configuration: 4'*S*,4"*S*,6'*S*,6"*S*-α-D

[2'*S*,2"*S*,4'*S*,4"*S*] Methyl 6-*O*-(*tert*-butyldiphenylsilyl)-2-*O*-3-*O*-(4',4"-dimethyloctahydro-2',2"-bipyran-2',2"-diyl)-α-D-glucopyranoside

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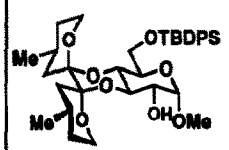

e.e.=100% (single diastereoisomer, based on sugar)
$[\alpha]_D^{25}$ = +110.7 (c=3.5 in $CHCl_3$)
Source of chirality: α-D-glucopyranoside sugar
Absolute configuration: 2'*S*,2"*S*,4'*S*,4"*S*-α-D

[2'*S*,2"*S*,4'*S*,4"*S*] Methyl 6-*O*-(*tert*-butyldiphenylsilyl)-3-*O*-4-*O*-(4',4"-dimethyloctahydro-2',2"-bipyran-2',2"-diyl)-α-D-glucopyranoside

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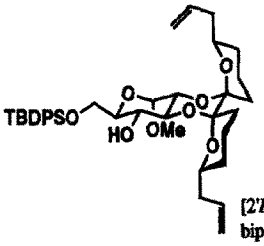

e.e.=100% (single diastereoisomer, based on sugar)
$[\alpha]_D^{23}$ = -8.8 (c=1.20 in $CHCl_3$)
Source of chirality: α-D-glucopyranoside sugar
Absolute configuration: 2'*R*,2"*R*,6'*R*,6"*R*-α-D

[2'*R*,2"*R*,6'*R*,6"*R*] Methyl 6-*O*-(*tert*-butyldiphenylsilyl)-2-*O*-3-*O*-(6',6"-diallyloctahydro-2',2"-bipyran-2',2"-diyl)-α-D-glucopyranoside

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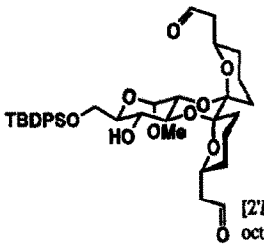

e.e.=100% (single diastereoisomer, based on sugar)
$[\alpha]_D^{23}$ = -3.8 (c=1.00 in $CHCl_3$)
Source of chirality: α-D-glucopyranoside sugar
Absolute configuration: 2'*R*,2"*R*,6'*R*,6"*R*-α-D

[2'*R*,2"*R*,6'*R*,6"*R*] Methyl 6-*O*-(*tert*-butyldiphenylsilyl)-2-*O*-3-*O*-(6',6"-di-(2-oxoethyl)-octahydro-2',2"-bipyran-2',2"-diyl)-α-D-glucopyranoside