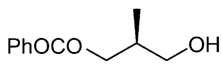
Stereochemistry abstracts

Enzo Santaniello,* Silvana Casati, Pierangela Ciuffreda and Luca Gamberoni

Tetrahedron: Asymmetry *15 (2004) 3177*



$C_{11}H_{14}O_3$

(*S*)-1-Benzoyloxy-2-methylpropan-3-ol

Ee >98%

$[\alpha]_D^{25} = +7.9$ (*c* 1, MeOH)

Source of chirality: enzymatic benzoylation

Absolute configuration: 2*S*

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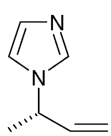
Tetrahedron: Asymmetry *15 (2004) 3181*



$C_7H_{10}N_2$

(*S*)-1-(1-Methyl-allyl)-1*H*-imidazole

$[\alpha]_D^{23} = +25.9$ (*c* 0.14, $CHCl_3$)

Source of chirality: L-alanine

Absolute configuration: *S*

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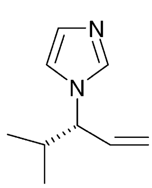
Tetrahedron: Asymmetry *15 (2004) 3181*



$C_9H_{14}N_2$

(*S*)-1-(1-Isopropyl-allyl)-1*H*-imidazole

$[\alpha]_D^{23} = +48.8$ (*c* 0.84, $CHCl_3$)

Source of chirality: L-valine

Absolute configuration: *S*

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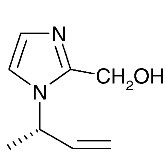
Tetrahedron: Asymmetry *15 (2004) 3181*



$C_8H_{12}N_2O$

(*S*)-[1-(1-Methyl-allyl)-1*H*-imidazole-2-yl]-methanol

$[\alpha]_D^{23} = -24.7$ (*c* 0.92, $CHCl_3$)

Source of chirality: L-alanine

Absolute configuration: *S*

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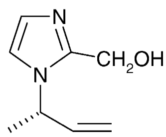
Tetrahedron: Asymmetry *15 (2004) 3181*



$C_{10}H_{16}N_2O$

(*S*)-[1-(1-Isopropyl-allyl)-1*H*-imidazole-2-yl]methanol

$[\alpha]_D^{23} = +27.8$ (*c* 2.4, $CHCl_3$)
Source of chirality: L-valine
Absolute configuration: *S*

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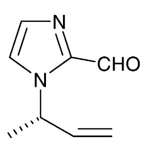
Tetrahedron: Asymmetry *15 (2004) 3181*



$C_8H_{10}N_2O$

(*S*)-1-(1-Methyl-allyl)-1*H*-imidazole-2-carbaldehyde

$[\alpha]_D^{23} = -16.9$ (*c* 0.58, $CHCl_3$)
Source of chirality: L-alanine
Absolute configuration: *S*

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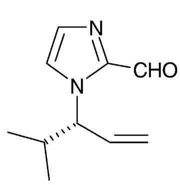
Tetrahedron: Asymmetry *15 (2004) 3181*



$C_{10}H_{14}N_2O$

(*S*)-1-(1-Isopropyl-allyl)-1*H*-imidazole-2-carbaldehyde

$[\alpha]_D^{23} = +19.7$ (*c* 0.98, $CHCl_3$)
Source of chirality: L-valine
Absolute configuration: *S*

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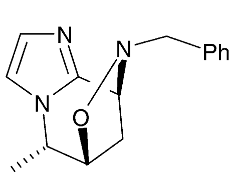
Tetrahedron: Asymmetry *15 (2004) 3181*



$C_{15}H_{17}N_3O$

(5*S*,6*R*,9*S*)-8-Benzyl-5-methyl-5,6,8,9-tetrahydro-6,9-methanoimidazo[2,1-*d*][1,2,5]oxadiazepine

$[\alpha]_D^{23} = -7.4$ (*c* 0.64, $CHCl_3$)
Source of chirality: L-alanine and stereoselective synthesis
Absolute configuration: 5*S*,6*R*,9*S*

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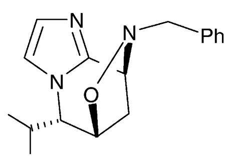
Tetrahedron: Asymmetry *15 (2004) 3181*



$C_{17}H_{21}N_3O$

(5*S*,6*R*,9*S*)-8-Benzyl-5-isopropyl-5,6,8,9-tetrahydro-6,9-methanoimidazo[2,1-*d*][1,2,5]oxadiazepine

$[\alpha]_D^{23} = +24.2$ (*c* 0.48, $CHCl_3$)

Source of chirality: L-valine and stereoselective synthesis

Absolute configuration: 5*S*,6*R*,9*S*

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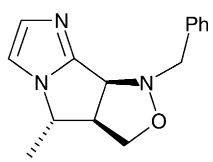
Tetrahedron: Asymmetry *15 (2004) 3181*



$C_{15}H_{17}N_3O$

(3a*S*,4*S*,8b*S*)-1-Benzyl-4-methyl-1,3a,4,8b-tetrahydro-3*H*-imidazo[1′,2′:1,2]pyrrolo[3,4-*c*]isoxazole

$[\alpha]_D^{23} = +10.7$ (*c* 0.23, $CHCl_3$)

Source of chirality: L-alanine and stereoselective synthesis

Absolute configuration: 3a*S*,4*S*,8b*S*

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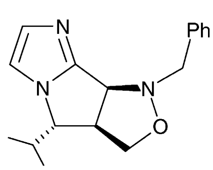
Tetrahedron: Asymmetry *15 (2004) 3181*



$C_{17}H_{21}N_3O$

(3a*S*,4*S*,8b*S*)-1-Benzyl-4-isopropyl-1,3a,4,8b-tetrahydro-3*H*-imidazo[1′,2′:1,2]pyrrolo[3,4-*c*]isoxazole

$[\alpha]_D^{23} = +6.7$ (*c* 0.80, $CHCl_3$)

Source of chirality: L-valine and stereoselective synthesis

Absolute configuration: 3a*S*,4*S*,8b*S*

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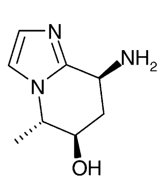
Tetrahedron: Asymmetry *15 (2004) 3181*



$C_8H_{13}N_3O$

(5*S*,6*R*,8*S*)-8-Amino-5-methyl-5,6,7,8-tetrahydro-imidazo[1,2-*a*]pyridin-6-ol

$[\alpha]_D^{23} = -15.2$ (*c* 0.09, $CHCl_3$)

Source of chirality: L-alanine and stereoselective synthesis

Absolute configuration: 5*S*,6*R*,8*S*

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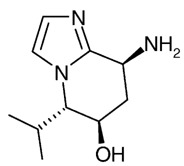
Tetrahedron: Asymmetry *15 (2004) 3181*



$C_{10}H_{17}N_3O$

(5*S*,6*R*,8*S*)-8-Amino-5-isopropyl-5,6,7,8-tetrahydro-imidazo[1,2-*a*]pyridin-6-ol

$[\alpha]_D^{23} = -11.4$ (c 0.21, $CHCl_3$)
Source of chirality: L-alanine and stereoselective synthesis
Absolute configuration: 5*S*,6*R*,8*S*

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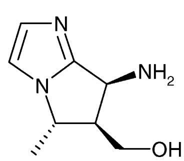
Tetrahedron: Asymmetry *15 (2004) 3181*



$C_8H_{13}N_3O$

(5*S*,6*R*,7*S*)-(7-Amino-5-methyl-6,7-dihydro-5*H*-pyrrolo[1,2-*a*]imidazol-6-yl)-methanol

$[\alpha]_D^{23} = +15.7$ (c 0.21, $CHCl_3$)
Source of chirality: L-alanine and stereoselective synthesis
Absolute configuration: 5*S*,6*R*,7*S*

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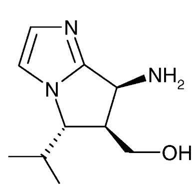
Ivan De Marchi, Gaetano Zecchi and Caterina Zoni

Tetrahedron: Asymmetry *15 (2004) 3181*



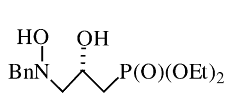
$C_{10}H_{17}N_3O$

(5*S*,6*R*,7*S*)-(7-Amino-5-isopropyl-6,7-dihydro-5*H*-pyrrolo[1,2-*a*]imidazol-6-yl)-methanol

$[\alpha]_D^{23} = +10.3$ (c 0.30, $CHCl_3$)
Source of chirality: L-alanine and stereoselective synthesis
Absolute configuration: 5*S*,6*R*,7*S*

Andrzej E. Wróblewski* and Anetta Hałajewska-Wosik

Tetrahedron: Asymmetry *15 (2004) 3201*



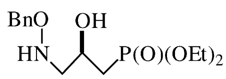
$C_{14}H_{24}NO_5P$

Diethyl (*S*)-3-(*N*-benzyl-*N*-hydroxy)amino-2-hydroxypropylphosphonate

Ee = 98%
$[\alpha]_D = -14.3$ (c 1.68, $CHCl_3$)
Source of chirality: Jacobsen's catalyst
Absolute configuration: (*S*)

Andrzej E. Wróblewski* and Anetta Hałajewska-Wosik

Tetrahedron: Asymmetry *15 (2004) 3201*



$C_{14}H_{24}NO_5P$

Diethyl (*R*)-3-(benzyloxyamino)-2-hydroxypropylphosphonate

Ee = 97%
$[\alpha]_D = +12.0$ (*c* 1.2, $CHCl_3$)
Source of chirality: Jacobsen's catalyst
Absolute configuration: (*R*)

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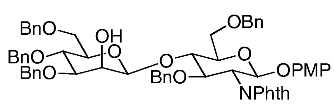
Alison J. Redgrave and Christopher M. P. Seward

Tetrahedron: Asymmetry *15 (2004) 3207*



$C_{62}H_{61}NO_{13}$

para-Methoxyphenyl 3,4,6-tri-*O*-benzyl-β-D-mannopyranosyl-(1→4)-3,6-di-*O*-benzyl-2-deoxy-2-phthalimido-β-D-glucopyranoside

Ee = 100%
$[\alpha]_D^{25} = +44.5$ (*c* 1.5, $CHCl_3$)
Source of chirality: D-mannose and D-glucosamine

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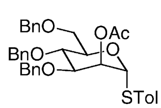
Tetrahedron: Asymmetry *15 (2004) 3207*



$C_{36}H_{38}O_6S$

para-Tolyl 2-*O*-acetyl-3,4,6-tri-*O*-benzyl-1-thio-α-D-mannopyranoside

Ee = 100%
$[\alpha]_D^{25} = +125$ (*c* 1.08, $CHCl_3$)
Source of chirality: D-mannose

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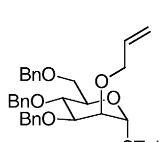
Tetrahedron: Asymmetry *15 (2004) 3207*



$C_{37}H_{40}O_5S$

para-Tolyl 2-*O*-allyl-3,4,6-tri-*O*-benzyl-1-thio-α-D-mannopyranoside

Ee = 100%
$[\alpha]_D^{25} = +137.1$ (*c* 0.96, $CHCl_3$)
Source of chirality: D-mannose

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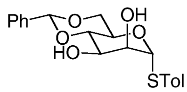
Tetrahedron: Asymmetry *15 (2004) 3207*



$C_{20}H_{22}O_5S$

para-Tolyl (*R*)-4,6-*O*-benzylidene-1-thio-α-D-mannopyranoside

Ee = 100%
$[\alpha]_D^{25} = +201.7$ (*c* 0.58, Me_2SO)
Source of chirality: D-mannose

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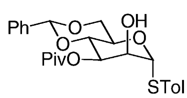
Tetrahedron: Asymmetry *15 (2004) 3207*



$C_{25}H_{30}O_6S$

para-Tolyl (*R*)-4,6-*O*-benzylidene-3-*O*-pivaloyl-1-thio-α-D-mannopyranoside

Ee = 100%
$[\alpha]_D^{25} = +217.1$ (*c* 1.0, $CHCl_3$)
Source of chirality: D-mannose

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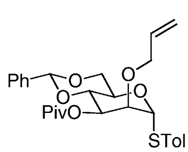
Tetrahedron: Asymmetry *15 (2004) 3207*



$C_{28}H_{34}O_6S$

para-Tolyl 2-*O*-allyl-(*R*)-4,6-*O*-benzylidene-3-*O*-pivaloyl-1-thio-α-D-mannopyranoside

Ee = 100%
$[\alpha]_D^{25} = +119.5$ (*c* 1.0, $CHCl_3$)
Source of chirality: D-mannose

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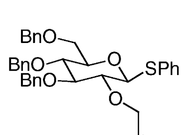
Tetrahedron: Asymmetry *15 (2004) 3207*



$C_{36}H_{38}O_5S$

Phenyl 2-*O*-allyl-3,4,6-tri-*O*-benzyl-1-thio-β-D-glucopyranoside

Ee = 100%
$[\alpha]_D^{24.5} = -21.1$ (*c* 1.04, $CHCl_3$)
Source of chirality: D-glucose

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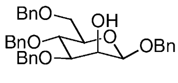
Tetrahedron: Asymmetry *15 (2004) 3207*



$C_{34}H_{36}O_6$

Benzyl 3,4,6-tri-*O*-benzyl-β-D-mannopyranoside

Ee = 100%

$[\alpha]_D^{25} = -40.7$ (*c* 0.7, $CHCl_3$)

Source of chirality: D-mannose

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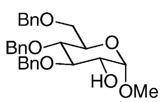
Tetrahedron: Asymmetry *15 (2004) 3207*



$C_{28}H_{32}O_6$

Methyl 3,4,6-tri-*O*-benzyl-α-D-glucopyranoside

Ee = 100%

$[\alpha]_D^{24.5} = +89.0$ (*c* 1.01, $CHCl_3$)

Source of chirality: D-glucose

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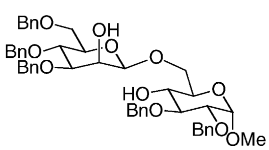
Tetrahedron: Asymmetry *15 (2004) 3207*



$C_{48}H_{54}O_{11}$

Methyl 3,4,6-tri-*O*-benzyl-β-D-mannopyranosyl-(1→6)-2,3-di-*O*-benzyl-α-D-glucopyranoside

Ee = 100%

$[\alpha]_D^{24} = -3.2$ (*c* 0.25, $CHCl_3$)

Source of chirality: D-mannose and D-glucose

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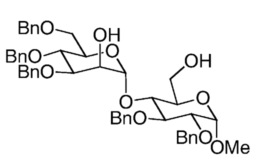
Tetrahedron: Asymmetry *15 (2004) 3207*



$C_{48}H_{54}O_{11}$

Methyl 3,4,6-tri-*O*-benzyl-α-D-mannopyranosyl-(1→4)-2,3-di-*O*-benzyl-α-D-glucopyranoside

Ee = 100%

$[\alpha]_D^{24} = +33.1$ (*c* 0.45, $CHCl_3$)

Source of chirality: D-mannose and D-glucose

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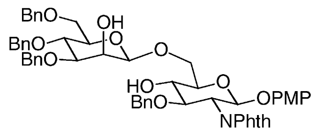
Tetrahedron: Asymmetry *15 (2004) 3207*



$C_{55}H_{55}NO_{13}$

Ee = 100%

$[\alpha]_D^{22} = +21.2$ (*c* 0.33, $CHCl_3$)

Source of chirality: D-mannose and D-glucosamine

para-Methoxyphenyl 3,4,6-tri-*O*-benzyl-β-D-mannopyranosyl-(1→6)-3-*O*-benzyl-2-deoxy-2-phthalimido-β-D-glucopyranoside

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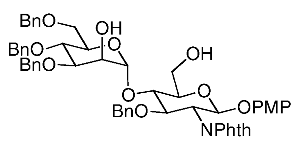
Tetrahedron: Asymmetry *15 (2004) 3207*



$C_{55}H_{55}NO_{13}$

Ee = 100%

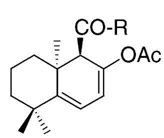
$[\alpha]_D^{22} = +73.9$ (*c* 0.7, $CHCl_3$)

Source of chirality: D-mannose and D-glucosamine

para-Methoxyphenyl 3,4,6-tri-*O*-benzyl-α-D-mannopyranosyl-(1→4)-3-*O*-benzyl-2-deoxy-2-phthalimido-β-D-glucopyranoside

Gian Piero Pollini,* Anna Bianchi, Alberto Casolari, Carmela De Risi,
Vinicio Zanirato and Valerio Bertolasi

Tetrahedron: Asymmetry *15 (2004) 3223*



R = (1*R*,2*S*,5*R*)-(-)-menthol

$C_{26}H_{40}O_4$

$[\alpha]_D^{20} = +395.0$ (*c* 1.00, $CHCl_3$)

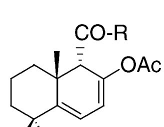
Source of chirality: (1*R*,2*S*,5*R*)-(−)-menthol

Absolute configuration: (1*R*,8a*S*)

(1*R*,8a*S*)-2-Acetyloxy-5,5,8a-trimethyl-1,5,6,7,8,8a-hexahydro-naphthalene-1-carboxylic acid (−)-menthyl ester

Gian Piero Pollini,* Anna Bianchi, Alberto Casolari, Carmela De Risi,
Vinicio Zanirato and Valerio Bertolasi

Tetrahedron: Asymmetry *15 (2004) 3223*



R = (1*R*,2*S*,5*R*)-(-)-menthol

$C_{26}H_{40}O_4$

$[\alpha]_D^{20} = -305.0$ (*c* 2.74, $CHCl_3$)

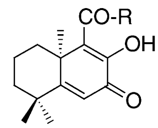
Source of chirality: (1*R*,2*S*,5*R*)-(−)-menthol

Absolute configuration: (1*S*,8a*R*)

(1*S*,8a*R*)-2-Acetyloxy-5,5,8a-trimethyl-1,5,6,7,8,8a-hexahydro-naphthalene-1-carboxylic acid (−)-menthyl ester

Gian Piero Pollini,* Anna Bianchi, Alberto Casolari, Carmela De Risi, Vinicio Zanirato and Valerio Bertolasi

Tetrahedron: Asymmetry *15 (2004) 3223*



R = (1*R*,2*S*,5*R*)-(-)-menthol

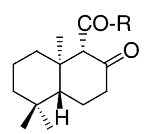
$C_{24}H_{36}O_4$

(8a*S*)-2-Hydroxy-5,5-8a-trimethyl-3-oxo-3,5,6,7,8,8a-hexahydro-naphthalene-1-carboxylic acid (−)-menthyl ester

$[\alpha]_D^{20} = -79.3$ (*c* 0.75, CH_3OH)
Source of chirality: (1*R*,2*S*,5*R*)-(−)-menthol
Absolute configuration: (8a*S*)

Gian Piero Pollini,* Anna Bianchi, Alberto Casolari, Carmela De Risi, Vinicio Zanirato and Valerio Bertolasi

Tetrahedron: Asymmetry *15 (2004) 3223*



R = (1*R*,2*S*,5*R*)-(-)-menthol

$C_{24}H_{40}O_3$

(1*S*,4a*R*,8a*R*)-5,5,8a-Trimethyl-2-oxo-decahydro-naphthalene-1-carboxylic acid (−)-menthyl ester

$[\alpha]_D^{20} = -11.9$ (*c* 0.92, $CHCl_3$)
Source of chirality: (1*R*,2*S*,5*R*)-(−)-menthol
Absolute configuration: (1*S*,4a*R*,8a*R*)

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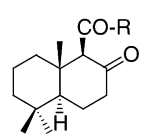
Tetrahedron: Asymmetry *15 (2004) 3223*



R = (1*R*,2*S*,5*R*)-(-)-menthol

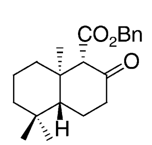
$C_{24}H_{40}O_3$

(1*R*,4a*S*,8a*S*)-5,5,8a-Trimethyl-2-oxo-decahydro-naphthalene-1-carboxylic acid (−)-menthyl ester

$[\alpha]_D^{20} = -58.8$ (*c* 0.83, $CHCl_3$)
Source of chirality: (1*R*,2*S*,5*R*)-(−)-menthol
Absolute configuration: (1*R*,4a*S*,8a*S*)

Gian Piero Pollini,* Anna Bianchi, Alberto Casolari, Carmela De Risi, Vinicio Zanirato and Valerio Bertolasi

Tetrahedron: Asymmetry *15 (2004) 3223*



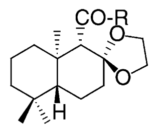
$C_{21}H_{28}O_3$

(1*S*,4a*R*,8a*R*)-5,5,8a-Trimethyl-2-oxo-decahydro-naphthalene-1-carboxylic acid benzyl ester

$[\alpha]_D^{20} = +45.3$ (*c* 0.91, $CHCl_3$)
Source of chirality: (1*R*,2*S*,5*R*)-(−)-menthol
Absolute configuration: (1*S*,4a*R*,8a*R*)

Gian Piero Pollini,* Anna Bianchi, Alberto Casolari, Carmela De Risi, Vinicio Zanirato and Valerio Bertolasi

Tetrahedron: Asymmetry *15 (2004) 3223*



R = (1*R*,2*S*,5*R*)-(-)-menthol

$C_{26}H_{44}O_4$

(1′*S*,4′a*R*,8′a*R*)-5′,5′,8′a-Trimethyl-octahydro-spiro{[1,3]dioxolane-2,2′-naphthalene}-1′-carboxylic acid (−)-menthyl ester

$[\alpha]_D^{20} = -62.7$ (*c* 0.88, $CHCl_3$)

Source of chirality: (1*R*,2*S*,5*R*)-(−)-menthol

Absolute configuration: (1′*S*,4′a*R*,8′a*R*)

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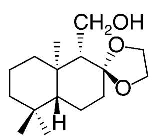
Tetrahedron: Asymmetry *15 (2004) 3223*



R = (1*R*,2*S*,5*R*)-(-)-menthol

$C_{16}H_{28}O_3$

(1′*R*,4′a*R*,8′a*R*)-5′,5′,8′a-Trimethyl-octahydro-spiro{[1,3]dioxolane-2,2′-naphthalen}-1′-yl-methanol

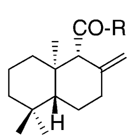
$[\alpha]_D^{20} = +7.9$ (*c* 0.83, $CHCl_3$)

Source of chirality: (1*R*,2*S*,5*R*)-(−)-menthol

Absolute configuration: (1′*R*,4′a*R*,8′a*R*)

Gian Piero Pollini,* Anna Bianchi, Alberto Casolari, Carmela De Risi, Vinicio Zanirato and Valerio Bertolasi

Tetrahedron: Asymmetry *15 (2004) 3223*



R = (1*R*,2*S*,5*R*)-(-)-menthol

$C_{25}H_{42}O_2$

(1*R*,4a*R*,8a*R*)-5,5,8a-Trimethyl-2-methylene-decahydro-naphthalene-1-carboxylic acid (−)-menthyl ester

$[\alpha]_D^{20} = -41.1$ (*c* 0.79, $CHCl_3$)

Source of chirality: (1*R*,2*S*,5*R*)-(−)-menthol

Absolute configuration: (1*R*,4a*R*,8a*R*)

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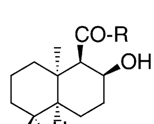
Tetrahedron: Asymmetry *15 (2004) 3223*



R = (1*R*,2*S*,5*R*)-(-)-menthol

$C_{24}H_{42}O_3$

(1*R*,2*S*,4a*S*,8a*R*)-2-Hydroxy-5,5,8a-trimethyl-decahydro-naphthalene-1-carboxylic acid (−)-menthyl ester

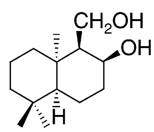
$[\alpha]_D^{20} = -40.1$ (*c* 1.83, $CHCl_3$)

Source of chirality: (1*R*,2*S*,5*R*)-(−)-menthol

Absolute configuration: (1*R*,2*S*,4a*S*,8a*R*)

Gian Piero Pollini,* Anna Bianchi, Alberto Casolari, Carmela De Risi, Vinicio Zanirato and Valerio Bertolasi

Tetrahedron: Asymmetry *15 (2004) 3223*



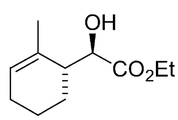
$C_{14}H_{26}O_2$

(1*S*,2*S*,4a*S*,8a*R*)-2-Hydroxy-1-hydroxymethyl-5,5,8a-trimethyldecahydronaphtalene

$[\alpha]_D^{20} = +15.3$ (*c* 0.74, MeOH)
Source of chirality: (1*R*,2*S*,5*R*)-(−)-menthol
Absolute configuration: (1*S*,2*S*,4a*S*,8a*R*)

Alessandro Mandoli, Simonetta Orlandi, Dario Pini and Piero Salvadori*

Tetrahedron: Asymmetry *15 (2004) 3233*



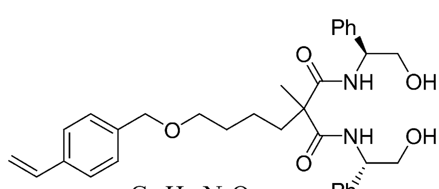
$C_{11}H_{18}O_3$

(1′*R*,2*R*)-Ethyl 2-(2′-methyl-2′-cyclohexenyl)-2-hydroxyacetate

(1′*S*,2*S*):(1′*R*,2*R*):(1′*R**,2*S**) = 2.2:95.3:2.6 (chiral GLC)
$[\alpha]_D^{25} = +22.1$ (*c* 0.89, $CHCl_3$)
Source of chirality: asymmetric catalysis

Alessandro Mandoli, Simonetta Orlandi, Dario Pini and Piero Salvadori*

Tetrahedron: Asymmetry *15 (2004) 3233*



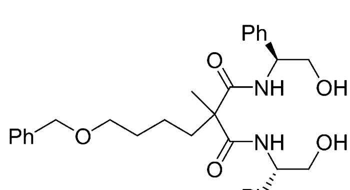
$C_{33}H_{40}N_2O_5$

2-(4-(4-Vinylbenzyloxy)butyl)-N[1],N[3]-bis((*S*)-2-hydroxy-1-phenylethyl)-2-methylmalonamide

Ee = 100%
$[\alpha]_D^{25} = +40.0$ (*c* 1.0, MeOH)
Source of chirality: (*S*)-phenylglycinol

Alessandro Mandoli, Simonetta Orlandi, Dario Pini and Piero Salvadori*

Tetrahedron: Asymmetry *15 (2004) 3233*



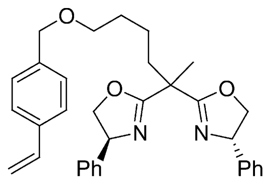
$C_{31}H_{38}N_2O_5$

2-(4-(Benzyloxy)butyl)N[1],N[3]-bis((*S*)-2-hydroxy-1-phenylethyl)-2-meythylmalonamide

Ee = 100%
$[\alpha]_D^{25} = +52.7$ (*c* 1.0, MeOH)
Source of chirality: (*S*)-phenylglycinol

Alessandro Mandoli, Simonetta Orlandi, Dario Pini and Piero Salvadori*

Tetrahedron: Asymmetry *15 (2004) 3233*



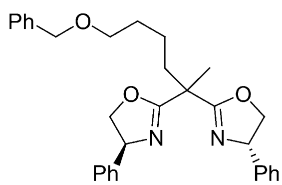
Ee = 100%
$[\alpha]_D^{25} = -84.8$ (*c* 2.6, MeOH)
Source of chirality: (*S*)-phenylglycinol

$C_{33}H_{36}N_2O_3$

(*S*)-2-(6-(4-Vinylbenzyloxy)-2-((*S*)-4,5-dihydro-4-phenyloxazol-2-yl)hexan-2-yl)-4,5-dihydro-4-phenyloxazole

Alessandro Mandoli, Simonetta Orlandi, Dario Pini and Piero Salvadori*

Tetrahedron: Asymmetry *15 (2004) 3233*



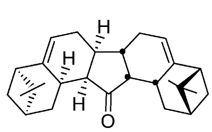
Ee = 100%
$[\alpha]_D^{25} = -98.3$ (*c* 1.4, CH_2Cl_2)
Source of chirality: (*S*)-phenylglycinol

$C_{31}H_{34}N_2O_3$

(*S*)-2-(6-(Benzyloxy)-2-((*S*)-4,5-dihydro-4-phenyloxazol-2-yl)hexan-2-yl)-4,5-dihydro-4-phenyloxazole

Lucio Minuti,* Aldo Taticchi,* Assunta Marrocchi, Alessandra Broggi and Eszter Gacs-Baitz

Tetrahedron: Asymmetry *15 (2004) 3245*



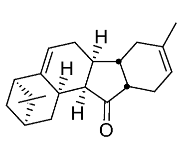
$[\alpha]_D = +8.5$ (*c* 0.448, $CHCl_3$);
Source of chirality: (+)-nopadiene

$C_{27}H_{36}O$

(2*S*,4*R*,6a*S*,6b*S*,9*R*,11*S*,12a*R*,12b*R*,13a*R*,13b*R*)-(+)-3,3,10,10-Tetramethyl-1,2,3,4,6,6a,6b,7,9,10,11,12,12a,12b,13a,13b-hexadecahydro-13*H*-2,4:9,11-dimethanodibenzo[*a*,*i*]fluoren-13-one

Lucio Minuti,* Aldo Taticchi,* Assunta Marrocchi, Alessandra Broggi and Eszter Gacs-Baitz

Tetrahedron: Asymmetry *15 (2004) 3245*



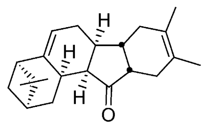
$[\alpha]_D = +34$ (*c* 0.396, $CHCl_3$)
Source of chirality: (+)-nopadiene

$C_{21}H_{28}O$

(2*S*,4*R*,6a*S*,6b*S*,10a*S*,11a*R*,11b*R*)-(+)-3,3,8-Trimethyl-1,2,3,4,6,6a,6b,7,10,10a,11a,11b-dodecahydro-11*H*-2,4-methanobenzo[*a*]fluoren-11-one

Lucio Minuti,* Aldo Taticchi,* Assunta Marrocchi, Alessandra Broggi and Eszter Gacs-Baitz

Tetrahedron: Asymmetry *15 (2004) 3245*



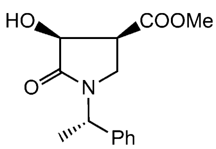
$C_{22}H_{30}O$

(2*S*,4*R*,6a*S*,6b*S*,10a*S*,11a*R*,11b*R*)-(+)-3,3,8,9-Tetramethyl-1,2,3,4,6,6a,6b,7,10,10a,11a,11b-dodecahydro-11*H*-2,4-methanobenzo[*a*]fluoren-11-one

$[\alpha]_D = +24$ (*c* 0.478, $CHCl_3$)
Source of chirality: (+)-nopadiene

Roberta Galeazzi, Gianluca Martelli, Giovanna Mobbili, Mario Orena* and Samuele Rinaldi

Tetrahedron: Asymmetry *15 (2004) 3249*



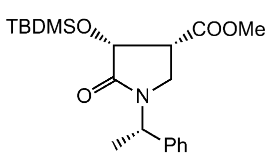
$C_{14}H_{17}NO_4$

(3*S*,4*S*,1′*S*)-3-Hydroxy-4-methoxycarbonyl-1-(1′-phenylethyl)pyrrolidin-2-one

Ee >98%
$[\alpha]_D = -187.9$ (*c* 1.1, $CHCl_3$)
Source of chirality: (*S*)-phenylethylamine
Absolute configuration: 3*S*,4*S*,1′*S*

Roberta Galeazzi, Gianluca Martelli, Giovanna Mobbili, Mario Orena* and Samuele Rinaldi

Tetrahedron: Asymmetry *15 (2004) 3249*



$C_{20}H_{31}NO_4Si$

(3*R*,4*R*,1′*S*)-3-*tert*-Butyldimethylsilyloxy-4-methoxycarbonyl-1-(1′-phenylethyl)pyrrolidin-2-one

Ee >98%
$[\alpha]_D = -33.1$ (*c* 8.1, $CHCl_3$)
Source of chirality: (*S*)-phenylethylamine
Absolute configuration: 3*R*,4*R*,1′*S*

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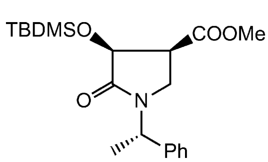
Tetrahedron: Asymmetry *15 (2004) 3249*



$C_{20}H_{31}NO_4Si$

(3*S*,4*S*,1′*S*)-3-*tert*-Butyldimethylsilyloxy-4-methoxycarbonyl-1-(1′-phenylethyl)pyrrolidin-2-one

Ee >98%
$[\alpha]_D = -67.1$ (*c* 8.1, CH_3OH)
Source of chirality: (*S*)-phenylethylamine
Absolute configuration: 3*S*,4*S*,1′*S*

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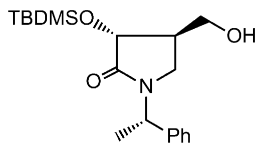
Tetrahedron: Asymmetry *15 (2004) 3249*



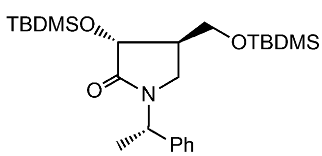
$C_{19}H_{31}NO_3Si$

(3*R*,4*R*,1′*S*)-3-*tert*-Butyldimethylsilyloxy-4-hydroxymethyl-1-(1′-phenylethyl)pyrrolidin-2-one

Ee >98%
$[\alpha]_D = -68.7$ (*c* 1.0, $CHCl_3$)
Source of chirality: (*S*)-phenylethylamine
Absolute configuration: 3*R*,4*R*,1′*S*

Roberta Galeazzi, Gianluca Martelli, Giovanna Mobbili, Mario Orena* and Samuele Rinaldi

Tetrahedron: Asymmetry *15 (2004) 3249*



$C_{25}H_{45}NO_3Si_2$

(3*R*,4*R*,1′*S*)-3-*tert*-Butyldimethylsilyloxy-4-*tert*-butyldimethylsilyloxymethyl-1-(1′-phenylethyl)pyrrolidin-2-one

Ee >98%
$[\alpha]_D = -28.7$ (*c* 1.0, $CHCl_3$)
Source of chirality: (*S*)-phenylethylamine
Absolute configuration: 3*R*,4*R*,1′*S*

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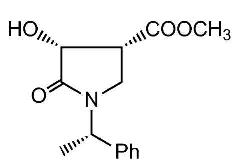
Tetrahedron: Asymmetry *15 (2004) 3249*



$C_{14}H_{17}NO_4$

(3*R*,4*R*,1′*S*)-3-Hydroxy-4-methoxycarbonyl-1-(1′-phenylethyl)pyrrolidin-2-one

Ee >98%
$[\alpha]_D = -72.6$ (*c* 1.1, $CHCl_3$)
Source of chirality: (*S*)-phenylethylamine
Absolute configuration: 3*R*,4*R*,1′*S*

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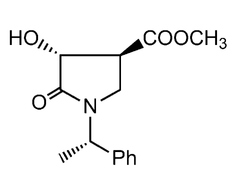
Tetrahedron: Asymmetry *15 (2004) 3249*



$C_{14}H_{17}NO_4$

(3*R*,4*S*,1′*S*)-3-Hydroxy-4-methoxycarbonyl-1-(1′-phenylethyl)pyrrolidin-2-one

Ee >98%
$[\alpha]_D = -27.8$ (*c* 1.0, $CHCl_3$)
Source of chirality: (*S*)-phenylethylamine
Absolute configuration: 3*R*,4*S*,1′*S*

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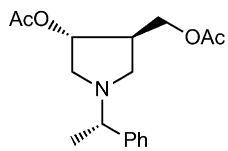
Tetrahedron: Asymmetry *15 (2004) 3249*



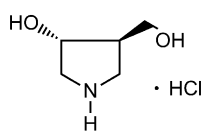
$C_{17}H_{23}NO_4$

(3*R*,4*R*,1′*S*)-3-Acetoxy-4-acetoxymethyl-1-(1′-phenylethyl)pyrrolidine

Ee >98%
$[\alpha]_D = -7.4$ (*c* 1.0, $CHCl_3$)
Source of chirality: (*S*)-phenylethylamine
Absolute configuration: 3*R*,4*R*,1′*S*

Roberta Galeazzi, Gianluca Martelli, Giovanna Mobbili, Mario Orena* and Samuele Rinaldi

Tetrahedron: Asymmetry *15 (2004) 3249*



$C_5H_{12}NO_2Cl$

(3*R*,4*R*)-3-Hydroxy-4-hydroxymethylpyrrolidine hydrochloride

Ee >98%
$[\alpha]_D = +18.3$ (*c* 0.7, CH_3OH)
Source of chirality: (*S*)-phenylethylamine
Absolute configuration: 3*R*,4*R*

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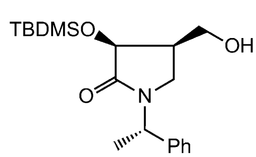
Tetrahedron: Asymmetry *15 (2004) 3249*



$C_{19}H_{31}NO_3Si$

(3*S*,4*R*,1′*S*)-3-*tert*-Butyldimethylsilyloxy-4-hydroxymethyl-1-(1′-phenylethyl)pyrrolidin-2-one

Ee >98%
$[\alpha]_D = -170.2$ (*c* 1.9, $CHCl_3$)
Source of chirality: (*S*)-phenylethylamine
Absolute configuration: 3*S*,4*R*,1′*S*

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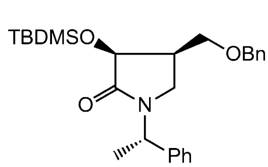
Tetrahedron: Asymmetry *15 (2004) 3249*



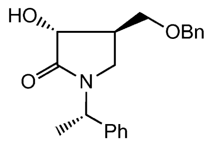
$C_{26}H_{37}NO_3Si$

(3*S*,4*R*,1′*S*)-4-Benzyloxymethyl-3-*tert*-butyldimethylsilyloxy-1-(1′-phenylethyl)pyrrolidin-2-one

Ee >98%
$[\alpha]_D = -56.0$ (*c* 1.0, $CHCl_3$)
Source of chirality: (*S*)-phenylethylamine
Absolute configuration: 3*S*,4*R*,1′*S*

Roberta Galeazzi, Gianluca Martelli, Giovanna Mobbili, Mario Orena* and Samuele Rinaldi

Tetrahedron: Asymmetry *15 (2004) 3249*



$C_{20}H_{23}NO_3$

(3*R*,4*R*,1′*S*)-4-Benzyloxymethyl-3-hydroxy-1-phenylethylpyrrolidin-2-one

Ee >98%

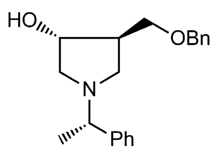
$[\alpha]_D = -35.0$ (*c* 0.5, $CHCl_3$)

Source of chirality: (*S*)-phenylethylamine

Absolute configuration: 3*R*,4*R*,1′*S*

Roberta Galeazzi, Gianluca Martelli, Giovanna Mobbili, Mario Orena* and Samuele Rinaldi

Tetrahedron: Asymmetry *15 (2004) 3249*



$C_{20}H_{25}NO_2$

(3*R*,4*R*,1′*S*)-4-Benzyloxymethyl-3-hydroxy-1-phenylethylpyrrolidine

Ee >98%

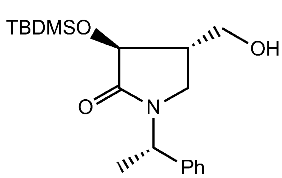
$[\alpha]_D = -108.0$ (*c* 0.3, $CHCl_3$)

Source of chirality: (*S*)-phenylethylamine

Absolute configuration: 3*R*,4*R*,1′*S*

Roberta Galeazzi, Gianluca Martelli, Giovanna Mobbili, Mario Orena* and Samuele Rinaldi

Tetrahedron: Asymmetry *15 (2004) 3249*



$C_{19}H_{31}NO_3Si$

(3*S*,4*S*,1′*S*)-3-*tert*-Butyldimethylsilyloxy-4-hydroxymethyl-1-(1′-phenylethyl)pyrrolidin-2-one

Ee >98%

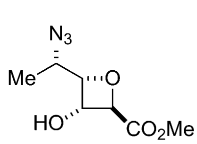
$[\alpha]_D = -180.3$ (*c* 1.1, $CHCl_3$)

Source of chirality: (*S*)-phenylethylamine

Absolute configuration: 3*S*,4*S*,1′*S*

Stephen W. Johnson, Sarah. F. Jenkinson (née Barker), Donald Angus, John H. Jones, David J. Watkin and George W. J. Fleet*

Tetrahedron: Asymmetry *15 (2004) 3263*



$C_7H_{11}N_3O_4$

Methyl 2,4-anhydro-5-azido-5-deoxy-L-rhamnonate

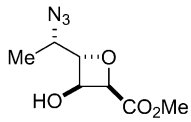
Ee = 100%

$[\alpha]_D^{22} = +75.1$ (*c* 0.97, $CHCl_3$)

Source of chirality: L-rhamnose as starting material

Stephen W. Johnson, Sarah. F. Jenkinson (née Barker), Donald Angus, John H. Jones, David J. Watkin and George W. J. Fleet*

Tetrahedron: Asymmetry *15 (2004) 3263*



$C_7H_{11}N_3O_4$

Methyl 2,4-anhydro-5-azido-5,6-di-deoxy-L-altronate

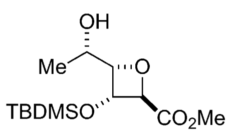
Ee = 100%

$[\alpha]_D^{26} = +15.7$ (*c* 0.99, $CHCl_3$)

Source of chirality: L-rhamnose as starting material

Stephen W. Johnson, Sarah. F. Jenkinson (née Barker), Donald Angus, John H. Jones, David J. Watkin and George W. J. Fleet*

Tetrahedron: Asymmetry *15 (2004) 3263*



$C_{13}H_{26}O_5Si$

Methyl 2,4-anhydro-3-*O*-*tert*-butyldimethylsilyl-L-rhamnonate

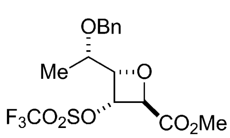
Ee = 100%

$[\alpha]_D^{23} = +26.6$ (*c* 0.70, Me_2CO)

Source of chirality: L-rhamnose as starting material

Stephen W. Johnson, Sarah. F. Jenkinson (née Barker), Donald Angus, John H. Jones, David J. Watkin and George W. J. Fleet*

Tetrahedron: Asymmetry *15 (2004) 3263*



$C_{15}H_{17}F_3O_7S$

Methyl 2,4-anhydro-5-*O*-benzyl-3-*O*-trifluoromethanesulfonyl-L-rhamnonate

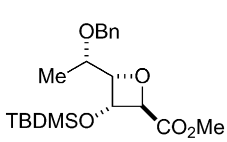
Ee = 100%

$[\alpha]_D^{26} = +13.1$ (*c* 1.64, $CHCl_3$)

Source of chirality: L-rhamnose as starting material

Stephen W. Johnson, Sarah. F. Jenkinson (née Barker), Donald Angus, John H. Jones, David J. Watkin and George W. J. Fleet*

Tetrahedron: Asymmetry *15 (2004) 3263*



$C_{20}H_{32}O_5Si$

Methyl 2,4-anhydro-5-*O*-benzyl-3-*O*-*tert*-butyldimethylsilyl-L-rhamnonate

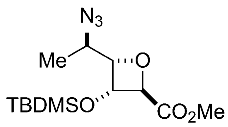
Ee = 100%

$[\alpha]_D^{22} = +33.5$ (*c* 1.25, Me_2CO)

Source of chirality: L-rhamnose as starting material

Stephen W. Johnson, Sarah. F. Jenkinson (née Barker), Donald Angus, John H. Jones, David J. Watkin and George W. J. Fleet*

Tetrahedron: Asymmetry *15 (2004) 3263*



$C_{13}H_{25}N_3O_4Si$

Methyl 2,4-anhydro-5-azido-3-*O*-*tert*-butyldimethylsilyl-5,6-di-deoxy-D-gulonate

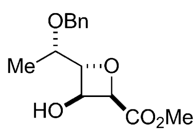
Ee = 100%

$[\alpha]_D^{25} = +10.4$ (*c* 0.96, $CHCl_3$)

Source of chirality: L-rhamnose as starting material

Stephen W. Johnson, Sarah. F. Jenkinson (née Barker), Donald Angus, John H. Jones, David J. Watkin and George W. J. Fleet*

Tetrahedron: Asymmetry *15 (2004) 3263*



$C_{14}H_{18}O_5$

Methyl 2,4-anhydro-5-*O*-benzyl-6-deoxy-L-altronate

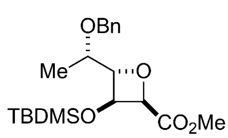
Ee = 100%

$[\alpha]_D^{26} = +34.4$ (*c* 1.42, $CHCl_3$)

Source of chirality: L-rhamnose as starting material

Stephen W. Johnson, Sarah. F. Jenkinson (née Barker), Donald Angus, John H. Jones, David J. Watkin and George W. J. Fleet*

Tetrahedron: Asymmetry *15 (2004) 3263*



$C_{20}H_{32}O_5Si$

Methyl 2,4-anhydro-5-*O*-benzyl-3-*O*-*tert*-butyldimethylsilyl-6-deoxy-L-altronate

Ee = 100%

$[\alpha]_D^{22} = +1.5$ (*c* 0.58, $CHCl_3$)

Source of chirality: L-rhamnose as starting material

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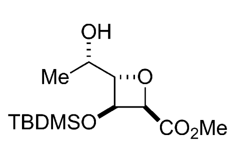
Tetrahedron: Asymmetry *15 (2004) 3263*



$C_{13}H_{26}O_5Si$

Methyl 2,4-anhydro-3-*O*-*tert*-butyldimethylsilyl-6-deoxy-L-altronate

Ee = 100%

$[\alpha]_D^{22} = -0.3$ (*c* 1.10, $CHCl_3$)

Source of chirality: L-rhamnose as starting material

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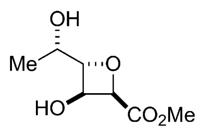
Tetrahedron: Asymmetry *15 (2004) 3263*



$C_7H_{12}O_5$

Methyl 2,4-anhydro-6-deoxy-L-altronate

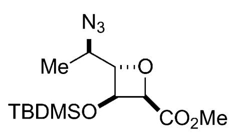
Ee = 100%

$[\alpha]_D^{22} = +48.3$ (c 0.84, H_2O)

Source of chirality: L-rhamnose as starting material

Stephen W. Johnson, Sarah. F. Jenkinson (née Barker), Donald Angus, John H. Jones, David J. Watkin and George W. J. Fleet*

Tetrahedron: Asymmetry *15 (2004) 3263*



$C_{13}H_{25}N_3O_4Si$

Methyl 2,4-anhydro-5-azido-3-*O*-*tert*-butyldimethylsilyl-5-deoxy-D-fuconate

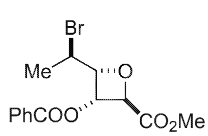
Ee = 100%

$[\alpha]_D^{23} = -50.9$ (c 0.74, $CHCl_3$)

Source of chirality: L-rhamnose as starting material

Stephen W. Johnson, Sarah. F. Jenkinson (née Barker), Donald Angus, John H. Jones, David J. Watkin and George W. J. Fleet*

Tetrahedron: Asymmetry *15 (2004) 3263*



$C_{14}H_{15}BrO_5$

Methyl 2,4-anhydro-3-*O*-benzoyl-5-bromo-5,6-di-deoxy-D-gulonate

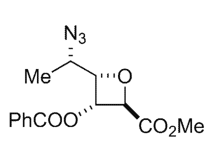
Ee = 100%

$[\alpha]_D^{22} = -31.6$ (c 0.97, $CHCl_3$)

Source of chirality: L-rhamnose as starting material

Stephen W. Johnson, Sarah. F. Jenkinson (née Barker), Donald Angus, John H. Jones, David J. Watkin and George W. J. Fleet*

Tetrahedron: Asymmetry *15 (2004) 3263*



$C_{14}H_{15}N_3O_5$

Methyl 2,4-anhydro-5-azido-3-*O*-benzoyl-5-deoxy-L-rhamnonate

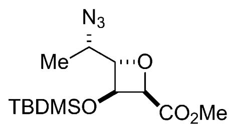
Ee = 100%

$[\alpha]_D^{22} = +43.5$ (c 0.99, $CHCl_3$)

Source of chirality: L-rhamnose as starting material

Stephen W. Johnson, Sarah. F. Jenkinson (née Barker), Donald Angus, John H. Jones, David J. Watkin and George W. J. Fleet*

Tetrahedron: Asymmetry *15 (2004) 3263*



$C_{13}H_{25}N_3O_4Si$

Methyl 2,4-anhydro-5-azido-3-*O*-*tert*-butyldimethylsilyl-5,6-deoxy-L-altronate

Ee = 100%

$[\alpha]_D^{25} = -7.1$ (*c* 0.94, $CHCl_3$)

Source of chirality: L-rhamnose as starting material

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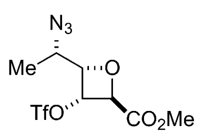
Tetrahedron: Asymmetry *15 (2004) 3263*



$C_8H_{10}F_3N_3O_6S$

Methyl 2,4-anhydro-5-azido-5-deoxy-3-*O*-trifluoromethanesulfonyl-L-rhamnonate

Ee = 100%

$[\alpha]_D^{25} = +8.6$ (*c* 0.92, $CHCl_3$)

Source of chirality: L-rhamnose as starting material

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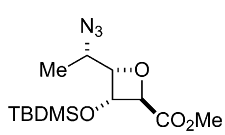
Tetrahedron: Asymmetry *15 (2004) 3263*



$C_{13}H_{25}N_3O_4Si$

Methyl 2,4-anhydro-5-azido-3-*O*-*tert*-butyldimethylsilyl-5-deoxy-L-rhamnonate

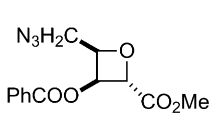
Ee = 100%

$[\alpha]_D^{22} = +44.8$ (*c* 1.16, $CHCl_3$)

Source of chirality: L-rhamnose as starting material

Stephen W. Johnson, Sarah. F. Jenkinson (née Barker), Donald Angus, John H. Jones, David J. Watkin and George W. J. Fleet*

Tetrahedron: Asymmetry *15 (2004) 3263*



$C_{13}H_{13}N_3O_5$

Methyl 2,4-anhydro-5-azido-3-*O*-benzoyl-5-deoxy-D-lyxonate

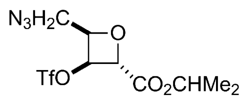
Ee = 100%

$[\alpha]_D^{22} = +103.5$ (*c* 1.03, $CHCl_3$)

Source of chirality: D-xylose as starting material

Stephen W. Johnson, Sarah. F. Jenkinson (née Barker), Donald Angus, John H. Jones, David J. Watkin and George W. J. Fleet*

Tetrahedron: Asymmetry *15 (2004) 3263*



$C_9H_{12}N_3O_6S$

*Iso*propyl 2,4-anhydro-5-azido-5-deoxy-3-*O*-trifluoromethanesulfonyl-D-lyxonate

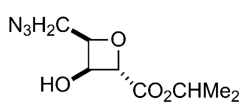
Ee = 100%

$[\alpha]_D^{26} = +41.8$ (*c* 1.04, $CHCl_3$)

Source of chirality: D-xylose as starting material

Stephen W. Johnson, Sarah. F. Jenkinson (née Barker), Donald Angus, John H. Jones, David J. Watkin and George W. J. Fleet*

Tetrahedron: Asymmetry *15 (2004) 3263*



$C_8H_{13}N_3O_4$

*Iso*propyl 2,4-anhydro-5-azido-5-deoxy-D-lyxonate

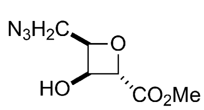
Ee = 100%

$[\alpha]_D^{23} = +26.4$ (*c* 0.95 $CHCl_3$)

Source of chirality: D-xylose as starting material

Stephen W. Johnson, Sarah. F. Jenkinson (née Barker), Donald Angus, John H. Jones, David J. Watkin and George W. J. Fleet*

Tetrahedron: Asymmetry *15 (2004) 3263*



$C_6H_9N_3O_4$

Methyl 2,4-anhydro-5-azido-5-deoxy-D-lyxonate

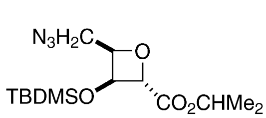
Ee = 100%

$[\alpha]_D^{22} = +8.78$ (*c* 0.98, $CHCl_3$)

Source of chirality: D-xylose as starting material

Stephen W. Johnson, Sarah. F. Jenkinson (née Barker), Donald Angus, John H. Jones, David J. Watkin and George W. J. Fleet*

Tetrahedron: Asymmetry *15 (2004) 3263*



$C_{14}H_{27}N_3O_4Si$

*Iso*propyl 2,4-anhydro-5-azido-3-*O*-*tert*-butyldimethylsilyl-5-deoxy-D-lyxonate

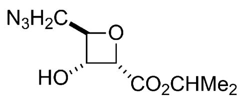
Ee = 100%

$[\alpha]_D^{24} = -8.8$ (*c* 0.98, $CHCl_3$)

Source of chirality: D-xylose as starting material

Stephen W. Johnson, Sarah. F. Jenkinson (née Barker), Donald Angus, John H. Jones, David J. Watkin and George W. J. Fleet*

Tetrahedron: Asymmetry *15 (2004) 3263*



$C_8H_{13}N_3O_4$

*Iso*propyl 2,4-anhydro-5-azido-5-deoxy-D-arabinonate

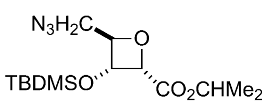
Ee = 100%

$[\alpha]_D^{26} = +45.9$ (*c* 1.04, $CHCl_3$)

Source of chirality: D-xylose as starting material

Stephen W. Johnson, Sarah. F. Jenkinson (née Barker), Donald Angus, John H. Jones, David J. Watkin and George W. J. Fleet*

Tetrahedron: Asymmetry *15 (2004) 3263*



$C_{14}H_{27}N_3O_4Si$

*Iso*propyl 2,4-anhydro-5-azido-3-*O*-*tert*-butyldimethylsilyl-5-deoxy-D-arabinonate

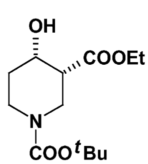
Ee = 100%

$[\alpha]_D^{26} = +50.3$ (*c* 0.815, $CHCl_3$)

Source of chirality: D-xylose as starting material

Magdolna Solymár, Enikő Forró and Ferenc Fülöp*

Tetrahedron: Asymmetry *15 (2004) 3281*



$C_{13}H_{23}NO_5$

(3*R*,4*S*)-Ethyl *cis*-1-(*tert*-butoxycarbonyl)-4-hydroxypiperidine-3-carboxylate

Ee >99% by GC on Chirasil-Dex-CB column

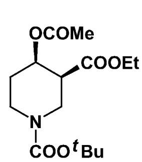
$[\alpha]_D^{25} = +57.9$ (*c* 1, CH_2Cl_2)

Source of chirality: lipase AK-catalyzed enantioselective acylation

Absolute configuration: 3*R*,4*S*

Magdolna Solymár, Enikő Forró and Ferenc Fülöp*

Tetrahedron: Asymmetry *15 (2004) 3281*



$C_{15}H_{25}NO_6$

(3*S*,4*R*)-Ethyl *cis*-1-(*tert*-butoxycarbonyl)-4-acetyloxypiperidine-3-carboxylate

Ee = 99% by GC on Chirasil-Dex-CB column

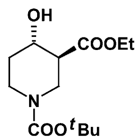
$[\alpha]_D^{25} = -41.0$ (*c* 1, CH_2Cl_2)

Source of chirality: lipase AK-catalyzed enantioselective acylation

Absolute configuration: 3*S*,4*R*

Magdolna Solymár, Enikő Forró and Ferenc Fülöp*

Tetrahedron: Asymmetry *15 (2004) 3281*



$C_{13}H_{23}NO_5$

(3*S*,4*S*)-Ethyl *trans*-1-(*tert*-butoxycarbonyl)-4-hydroxypiperidine-3-carboxylate

Ee = 99% by GC on Chirasil-Dex-CB column

$[\alpha]_D^{25} = -24.4$ (*c* 0.91, CH_2Cl_2)

Source of chirality: lipase AK-catalyzed enantioselective acylation

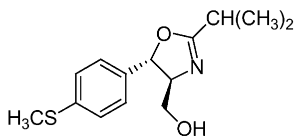
Absolute configuration: 3*S*,4*S*

Magdolna Solymár, Enikő Forró and Ferenc Fülöp*

Tetrahedron: Asymmetry *15 (2004) 3281*

Agata Głuszyńska and Maria D. Rozwadowska*

Tetrahedron: Asymmetry *15 (2004) 3289*



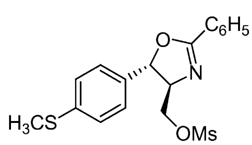
$C_{14}H_{19}NO_2S$

(4*S*,5*S*)-4-Hydroxymethyl-2-*iso*-propyl-5-[4-(methylthio)phenyl]-2-oxazoline

Ee = 100%
$[\alpha]_D = -92.5$ (*c* 1.02, CH_2Cl_2)
Source of chirality: (+)-thiomicamine
Absolute configuration: (4*S*,5*S*)

Agata Głuszyńska and Maria D. Rozwadowska*

Tetrahedron: Asymmetry *15 (2004) 3289*



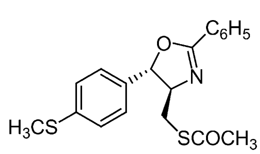
$C_{18}H_{19}NO_4S_2$

(4*S*,5*S*)-4-Mesyloxymethyl-5-[4-(methylthio)phenyl]-2-phenyl-2-oxazoline

Ee = 100%
$[\alpha]_D = +29.8$ (*c* 0.99, $CHCl_3$)
Source of chirality: (+)-thiomicamine
Absolute configuration: (4*S*,5*S*)

Agata Głuszyńska and Maria D. Rozwadowska*

Tetrahedron: Asymmetry *15 (2004) 3289*



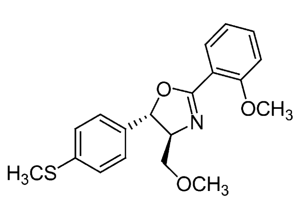
$C_{19}H_{19}NO_2S_2$

(4*S*,5*S*)-5-[4-(Methylthio)phenyl]-2-phenyl-4-thioacetoxylmethyl-2-oxazoline

Ee = 100%
$[\alpha]_D = +79.3$ (*c* 1.00, $CHCl_3$)
Source of chirality: (+)-thiomicamine
Absolute configuration: (4*S*,5*S*)

Agata Głuszyńska and Maria D. Rozwadowska*

Tetrahedron: Asymmetry *15 (2004) 3289*



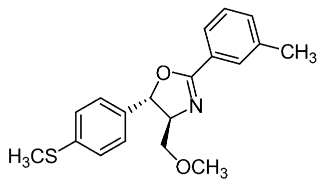
$C_{19}H_{21}NO_3S$

(4*S*,5*S*)-4-Methoxymethyl-2-(2-methoxyphenyl)-5-[4-(methylthio)phenyl]-2-oxazoline

Ee = 100%
$[\alpha]_D = +50.6$ (*c* 0.89, CH_2Cl_2)
Source of chirality: (+)-thiomicamine
Absolute configuration: (4*S*,5*S*)

Agata Głuszyńska and Maria D. Rozwadowska*

Tetrahedron: Asymmetry *15 (2004) 3289*



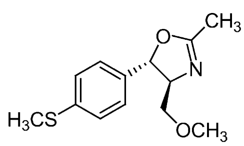
$C_{19}H_{21}NO_2S$

(4*S*,5*S*)-4-Methoxymethyl-5-[4-(methylthio)phenyl]-2-(3-tolyl)-2-oxazoline

Ee = 100%
$[\alpha]_D = +66.1$ (*c* 1.03, CH_2Cl_2)
Source of chirality: (+)-thiomicamine
Absolute configuration: (4*S*,5*S*)

Agata Głuszyńska and Maria D. Rozwadowska*

Tetrahedron: Asymmetry *15 (2004) 3289*



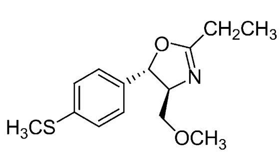
$C_{13}H_{17}NO_2S$

(4*S*,5*S*)-4-Methoxymethyl-2-methyl-5-[4-(methylthio)phenyl]-2-oxazoline

Ee = 100%
$[\alpha]_D = -119.5$ (*c* 0.98, CH_2Cl_2)
Source of chirality: (+)-thiomicamine
Absolute configuration: (4*S*,5*S*)

Agata Głuszyńska and Maria D. Rozwadowska*

Tetrahedron: Asymmetry *15 (2004) 3289*



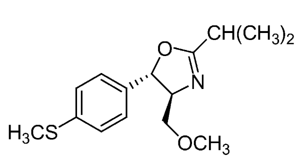
$C_{14}H_{19}NO_2S$

(4*S*,5*S*)-2-Ethyl-4-methoxymethyl-5-[4-(methylthio)phenyl]-2-oxazoline

Ee = 100%
$[\alpha]_D = -102.7$ (*c* 1.08, CH_2Cl_2)
Source of chirality: (+)-thiomicamine
Absolute configuration: (4*S*,5*S*)

Agata Głuszyńska and Maria D. Rozwadowska*

Tetrahedron: Asymmetry *15 (2004) 3289*



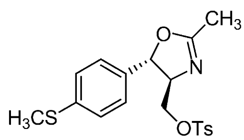
$C_{15}H_{21}NO_2S$

(4*S*,5*S*)-2-*iso*-Propyl-4-methoxymethyl-5-[4-(methylthio)phenyl]-2-oxazoline

Ee = 100%
$[\alpha]_D = -87.1$ (*c* 0.99, CH_2Cl_2)
Source of chirality: (+)-thiomicamine
Absolute configuration: (4*S*,5*S*)

Agata Głuszyńska and Maria D. Rozwadowska*

Tetrahedron: Asymmetry *15 (2004) 3289*



$C_{19}H_{21}NO_4S_2$

(4*S*,5*S*)-2-Methyl-5-[4-(methylthio)phenyl]-4-tosyloxymethyl-2-oxazoline

Ee = 100%

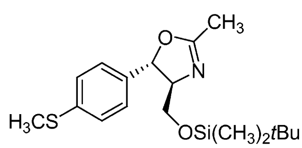
$[\alpha]_D = -127.9$ (*c* 0.88, MeOH)

Source of chirality: (+)-thiomicamine

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

Agata Głuszyńska and Maria D. Rozwadowska*

Tetrahedron: Asymmetry *15 (2004) 3289*



$C_{18}H_{29}NO_2SSi$

(4*S*,5*S*)-4-[(*t*-Butyl)dimethylsilyloxy]methyl-2-methyl-5-[4-(methylthio)phenyl]-2-oxazoline

Ee = 100%

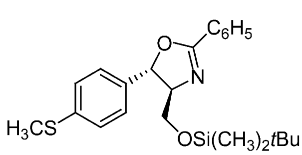
$[\alpha]_D = -77.7$ (*c* 1.10, CH_2Cl_2)

Source of chirality: (+)-thiomicamine

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

Agata Głuszyńska and Maria D. Rozwadowska*

Tetrahedron: Asymmetry *15 (2004) 3289*



$C_{23}H_{31}NO_2SSi$

(4*S*,5*S*)-4-[(*t*-Butyl)dimethylsilyloxy]methyl-5-[4-(methylthio)phenyl]-2-phenyl-2-oxazoline

Ee = 100%

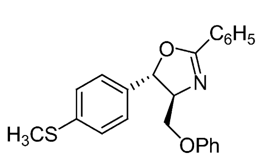
$[\alpha]_D = +55.4$ (*c* 0.57, CH_2Cl_2)

Source of chirality: (+)-thiomicamine

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

Agata Głuszyńska and Maria D. Rozwadowska*

Tetrahedron: Asymmetry *15 (2004) 3289*



$C_{23}H_{21}NO_2S$

(4*S*,5*S*)-5-[4-(Methylthio)phenyl]-2-phenyl-4-phenoxymethyl-2-oxazoline

Ee = 100%

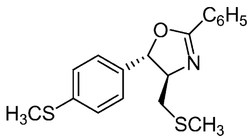
$[\alpha]_D = -22.0$ (*c* 1.01, $CHCl_3$)

Source of chirality: (+)-thiomicamine

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

Agata Głuszyńska and Maria D. Rozwadowska*

Tetrahedron: Asymmetry *15 (2004) 3289*



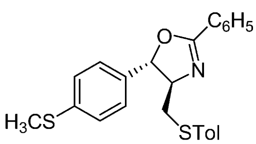
$C_{18}H_{19}NOS_2$

(4*S*,5*S*)-5-[4-(Methylthio)phenyl]-2-phenyl-4-thiomethoxymethyl-2-oxazoline

Ee = 100%
$[\alpha]_D = +130.1$ (*c* 0.98, CH_2Cl_2)
Source of chirality: (+)-thiomicamine
Absolute configuration: (4*S*,5*S*)

Agata Głuszyńska and Maria D. Rozwadowska*

Tetrahedron: Asymmetry *15 (2004) 3289*



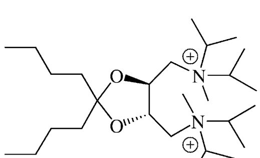
$C_{24}H_{23}NOS_2$

(4*S*,5*S*)-5-[4-(Methylthio)phenyl]-2-phenyl-4-tolylthiomethyl-2-oxazoline

Ee = 100%
$[\alpha]_D = +142.1$ (*c* 0.99, MeOH)
Source of chirality: (+)-thiomicamine
Absolute configuration: (4*S*,5*S*)

Michelle E. Rueffer, Linda K. Fort and Darren K. MacFarland*

Tetrahedron: Asymmetry *15 (2004) 3297*



2 OTf^-

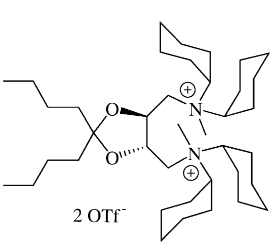
$C_{29}H_{58}N_2O_8S_2F_6$

(4*S*,5*S*)-*N*,*N*,*N*′,*N*′-Tetraisopropyl-2,2-dibutyl-4,5-methanamine-1,3-dioxolane

$[\alpha]_D^{25} = -22.9$ (*c* 0.5, CH_2Cl_2)

Michelle E. Rueffer, Linda K. Fort and Darren K. MacFarland*

Tetrahedron: Asymmetry *15 (2004) 3297*



2 OTf^-

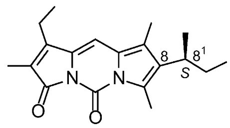
$C_{41}H_{74}N_2O_8S_2F_6$

(4*S*,5*S*)-*N*,*N*,*N*′,*N*′-Tetracyclohexyl-2,2-dibutyl-4,5-methanamine-1,3-dioxolane

$[\alpha]_D^{25} = -17.0$ (*c* 0.5, CH_2Cl_2)

Stefan E. Boiadjiev and David A. Lightner*

Tetrahedron: Asymmetry *15 (2004) 3301*



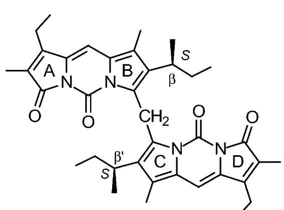
$C_{19}H_{24}N_2O_2$

(+)-(*S*)-1-Ethyl-8-(1-methylpropyl)-2,7,9-trimethyl-3*H*,5*H*-dipyrrolo[1,2-*c*:2′,1′-*f*]pyrimidin-3,5-dione

Ee = 100%
$[\alpha]_D^{20} = +24.5$ (*c* 0.22, $CHCl_3$)
Source of chirality: resolution
Absolute configuration: 8^1S (assigned by X-ray of the brucine salt of the monopyrrole carboxylic acid precursor)

Stefan E. Boiadjiev and David A. Lightner*

Tetrahedron: Asymmetry *15 (2004) 3301*



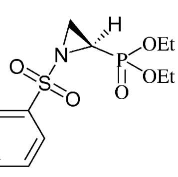
$C_{37}H_{44}N_4O_4$

(−)-(*S*,*S*)-Bis[1-ethyl-8-(1-methylpropyl)-2,9-dimethyl-3*H*,5*H*-dipyrrolo[1,2-*c*:2′,1′-*f*]pyrimidine-3,5-dione-7-yl]methane

Ee = 100%
$[\alpha]_D^{20} = -621.8$ (*c* 1.4×10^{-2}, $CHCl_3$)
Source of chirality: synthesis and resolution
Absolute configuration: (β*S*,β′*S*) (assigned by X-ray of monopyrrole precursor)

E. Kurt Dolence* and Jason B. Roylance

Tetrahedron: Asymmetry *15 (2004) 3307*



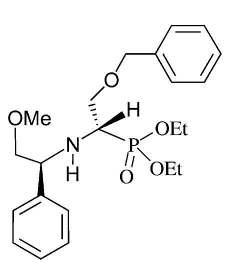
$C_{13}H_{20}O_5N_1P_1S_1$

Diethyl (2*R*)-1-[(4-methylphenyl)sulfonyl]aziridin-2-ylphosphonate

Ee = 96%
$[\alpha]_D^{20} = -29.8$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (2*R*)

E. Kurt Dolence* and Jason B. Roylance

Tetrahedron: Asymmetry *15 (2004) 3307*



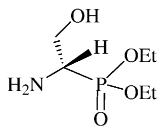
$C_{22}H_{32}O_5N_1P_1$

Diethyl (1*S*)-(2-*O*-benzyl)-1-{[(1*S*)-2-methoxy-1-phenylethyl]amino}ethylphosphonate

Ee = >99%
$[\alpha]_D^{20} = +48.2$ (*c* 0.60, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*S*), (1*S*)

E. Kurt Dolence* and Jason B. Roylance

Tetrahedron: Asymmetry *15 (2004) 3307*



$C_6H_{16}O_4N_1P_1$

Diethyl (1*S*)-1-amino-2-hydroxyethylphosphonate

Ee = >98%

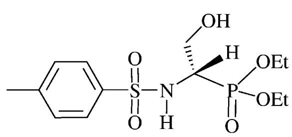
$[\alpha]_D^{20} = +11.7$ (*c* 1.0, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (1*S*)

E. Kurt Dolence* and Jason B. Roylance

Tetrahedron: Asymmetry *15 (2004) 3307*



$C_{13}H_{22}O_6N_1P_1S_1$

Diethyl (1*S*)-2-hydroxy-1-{[(4-methylphenyl)sulfonyl]amino}ethylphosphonate

Ee = 98%

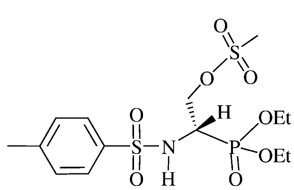
$[\alpha]_D^{20} = +11.7$ (*c* 1.00, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (1*S*)

E. Kurt Dolence* and Jason B. Roylance

Tetrahedron: Asymmetry *15 (2004) 3307*



$C_{14}H_{24}O_8N_1P_1S_2$

(2*S*)-2-(Diethoxyphosphoryl)-2-{[(4-methylphenyl)sulfonyl]amino}ethyl methanesulfonate

Ee = 98%

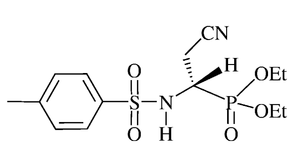
$[\alpha]_D^{20} = +9.2$ (*c* 0.972, benzene)

Source of chirality: asymmetric synthesis

Absolute configuration: (2*S*)

E. Kurt Dolence* and Jason B. Roylance

Tetrahedron: Asymmetry *15 (2004) 3307*



$C_{14}H_{21}O_5N_2P_1S_1$

Diethyl (2*S*)-cyano{[(4-methylphenyl)sulfonyl]amino}methylphosphonate

Ee = 98%

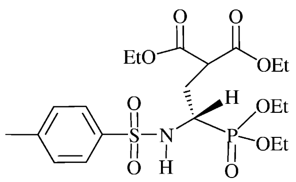
$[\alpha]_D^{20} = -14.1$ (*c* 1.932, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (2*S*)

E. Kurt Dolence* and Jason B. Roylance

Tetrahedron: Asymmetry *15 (2004) 3307*



$C_{20}H_{32}O_9N_1P_1S_1$

Diethyl [(2*S*)-1-{[(4-methylphenyl)sulfonyl]amino}-2-amino-2-(diethoxyphosphoryl)ethyl]malonate

Ee = 98%

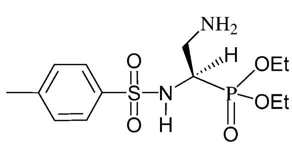
$[\alpha]_D^{20} = -21.9$ (c 1.540, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (2*S*)

E. Kurt Dolence* and Jason B. Roylance

Tetrahedron: Asymmetry *15 (2004) 3307*



$C_{13}H_{23}O_5N_2P_1S_1$

Diethyl (1*R*)-2-amino-1-{[(4-methylphenyl)sulfonyl]amino}ethylphosphonate

Ee = 98%

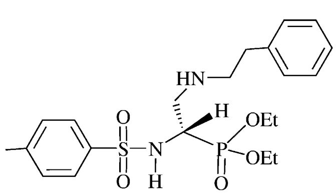
$[\alpha]_D^{20} = -18.5$ (c 0.460, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (1*R*)

E. Kurt Dolence* and Jason B. Roylance

Tetrahedron: Asymmetry *15 (2004) 3307*



$C_{21}H_{31}O_5N_2P_1S_1$

Diethyl (1*S*)-1-{[(4-methylphenyl)sulfonyl]amino}-2-[(2-phenylethyl)amino]ethylphosphonate

Ee = 98%

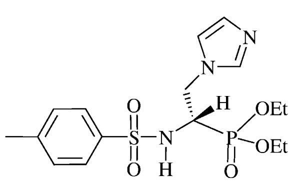
$[\alpha]_D^{20} = +6.8$ (c 0.306, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (1*S*)

E. Kurt Dolence* and Jason B. Roylance

Tetrahedron: Asymmetry *15 (2004) 3307*



$C_{16}H_{24}O_5N_3P_1S_1$

Diethyl (1*S*)-2-(1*H*-imidazol-1-yl)-1-{[(4-methylphenyl)sulfonyl]amino}ethylphosphonate

Ee = 98%

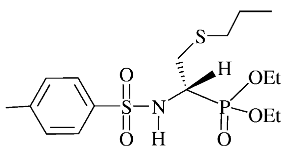
$[\alpha]_D^{20} = -13.3$ (c 0.744, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (1*S*)

E. Kurt Dolence* and Jason B. Roylance

Tetrahedron: Asymmetry *15 (2004) 3307*



$C_{16}H_{28}O_5N_1P_1S_2$

Diethyl (1*S*)-1-{[(4-methylphenyl)sulfonyl]amino}-2-(propylsulfanyl)ethylphosphonate

Ee = 98%

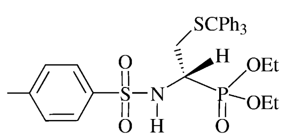
$[\alpha]_D^{20} = +18.0$ (*c* 0.128, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (1*S*)

E. Kurt Dolence* and Jason B. Roylance

Tetrahedron: Asymmetry *15 (2004) 3307*



$C_{32}H_{36}O_5N_1P_1S_2$

Diethyl (1*S*)-1-{[(4-methylphenyl)sulfonyl]amino}-2-(triphenylmethylsulfanyl)ethylphosphonate

Ee = 98%

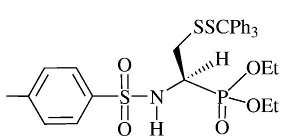
$[\alpha]_D^{20} = -1.4$ (*c* 0.580, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (1*S*)

E. Kurt Dolence* and Jason B. Roylance

Tetrahedron: Asymmetry *15 (2004) 3307*



$C_{32}H_{36}O_5N_1P_1S_3$

Diethyl (1*R*)-1-{[(4-methylphenyl)sulfonyl]amino}-2-(triphenylmethyldisulfanyl)ethylphosphonate

Ee = 97%

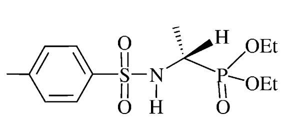
$[\alpha]_D^{20} = -59.1$ (*c* 0.310, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (1*S*)

E. Kurt Dolence* and Jason B. Roylance

Tetrahedron: Asymmetry *15 (2004) 3307*



$C_{13}H_{22}O_5N_1P_1S_1$

Diethyl (1*S*)-1-{[(4-methylphenyl)sulfonyl]amino}ethylphosphonate

Ee = 100%

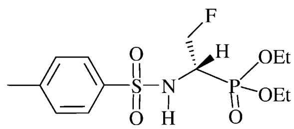
$[\alpha]_D^{20} = +15.0$ (*c* 0.276, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (1*S*)

E. Kurt Dolence* and Jason B. Roylance

Tetrahedron: Asymmetry *15 (2004) 3307*



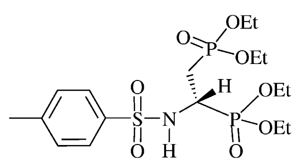
$C_{13}H_{21}F_1O_5N_1P_1S_1$

Diethyl (1*S*)-2-fluoro-l-{[(4-methylphenyl)sulfonyl]amino}ethylphosphonate

Ee = 98%
$[\alpha]_D^{20} = +10.2$ (*c* 1.200, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*S*)

E. Kurt Dolence* and Jason B. Roylance

Tetrahedron: Asymmetry *15 (2004) 3307*



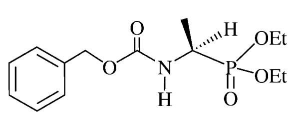
$C_{17}H_{31}O_8N_1P_2S_1$

Diethyl (1*S*)-(2-diethylphosphoryl)-1-{[(4-methylphenyl)sulfonyl]amino}ethylphosphonate

Ee = 98%
$[\alpha]_D^{20} = +4.1$ (*c* 0.924, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*S*)

E. Kurt Dolence* and Jason B. Roylance

Tetrahedron: Asymmetry *15 (2004) 3307*



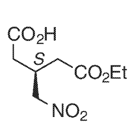
$C_{14}H_{22}O_5N_1P_1$

Diethyl (1*R*)-1-{[carbobenzyloxy]amino}ethylphosphonate

Ee = 90%
$[\alpha]_D^{20} = -12.5$ (*c* 1.180, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*R*)

Fulvia Felluga,* Valentina Gombac, Giuliana Pitacco and Ennio Valentin

Tetrahedron: Asymmetry *15 (2004) 3323*



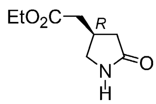
$C_8H_{13}NO_6$

(*S*)-(−)-3-(Nitromethyl)pentanedioic acid monoethyl ester

Ee = 99% (by ^{1}H NMR, 400 MHz)
$[\alpha]_D^{25} = -2.2$ (*c* 1.0, MeOH)
Source of chirality: enzymatic hydrolysis
Absolute configuration: *S*

Fulvia Felluga,* Valentina Gombac, Giuliana Pitacco and Ennio Valentin

Tetrahedron: Asymmetry *15 (2004) 3323*



$C_8H_{13}NO_3$

Ethyl (*R*)-(+)-2-oxo-4-pyrrolidineacetate

Ee = 99%

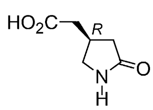
$[\alpha]_D^{25} = +2.8$ (*c* 1.0, MeOH)

Source of chirality: enzymatic hydrolysis

Absolute configuration: *R*

Fulvia Felluga,* Valentina Gombac, Giuliana Pitacco and Ennio Valentin

Tetrahedron: Asymmetry *15 (2004) 3323*



$C_6H_9NO_3$

(*R*)-(+)-2-Oxo-4-pyrrolidineacetic acid

Ee = 99%

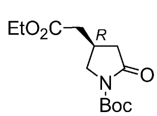
$[\alpha]_D^{25} = +2.9$ (*c* 0.5, MeOH)

Source of chirality: enzymatic hydrolysis

Absolute configuration: *R*

Fulvia Felluga,* Valentina Gombac, Giuliana Pitacco and Ennio Valentin

Tetrahedron: Asymmetry *15 (2004) 3323*



$C_{13}H_{21}NO_5$

Ethyl (*R*)-(+)-2-oxo-1-*tert*-butoxycarbonyl-4-pyrrolidineacetate

Ee = 99%

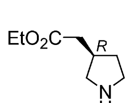
$[\alpha]_D^{25} = +2.7$ (*c* 1.1, MeOH)

Source of chirality: enzymatic hydrolysis

Absolute configuration: *R*

Fulvia Felluga,* Valentina Gombac, Giuliana Pitacco and Ennio Valentin

Tetrahedron: Asymmetry *15 (2004) 3323*



$C_8H_{15}NO_2$

Ethyl (*R*)-(−)-3-pyrrolidineacetate

Ee = 99%

$[\alpha]_D^{25} = -14$ (*c* = 1, MeOH)

Source of chirality: enzymatic hydrolysis

Absolute configuration: *R*