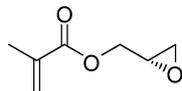


Stereochemistry abstracts

Damien Héroult, Christine Saluzzo and Marc Lemaire*

Tetrahedron: Asymmetry 17 (2006) 1944



$C_7H_{10}O_3$

(*S*)-Glycidyl methacrylate

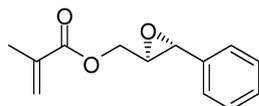
Ee >99.5%

$[\alpha]_D = +30.3$ (*c* 0.01, CH_2Cl_2)

Absolute configuration: *S*

Damien Héroult, Christine Saluzzo and Marc Lemaire*

Tetrahedron: Asymmetry 17 (2006) 1944



$C_{13}H_{14}O_4$

(*R,R*)-Phenyl glycidylmethacrylate

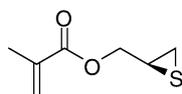
Ee >99.5%

$[\alpha]_D = +49.6$ (*c* 0.01, CH_2Cl_2)

Absolute configuration: *R,R*

Damien Héroult, Christine Saluzzo and Marc Lemaire*

Tetrahedron: Asymmetry 17 (2006) 1944



$C_7H_{10}O_2S$

(*S*)-Thiiranylmethyl methacrylate

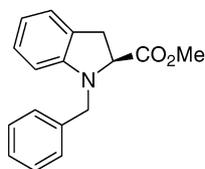
Ee >99.5%

$[\alpha]_D = -37.8$ (*c* 0.01, CH_2Cl_2)

Absolute configuration: *S*

Fredrik Andersson and Erik Hedenström*

Tetrahedron: Asymmetry 17 (2006) 1952



$C_{17}H_{17}NO_2$

(*S*)-Methyl 1-benzylindoline-2-carboxylate

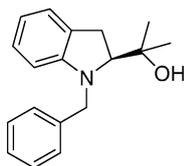
$[\alpha]_D^{20} = +5.4$ (*c* 2.90, MeOH)

Source of chirality: (*S*)-indoline-2-carboxylic acid

Absolute configuration: 2*S*

Fredrik Andersson and Erik Hedenström*

Tetrahedron: Asymmetry 17 (2006) 1952



C₁₈H₂₁NO

2-((*S*)-Benzyloxyindolin-2-yl)propan-2-ol

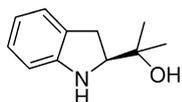
$[\alpha]_D^{20} = -10.1$ (*c* 0.80, MeOH)

Source of chirality: (*S*)-indoline-2-carboxylic acid

Absolute configuration: 2*S*

Fredrik Andersson and Erik Hedenström*

Tetrahedron: Asymmetry 17 (2006) 1952



C₁₁H₁₅NO

2-((*S*)-Indolin-2-yl)propan-2-ol

Ee >99%

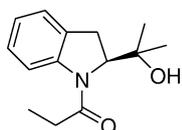
$[\alpha]_D^{20} = -56.4$ (*c* 0.61, CHCl₃)

Source of chirality: (*S*)-indoline-2-carboxylic acid

Absolute configuration: 2*S*

Fredrik Andersson and Erik Hedenström*

Tetrahedron: Asymmetry 17 (2006) 1952



C₁₄H₁₉NO₂

1-((*S*)-2-(2-Hydroxypropan-2-yl)indolin-1-yl)propan-1-one

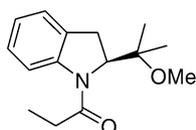
$[\alpha]_D^{20} = -129.5$ (*c* 1.53, MeOH)

Source of chirality: (*S*)-indoline-2-carboxylic acid

Absolute configuration: 2*S*

Fredrik Andersson and Erik Hedenström*

Tetrahedron: Asymmetry 17 (2006) 1952



C₁₅H₂₁NO₂

1-((*S*)-2-(2-Methoxypropan-2-yl)indolin-1-yl)propan-1-one

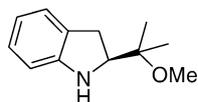
$[\alpha]_D^{20} = -94.3$ (*c* 1.51, MeOH)

Source of chirality: (*S*)-indoline-2-carboxylic acid

Absolute configuration: 2*S*

Fredrik Andersson and Erik Hedenström*

Tetrahedron: Asymmetry 17 (2006) 1952



C₁₂H₁₇NO

(*S*)-2-(2-Methoxypropan-2-yl)indoline

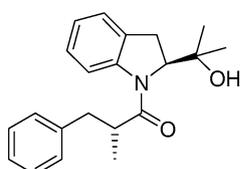
$[\alpha]_D^{20} = -182.3$ (*c* 0.62, MeOH)

Source of chirality: (*S*)-indoline-2-carboxylic acid

Absolute configuration: 2*S*

Fredrik Andersson and Erik Hedenström*

Tetrahedron: Asymmetry 17 (2006) 1952



C₂₁H₂₅NO₂

(*R*)-2-Benzyl-1-((*S*)-2-(2-hydroxypropan-2-yl)indolin-1-yl)propan-1-one

Dr = 99.7:0.3

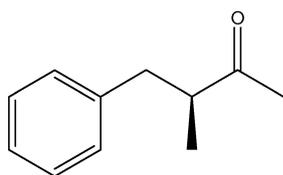
$[\alpha]_D^{20} = -170.2$ (*c* 0.60, MeOH)

Source of chirality: diastereoselective alkylation

Absolute configuration: 2*S*,2'*R*

Malgorzata Zagozda and Jan Pleniewicz*

Tetrahedron: Asymmetry 17 (2006) 1958



C₁₁H₁₄O

(*S*)-(+)-3-Methyl-4-phenyl-2-butanone

Ee = 46%

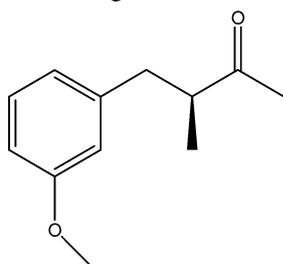
$[\alpha]_D^{23} = +19.0$ (*c* 2.11, CHCl₃)

Source of chirality: microbial reduction

Absolute configuration: *S*

Malgorzata Zagozda and Jan Pleniewicz*

Tetrahedron: Asymmetry 17 (2006) 1958



C₁₂H₁₆O₂

(*S*)-(+)-4-(3-Methoxyphenyl)-3-methyl-2-butanone

Ee = 71%

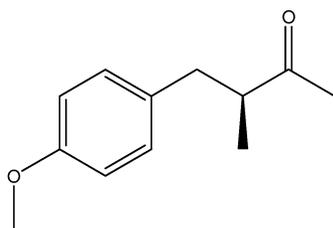
$[\alpha]_D^{24} = +33.6$ (*c* 2.33, CHCl₃)

Source of chirality: microbial reduction

Absolute configuration: *S*

Malgorzata Zagozda and Jan Pleniewicz*

Tetrahedron: Asymmetry 17 (2006) 1958



C₁₂H₁₆O₂

(*S*)-(+)-4-(4-Methoxyphenyl)-3-methyl-2-butanone

Ee = 38%

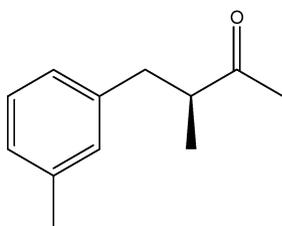
$[\alpha]_D^{24} = +14.3$ (c 2.09, CHCl₃)

Source of chirality: microbial reduction

Absolute configuration: *S*

Malgorzata Zagozda and Jan Pleniewicz*

Tetrahedron: Asymmetry 17 (2006) 1958



C₁₂H₁₆O

(*S*)-(+)-4-(3-Methylphenyl)-3-methyl-2-butanone

Ee = 65%

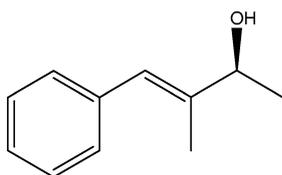
$[\alpha]_D^{24} = +28.4$ (c 2.40, CHCl₃)

Source of chirality: microbial reduction

Absolute configuration: *S*

Malgorzata Zagozda and Jan Pleniewicz*

Tetrahedron: Asymmetry 17 (2006) 1958



C₁₁H₁₄O

(*S*)-(+)-3-Methyl-4-phenyl-3-buten-2-ol

Ee = 98% (*Geotrichum candidum*), ee = 97% (*Mortierella isabellina*)

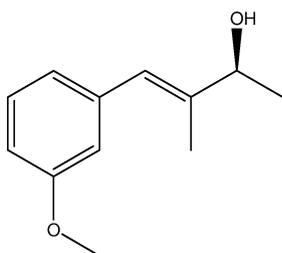
$[\alpha]_D^{24} = +6.8$ (c 2.74, CHCl₃) and $[\alpha]_D^{22} = +6.5$ (c 2.81, CHCl₃), respectively

Source of chirality: microbial reduction

Absolute configuration: *S*

Malgorzata Zagozda and Jan Pleniewicz*

Tetrahedron: Asymmetry 17 (2006) 1958



C₁₂H₁₆O₂

(*S*)-(+)-4-(3-Methoxyphenyl)-3-methyl-3-buten-2-ol

Ee = 99% (*Geotrichum candidum*), ee = 94% (*Mortierella isabellina*)

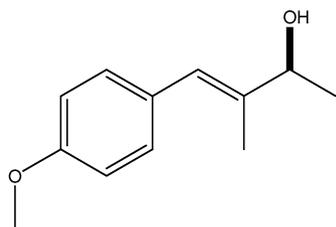
$[\alpha]_D^{22} = +4.3$ (c 1.27, CHCl₃) and $[\alpha]_D^{22} = +7.4$ (c 2.66, CHCl₃), respectively

Source of chirality: microbial reduction

Absolute configuration: *S*

Malgorzata Zagozda and Jan Pleniewicz*

Tetrahedron: Asymmetry 17 (2006) 1958



C₁₂H₁₆O₂

(-)-4-(4-Methoxyphenyl)-3-methyl-3-buten-2-ol

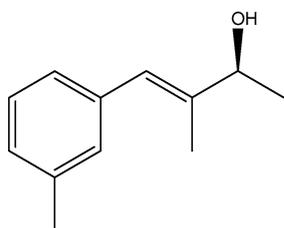
Ee = 77% (*Mortierella isabellina*)

[α]_D²³ = -16.7 (c 1.36, CHCl₃) (*Mortierella isabellina*)

Source of chirality: microbial reduction

Malgorzata Zagozda and Jan Pleniewicz*

Tetrahedron: Asymmetry 17 (2006) 1958



C₁₂H₁₆O

(S)-(+)-4-(3-Methylphenyl)-3-methyl-3-buten-2-ol

Ee = 98% (*Geotrichum candidum*), ee = 94% (*Mortierella isabellina*)

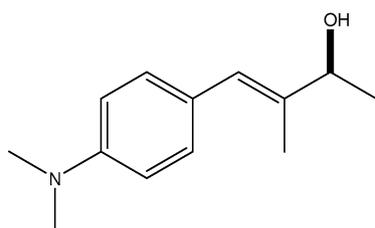
[α]_D²² = +7.7 (c 2.50, CHCl₃) and [α]_D²³ = +7.2 (c 2.18, CHCl₃), respectively

Source of chirality: microbial reduction

Absolute configuration: S

Malgorzata Zagozda and Jan Pleniewicz*

Tetrahedron: Asymmetry 17 (2006) 1958



C₁₃H₁₉NO

(-)-4-(4-Dimethylaminophenyl)-3-methyl-3-buten-2-ol

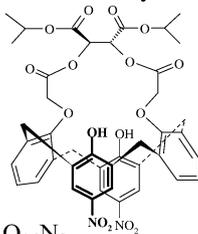
Ee = 43% (*Mortierella isabellina*)

[α]_D²³ = -0.4 (c 1.50, CHCl₃) (*Mortierella isabellina*)

Source of chirality: microbial reduction

Aysegul Karakucuk, Mustafa Durmaz, Abdulkadir Sirit, Mustafa Yilmaz* and Ayhan S. Demir

Tetrahedron: Asymmetry 17 (2006) 1963



C₄₂H₄₀O₁₆N₂

(40*R*,50*R*)-5,17-Dinitro-25,27-dihydroxy-26,28-(40,50-di-1-methylethoxycarbonyl-30,60-dioxa-20,70-dioxooctylene)-dioxycalix[4]arene

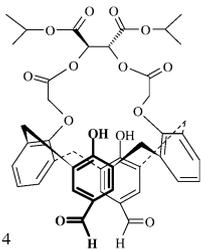
[α]_D²⁰ = +50.2 (c 0.5 CHCl₃)

Source of chirality: L-(+)-tartaric acid diisopropyl ester

Absolute configuration: (*R,R*)

Aysegul Karakucuk, Mustafa Durmaz, Abdulkadir Sirit,
Mustafa Yilmaz* and Ayhan S. Demir

Tetrahedron: Asymmetry 17 (2006) 1963



$C_{44}H_{42}O_{14}$

(40*R*,50*R*)-5,17-Diformyl-25,27-dihydroxy-26,28-(40,50-di-1-methylethoxycarbonyl-30,60-dioxa-20,70-dioxooctylene)-dioxycalix[4]arene

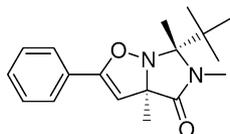
$[\alpha]_D^{20} = +28.2$ (*c* 0.3 $CHCl_3$)

Source of chirality: L-(+)-tartaric acid diisopropyl ester

Absolute configuration: (*R,R*)

Astrid Pernet-Poil-Chevrier, Frédéric Cantagrel, Karel Le Jeune,
Christian Philouze and Pierre Yves Chavant*

Tetrahedron: Asymmetry 17 (2006) 1969



$C_{18}H_{24}N_2O_2$

(3*aS*,6*R*)-6-*tert*-Butyl-5,6-dimethyl-2-phenyl-5,6-dihydroimidazo[1,5-*b*]isoxazol-4(3*aH*)-one

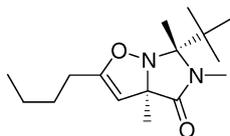
$[\alpha]_D^{25} = -33$ (*c* 3.2, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: 3*R*,6*R*

Astrid Pernet-Poil-Chevrier, Frédéric Cantagrel, Karel Le Jeune,
Christian Philouze and Pierre Yves Chavant*

Tetrahedron: Asymmetry 17 (2006) 1969



$C_{16}H_{28}N_2O_2$

(3*aS*,6*R*)-2-Butyl-6-*tert*-Butyl-5,6-dimethyl-5,6-dihydroimidazo[1,5-*b*]isoxazol-4(3*aH*)-one

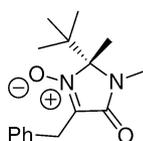
$[\alpha]_D^{25} = -29$ (*c* 5.3, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: 3*R*,6*R*

Astrid Pernet-Poil-Chevrier, Frédéric Cantagrel, Karel Le Jeune,
Christian Philouze and Pierre Yves Chavant*

Tetrahedron: Asymmetry 17 (2006) 1969



$C_{16}H_{22}N_2O_2$

(*R*)-5-Benzyl-2-*tert*-butyl-2,3-dimethyl-2,3-dihydro-imidazol-4-one-1-oxide

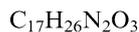
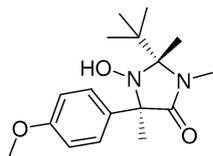
$[\alpha]_D^{25} = -69.8$ (*c* 1.08, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: *R*

Astrid Pernet-Poil-Chevrier, Frédéric Cantagrel, Karel Le Jeune,
Christian Philouze and Pierre Yves Chavant*

Tetrahedron: Asymmetry 17 (2006) 1969



(2*R*,5*R*)-2-*tert*-Butyl-1-hydroxy-5-*para*-methoxyphenyl-2,3,5-trimethylimidazolidin-4-one

$$[\alpha]_D^{25} = +77.3 (c 0.75, CH_2Cl_2)$$

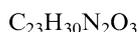
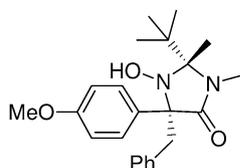
Source of chirality: asymmetric synthesis

Absolute configuration: 2*R*,5*R*

Ee determination: HPLC, Chiralpak AD-RH

Astrid Pernet-Poil-Chevrier, Frédéric Cantagrel, Karel Le Jeune,
Christian Philouze and Pierre Yves Chavant*

Tetrahedron: Asymmetry 17 (2006) 1969



(2*R*,5*R*)-5-Benzyl-2-*tert*-butyl-1-hydroxy-5-*para*-methoxyphenyl-2,3-dimethylimidazolidin-4-one

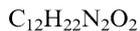
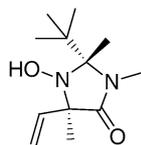
$$[\alpha]_D^{25} = +93.9 (c 0.83, CH_2Cl_2)$$

Source of chirality: asymmetric synthesis

Absolute configuration: 2*R*,5*R*

Astrid Pernet-Poil-Chevrier, Frédéric Cantagrel, Karel Le Jeune,
Christian Philouze and Pierre Yves Chavant*

Tetrahedron: Asymmetry 17 (2006) 1969



(2*R*,5*R*)-2-*tert*-Butyl-1-hydroxy-2,3,5-trimethyl-5-vinyl-imidazolidin-4-one

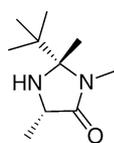
$$[\alpha]_D^{25} = +25.2 (c 1.02, CH_2Cl_2)$$

Source of chirality: asymmetric synthesis

Absolute configuration: 2*R*,5*R*

Astrid Pernet-Poil-Chevrier, Frédéric Cantagrel, Karel Le Jeune,
Christian Philouze and Pierre Yves Chavant*

Tetrahedron: Asymmetry 17 (2006) 1969



(2*S*,5*S*)-2-*tert*-Butyl-2,3,5-trimethylimidazolidin-4-one

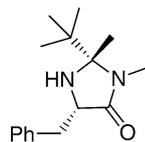
$$[\alpha]_D^{25} = +50.7 (c 1.03, CH_2Cl_2)$$

Source of chirality: asymmetric synthesis

Absolute configuration: 2*S*,5*S*

Astrid Pernet-Poil-Chevrier, Frédéric Cantagrel, Karel Le Jeune,
Christian Philouze and Pierre Yves Chavant*

Tetrahedron: Asymmetry 17 (2006) 1969



C₁₆H₂₄N₂O

(2*S*,5*S*)-5-Benzyl-2-*tert*-butyl-2,3-dimethylimidazolidin-4-one

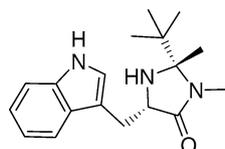
$[\alpha]_D^{25} = -48.8$ (*c* 1.05, CH₂Cl₂)

Source of chirality: asymmetric synthesis

Absolute configuration: 2*S*,5*S*

Astrid Pernet-Poil-Chevrier, Frédéric Cantagrel, Karel Le Jeune,
Christian Philouze and Pierre Yves Chavant*

Tetrahedron: Asymmetry 17 (2006) 1969



C₁₈H₂₅N₃O

(2*S*,5*S*)-5-((1*H*-Indol-3-yl)methyl)-2-*tert*-butyl-2,3-dimethylimidazolidin-4-one

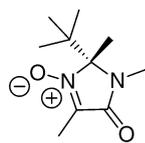
$[\alpha]_D^{25} = -70.1$ (*c* 1.01, CH₂Cl₂)

Source of chirality: asymmetric synthesis

Absolute configuration: 2*S*,5*S*

Astrid Pernet-Poil-Chevrier, Frédéric Cantagrel, Karel Le Jeune,
Christian Philouze and Pierre Yves Chavant*

Tetrahedron: Asymmetry 17 (2006) 1969



C₁₀H₁₈N₂O₂

(*R*)-2-*tert*-Butyl-2,3,5-trimethyl-2,3-dihydro-4*H*-imidazol-4-one 1-oxide

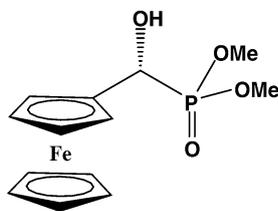
$[\alpha]_D^{25} = -93.7$ (*c* 4.80, CH₂Cl₂)

Source of chirality: asymmetric synthesis

Absolute configuration: *R*

Damian Plażuk, Janusz Zakrzewski* and Agnieszka Rybarczyk-Pirek

Tetrahedron: Asymmetry 17 (2006) 1975



C₁₃H₁₆O₃PFe

(*R*)-(-)-Dimethyl hydroxy-(ferrocenylmethyl)phosphonate

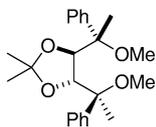
Ee = 94%

$[\alpha]_D^{18} = -97$ (*c* 0.3, CHCl₃)

Source of chirality: resolution of racemate

Kavirayani R. Prasad,* Appayee Chandrakumar
and Pazhamalai Anbarasan

Tetrahedron: Asymmetry 17 (2006) 1979



(4*R*,5*R*)-4,5-Bis((*S*)-1-methoxy-1-phenylethyl)-2,2-dimethyl-1,3-dioxolane

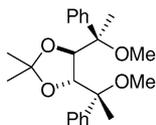
$[\alpha]_D = +25.7$ (*c* 0.7, CHCl₃)

Source of chirality: L-(+)-tartaric acid

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

Kavirayani R. Prasad,* Appayee Chandrakumar
and Pazhamalai Anbarasan

Tetrahedron: Asymmetry 17 (2006) 1979



(4*R*,5*R*)-4,5-Bis((*R*)-1-methoxy-1-phenylethyl)-2,2-dimethyl-1,3-dioxolane

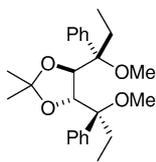
$[\alpha]_D = -80$ (*c* 0.5, CHCl₃)

Source of chirality: L-(+)-tartaric acid

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

Kavirayani R. Prasad,* Appayee Chandrakumar
and Pazhamalai Anbarasan

Tetrahedron: Asymmetry 17 (2006) 1979



(4*R*,5*R*)-4,5-Bis((*S*)-1-methoxy-1-phenylpropyl)-2,2-dimethyl-1,3-dioxolane

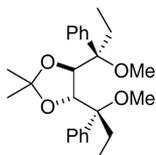
$[\alpha]_D = -38$ (*c* 0.5, CHCl₃)

Source of chirality: L-(+)-tartaric acid

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

Kavirayani R. Prasad,* Appayee Chandrakumar
and Pazhamalai Anbarasan

Tetrahedron: Asymmetry 17 (2006) 1979



(4*R*,5*R*)-4,5-Bis((*S*)-1-methoxy-1-phenylethyl)-2,2-dimethyl-1,3-dioxolane

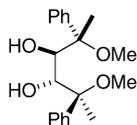
$[\alpha]_D = -32.5$ (*c* 1.2, CHCl₃)

Source of chirality: L-(+)-tartaric acid

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

Kavirayani R. Prasad,* Appayee Chandrakumar
and Pazhamalai Anbarasan

Tetrahedron: Asymmetry 17 (2006) 1979



(2*S*,3*R*,4*R*,5*S*)-2,5-Dimethoxy-2,5-diphenylhexane-3,4-diol

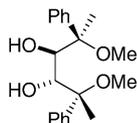
$[\alpha]_D = +70$ (*c* 0.5, CHCl₃)

Source of chirality: L-(+)-tartaric acid

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

Kavirayani R. Prasad,* Appayee Chandrakumar
and Pazhamalai Anbarasan

Tetrahedron: Asymmetry 17 (2006) 1979



(2*R*,3*R*,4*R*,5*R*)-2,5-Dimethoxy-2,5-diphenylhexane-3,4-diol

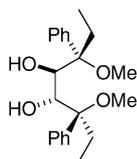
$[\alpha]_D = -48$ (*c* 0.5, CHCl₃)

Source of chirality: L-(+)-tartaric acid

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

Kavirayani R. Prasad,* Appayee Chandrakumar
and Pazhamalai Anbarasan

Tetrahedron: Asymmetry 17 (2006) 1979



(2*S*,3*R*,4*R*,5*S*)-2,5-Dimethoxy-2,5-diphenyloctane-3,4-diol

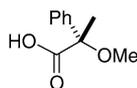
$[\alpha]_D = -16.3$ (*c* 0.8, CHCl₃)

Source of chirality: L-(+)-tartaric acid

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

Kavirayani R. Prasad,* Appayee Chandrakumar
and Pazhamalai Anbarasan

Tetrahedron: Asymmetry 17 (2006) 1979



(*S*)-2-Methoxy-2-phenylpropanoic acid

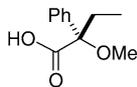
$[\alpha]_D = +38$ (*c* 1, MeOH)

Source of chirality: L-(+)-tartaric acid

Absolute configuration: (*S*)

Kavirayani R. Prasad,* Appayee Chandrakumar
and Pazhamalai Anbarasan

Tetrahedron: Asymmetry 17 (2006) 1979



(*S*)-2-Methoxy-2-phenylbutanoic acid

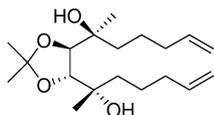
$[\alpha]_D = +52$ (*c* 1, CHCl₃)

Source of chirality: L-(+)-tartaric acid

Absolute configuration: (*S*)

Kavirayani R. Prasad,* Appayee Chandrakumar
and Pazhamalai Anbarasan

Tetrahedron: Asymmetry 17 (2006) 1979



(*4R,5R*)-4,5-Bis((*S*)-2-hydroxyhept-6-en-2-yl)-2,2-dimethyl-1,3-dioxolane

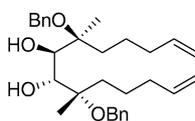
$[\alpha]_D = -5$ (*c* 2.7, CHCl₃)

Source of chirality: L-(+)-tartaric acid

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

Kavirayani R. Prasad,* Appayee Chandrakumar
and Pazhamalai Anbarasan

Tetrahedron: Asymmetry 17 (2006) 1979



(*6S,7R,8R,9S*)-6,9-Bis(benzyloxy)-6,9-dimethyltetradeca-1,13-diene-7,8-diol

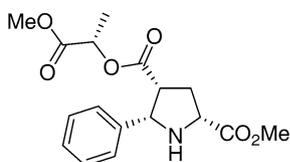
$[\alpha]_D = -12.2$ (*c* 2.7, CHCl₃)

Source of chirality: L-(+)-tartaric acid

Absolute configuration: (*6S,7R,8R,9S*)

Carmen Nájera,* M. de Gracia Retamosa and José M. Sansano*

Tetrahedron: Asymmetry 17 (2006) 1985



C₁₇H₂₁NO₆

4-[(*1S*)-1-(Methoxycarbonyl)-1-methyl] 2-methyl (*2R,4R,5S*)-5-phenylpyrrolidine-2,4-dicarboxylate

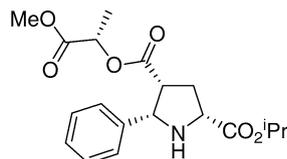
$[\alpha]_D = -82.6$ (*c* 1, CHCl₃)

Source of chirality: methyl (*S*)-lactate

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

Carmen Nájera,* M. de Gracia Retamosa and José M. Sansano*

Tetrahedron: Asymmetry 17 (2006) 1985



$C_{19}H_{25}NO_6$

2-Isopropyl 4-[(1*S*)-1-(methoxycarbonyl)-1-methyl] (2*R*,4*R*,5*S*)-5-phenylpyrrolidine-2,4-dicarboxylate

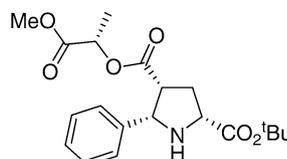
$[\alpha]_D = -63.0$ (*c* 1, $CHCl_3$)

Source of chirality: methyl (*S*)-lactate

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

Carmen Nájera,* M. de Gracia Retamosa and José M. Sansano*

Tetrahedron: Asymmetry 17 (2006) 1985



$C_{20}H_{27}NO_6$

2-*tert*-Butyl 4-[(1*S*)-1-(methoxycarbonyl)-1-methyl] (2*R*,4*R*,5*S*)-5-phenylpyrrolidine-2,4-dicarboxylate

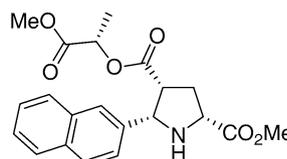
$[\alpha]_D = -59.8$ (*c* 1, $CHCl_3$)

Source of chirality: methyl (*S*)-lactate

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

Carmen Nájera,* M. de Gracia Retamosa and José M. Sansano*

Tetrahedron: Asymmetry 17 (2006) 1985



$C_{21}H_{23}NO_6$

4-[(1*S*)-1-(Methoxycarbonyl)-1-methyl] 2-methyl (2*R*,4*R*,5*S*)-5-(2-naphthyl)pyrrolidine-2,4-dicarboxylate

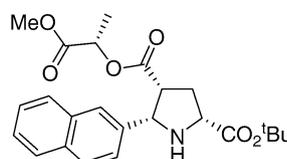
$[\alpha]_D = -63.9$ (*c* 1.2, $CHCl_3$)

Source of chirality: methyl (*S*)-lactate

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

Carmen Nájera,* M. de Gracia Retamosa and José M. Sansano*

Tetrahedron: Asymmetry 17 (2006) 1985



$C_{24}H_{29}NO_6$

2-*tert*-Butyl 4-[(1*S*)-1-(methoxycarbonyl)-1-methyl] (2*R*,4*R*,5*S*)-5-(2-naphthyl)pyrrolidine-2,4-dicarboxylate

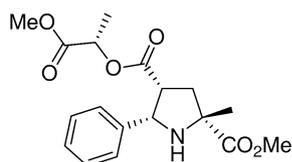
$[\alpha]_D = -57.0$ (*c* 1, $CHCl_3$)

Source of chirality: methyl (*S*)-lactate

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

Carmen Nájera,* M. de Gracia Retamosa and José M. Sansano*

Tetrahedron: Asymmetry 17 (2006) 1985



$C_{18}H_{23}NO_6$

4-[(1*S*)-1-(Methoxycarbonyl)-1-methyl] 2-methyl (2*R*,4*R*,5*S*)-2-methyl-5-phenylpyrrolidine-2,4-dicarboxylate

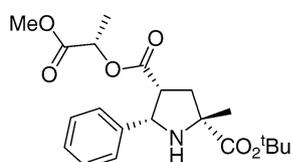
$[\alpha]_D = -66.3$ (*c* 1.2, $CHCl_3$)

Source of chirality: methyl (*S*)-lactate

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

Carmen Nájera,* M. de Gracia Retamosa and José M. Sansano*

Tetrahedron: Asymmetry 17 (2006) 1985



$C_{21}H_{29}NO_6$

2-*tert*-Butyl 4-[(1*S*)-1-(methoxycarbonyl)-1-methyl] (2*R*,4*R*,5*S*)-2-methyl-5-phenylpyrrolidine-2,4-dicarboxylate

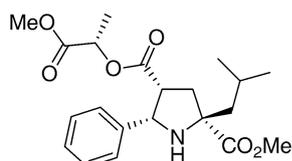
$[\alpha]_D = -57.4$ (*c* 1, $CHCl_3$)

Source of chirality: methyl (*S*)-lactate

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

Carmen Nájera,* M. de Gracia Retamosa and José M. Sansano*

Tetrahedron: Asymmetry 17 (2006) 1985



$C_{21}H_{29}NO_6$

4-[(1*S*)-1-(Methoxycarbonyl)-1-methyl] 2-methyl (2*R*,4*R*,5*S*)-2-isobutyl-5-phenylpyrrolidine-2,4-dicarboxylate

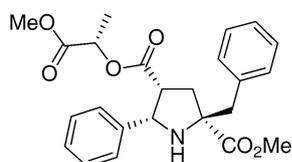
$[\alpha]_D = -44.0$ (*c* 1.2, $CHCl_3$)

Source of chirality: methyl (*S*)-lactate

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

Carmen Nájera,* M. de Gracia Retamosa and José M. Sansano*

Tetrahedron: Asymmetry 17 (2006) 1985



$C_{24}H_{27}NO_6$

4-[(1*S*)-1-(Methoxycarbonyl)-1-methyl] 2-methyl (2*S*,4*R*,5*S*)-2-benzyl-5-phenylpyrrolidine-2,4-dicarboxylate

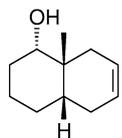
$[\alpha]_D = -45.3$ (*c* 1, $CHCl_3$)

Source of chirality: methyl (*S*)-lactate

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

Tiago O. Vieira, Helena M. C. Ferraz, Leandro H. Andrade and André L. M. Porto*

Tetrahedron: Asymmetry 17 (2006) 1990



C₁₁H₁₈O

(1*S*,4*aS*,8*aR*)-1,2,3,4,4*a*,5,8-Heptahydro-8*a*-methylnaphthalen-1-ol

Ee = 99%

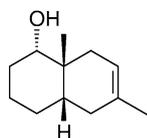
$[\alpha]_D^{25} = +6.6$ (*c* 8.6, CHCl₃)

Absolute configuration: 1*S*,4*aS*,8*aR*

Source of chirality: enzymatic resolution

Tiago O. Vieira, Helena M. C. Ferraz, Leandro H. Andrade and André L. M. Porto*

Tetrahedron: Asymmetry 17 (2006) 1990



C₁₂H₂₀O

(1*S*,4*aS*,8*aR*)-1,2,3,4,4*a*,5,8-Heptahydro-6,8*a*-dimethylnaphthalen-1-ol

Ee = 92%

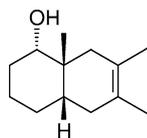
$[\alpha]_D^{25} = -1.6$ (*c* 3.02, CHCl₃)

Absolute configuration: 1*S*,4*aS*,8*aR*

Source of chirality: enzymatic resolution

Tiago O. Vieira, Helena M. C. Ferraz, Leandro H. Andrade and André L. M. Porto*

Tetrahedron: Asymmetry 17 (2006) 1990



C₁₃H₂₂O

(1*S*,4*aS*,8*aR*)-1,2,3,4,4*a*,5,8-Heptahydro-6,7,8*a*-trimethylnaphthalen-1-ol

Ee = 99%

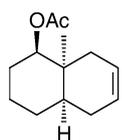
$[\alpha]_D^{25} = -8.0$ (*c* 1.35, CHCl₃)

Absolute configuration: 1*S*,4*aS*,8*aR*

Source of chirality: enzymatic resolution

Tiago O. Vieira, Helena M. C. Ferraz, Leandro H. Andrade and André L. M. Porto*

Tetrahedron: Asymmetry 17 (2006) 1990



C₁₃H₂₀O₂

(1*R*,4*aR*,8*aS*)-1,2,3,4,4*a*,5,8-Heptahydro-8*a*-methylnaphthalen-1-yl acetate

Ee = 99%

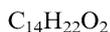
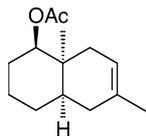
$[\alpha]_D^{25} = -24.0$ (*c* 3.25, CHCl₃)

Absolute configuration: 1*R*,4*aR*,8*aS*

Source of chirality: enzymatic resolution

Tiago O. Vieira, Helena M. C. Ferraz, Leandro H. Andrade
and André L. M. Porto*

Tetrahedron: Asymmetry 17 (2006) 1990



(1*R*,4*aR*,8*aS*)-1,2,3,4,4*a*,5,8-Heptahydro-6,8*a*-dimethylnaphthalen-1-yl acetate

Ee = 99%

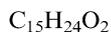
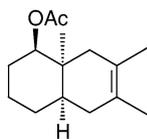
$[\alpha]_D^{25} = -8.5$ (*c* 2.95, $CHCl_3$)

Absolute configuration: 1*R*,4*aR*,8*aS*

Source of chirality: enzymatic resolution

Tiago O. Vieira, Helena M. C. Ferraz, Leandro H. Andrade
and André L. M. Porto*

Tetrahedron: Asymmetry 17 (2006) 1990



(1*R*,4*aR*,8*aS*)-1,2,3,4,4*a*,5,8-Heptahydro-6,7,8*a*-trimethylnaphthalen-1-yl acetate

Ee = 99%

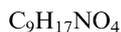
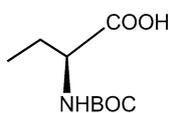
$[\alpha]_D^{25} = +13.5$ (*c* 2.73, $CHCl_3$)

Absolute configuration: 1*S*,4*aS*,8*aR*

Source of chirality: enzymatic resolution

Eleonora Agosta, Antonio Caligiuri, Paola D'Arrigo, Stefano Servi,*
Davide Tessaro and Renato Canevotti

Tetrahedron: Asymmetry 17 (2006) 1995



(*S*)-*N*-Boc-aminobutanoic acid

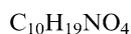
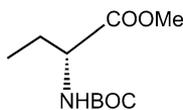
Ee = 98%

$[\alpha]_D^{20} = -17.8$ (*c* 2, MeOH)

Source of chirality: enzyme catalysed kinetic resolution

Eleonora Agosta, Antonio Caligiuri, Paola D'Arrigo, Stefano Servi,*
Davide Tessaro and Renato Canevotti

Tetrahedron: Asymmetry 17 (2006) 1995



(*R*)-*N*-Boc-aminobutanoic acid methyl ester

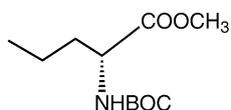
Ee = 98%

$[\alpha]_D^{20} = +39$ (*c* 2.2, MeOH)

Source of chirality: enzyme catalysed kinetic resolution

Eleonora Agosta, Antonio Caligiuri, Paola D'Arrigo, Stefano Servi,*
Davide Tessaro and Renato Canevotti

Tetrahedron: Asymmetry 17 (2006) 1995



$C_{11}H_{21}NO_4$

(*R*)-*N*-Boc-nor-valine-methyl ester

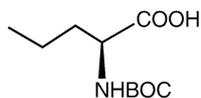
Ee >99%

$[\alpha]_D^{20} = +32$ (*c* 1, MeOH)

Source of chirality: enzyme catalysed kinetic resolution

Eleonora Agosta, Antonio Caligiuri, Paola D'Arrigo, Stefano Servi,*
Davide Tessaro and Renato Canevotti

Tetrahedron: Asymmetry 17 (2006) 1995



$C_{10}H_{19}NO_4$

(*S*)-*N*-Boc-nor-valine

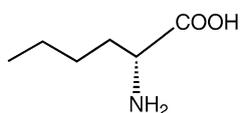
Ee = 97%

$[\alpha]_D^{20} = -14.1$ (*c* 2, MeOH)

Source of chirality: enzyme catalysed kinetic resolution

Eleonora Agosta, Antonio Caligiuri, Paola D'Arrigo, Stefano Servi,*
Davide Tessaro and Renato Canevotti

Tetrahedron: Asymmetry 17 (2006) 1995



$C_6H_{13}NO_2$

(*R*)-Nor-leucine

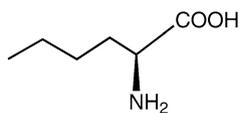
Ee >99%

$[\alpha]_D^{20} = -23.1$ (*c* 5, HCl 6 M)

Source of chirality: enzyme catalysed kinetic resolution

Eleonora Agosta, Antonio Caligiuri, Paola D'Arrigo, Stefano Servi,*
Davide Tessaro and Renato Canevotti

Tetrahedron: Asymmetry 17 (2006) 1995



$C_6H_{13}NO_2$

(*S*)-Nor-leucine

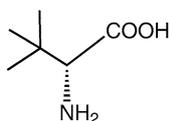
Ee >99%

$[\alpha]_D^{20} = +23.2$ (*c* 5, HCl 6 M)

Source of chirality: enzyme catalysed kinetic resolution

Eleonora Agosta, Antonio Caligiuri, Paola D'Arrigo, Stefano Servi,*
Davide Tessaro and Renato Canevotti

Tetrahedron: Asymmetry 17 (2006) 1995



C₆H₁₃NO₂

(*R*)-t-Leucine

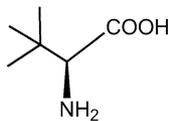
Ee >99%

[α]_D²⁰ = -31.1 (c 1, acetic acid)

Source of chirality: enzyme catalysed kinetic resolution

Eleonora Agosta, Antonio Caligiuri, Paola D'Arrigo, Stefano Servi,*
Davide Tessaro and Renato Canevotti

Tetrahedron: Asymmetry 17 (2006) 1995



C₆H₁₃NO₂

(*S*)-t-Leucine

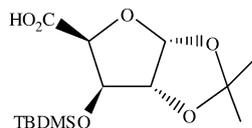
Ee >99%

[α]_D²⁰ = +31.4 (c 1, acetic acid)

Source of chirality: enzyme catalysed kinetic resolution

Géraldine Le Bouc, Christine Thomassigny and Christine Greck*

Tetrahedron: Asymmetry 17 (2006) 2006



C₁₄H₂₆O₆Si

3-*O*-*tert*-Butyldimethylsilyl-1,2-*O*-isopropylidene-α-*D*-xylo-furanuronic acid

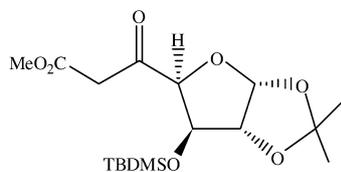
[α]_D = -48 (c 0.8, DCM)

Source of chirality: 1,2:5,6-di-*O*-isopropylidene-*D*-glucofuranose

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

Géraldine Le Bouc, Christine Thomassigny and Christine Greck*

Tetrahedron: Asymmetry 17 (2006) 2006



C₁₇H₃₀O₇Si

Methyl 3-*O*-*tert*-butyldimethylsilyl-6-deoxy-1,2-*O*-isopropylidene-5-oxo-α-*D*-xylo-heptofuranuronates

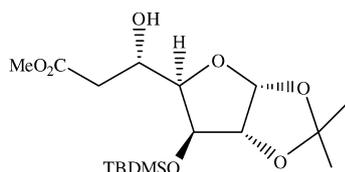
[α]_D = -104 (c 1.4, DCM)

Source of chirality: 1,2:5,6-di-*O*-isopropylidene-*D*-glucofuranose

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

Géraldine Le Bouc, Christine Thomassigny and Christine Greck*

Tetrahedron: Asymmetry 17 (2006) 2006



$C_{17}H_{32}O_7Si$

Methyl 3-*O*-*tert*-butyldimethylsilyl-6-deoxy-1,2-*O*-isopropylidene- β -*L*-ido-heptofuranuronate

De >99%

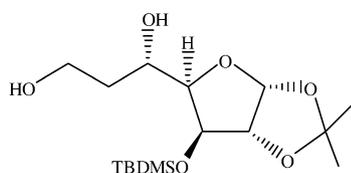
$[\alpha]_D = -18$ (*c* 1.6, DCM)

Source of chirality: 1,2:5,6-di-*O*-isopropylidene-D-glucofuranose

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

Géraldine Le Bouc, Christine Thomassigny and Christine Greck*

Tetrahedron: Asymmetry 17 (2006) 2006



$C_{16}H_{32}O_6Si$

3-*O*-*tert*-Butyldimethylsilyl-6-deoxy-1,2-*O*-isopropylidene- β -*L*-ido-hepto-1,4-furanose

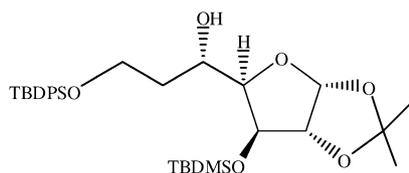
$[\alpha]_D = -28$ (*c* 1.1, DCM)

Source of chirality: 1,2:5,6-di-*O*-isopropylidene-D-glucofuranose

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

Géraldine Le Bouc, Christine Thomassigny and Christine Greck*

Tetrahedron: Asymmetry 17 (2006) 2006



$C_{32}H_{50}O_6Si$

3-*O*-*tert*-Butyldimethylsilyl-7-*O*-*tert*-butyldiphenylsilyl-6-deoxy-1,2-*O*-isopropylidene- β -*L*-ido-hepto-1,4-furanose

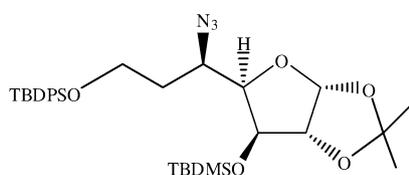
$[\alpha]_D = -18$ (*c* 1.0, DCM)

Source of chirality: 1,2:5,6-di-*O*-isopropylidene-D-glucofuranose

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

Géraldine Le Bouc, Christine Thomassigny and Christine Greck*

Tetrahedron: Asymmetry 17 (2006) 2006



$C_{32}H_{49}N_3O_5Si_2$

5-Azido-3-*O*-*tert*-butyldimethylsilyl-7-*O*-*tert*-butyldiphenylsilyl-5,6-dideoxy-1,2-*O*-isopropylidene- α -D-*gluco*-hepto-1,4-furanose

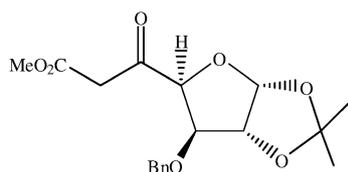
$[\alpha]_D = -6$ (*c* 1.6, DCM)

Source of chirality: 1,2:5,6-di-*O*-isopropylidene-D-glucofuranose

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

Géraldine Le Bouc, Christine Thomassigny and Christine Greck*

Tetrahedron: Asymmetry 17 (2006) 2006



C₁₈H₂₂O₇

Methyl 3-*O*-benzyl-6-deoxy-1,2-*O*-isopropylidene-5-oxo- α -D-ribo-heptofuranuronate

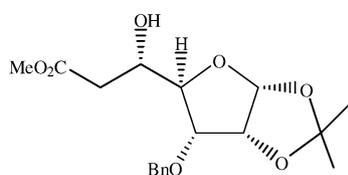
$[\alpha]_D = +76$ (*c* 1.3, DCM)

Source of chirality: 1,2:5,6-di-*O*-isopropylidene-D-glucofuranose

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

Géraldine Le Bouc, Christine Thomassigny and Christine Greck*

Tetrahedron: Asymmetry 17 (2006) 2006



C₁₈H₂₄O₇

Methyl 3-*O*-benzyl-6-deoxy-1,2-*O*-isopropylidene- β -L-talo-heptofuranurate

De >99%

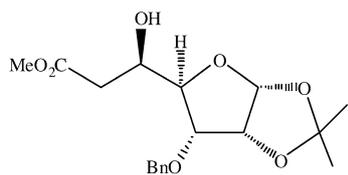
$[\alpha]_D = +72$ (*c* 0.8, DCM)

Source of chirality: 1,2:5,6-di-*O*-isopropylidene-D-glucofuranose

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

Géraldine Le Bouc, Christine Thomassigny and Christine Greck*

Tetrahedron: Asymmetry 17 (2006) 2006



C₁₈H₂₄O₇

Methyl 3-*O*-benzyl-6-deoxy-1,2-*O*-isopropylidene- α -D-allo-heptofuranuronate

De >99%

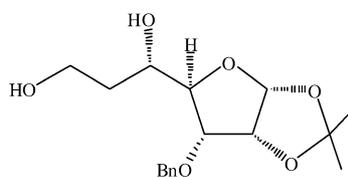
$[\alpha]_D = +110$ (*c* 0.6, DCM)

Source of chirality: 1,2:5,6-di-*O*-isopropylidene-D-allofuranose

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

Géraldine Le Bouc, Christine Thomassigny and Christine Greck*

Tetrahedron: Asymmetry 17 (2006) 2006



C₁₇H₂₄O₆

3-*O*-Benzyl-6-deoxy-1,2-*O*-isopropylidene- β -L-talo-hepto-1,4-furanose

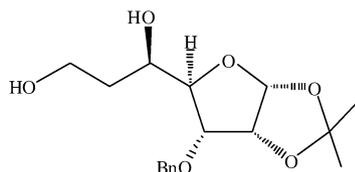
$[\alpha]_D = +101$ (*c* 0.9, DCM)

Source of chirality: 1,2:5,6-di-*O*-isopropylidene-D-allofuranose

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

Géraldine Le Bouc, Christine Thomassigny and Christine Greck*

Tetrahedron: Asymmetry 17 (2006) 2006



C₁₇H₂₄O₆

3-*O*-Benzyl-6-deoxy-1,2-*O*-isopropylidene- α -D-*allo*-hepto-1,4-furanose

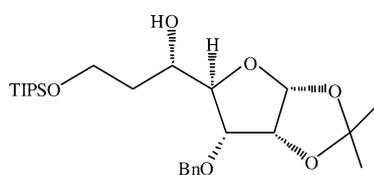
$[\alpha]_D = +113$ (*c* 1.0, DCM)

Source of chirality: 1,2:5,6-di-*O*-isopropylidene-D-allofuranose

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

Géraldine Le Bouc, Christine Thomassigny and Christine Greck*

Tetrahedron: Asymmetry 17 (2006) 2006



C₂₆H₄₄O₆Si

3-*O*-Benzyl-6-deoxy-1,2-*O*-isopropylidene-7-*O*-triisopropylsilyl- β -L-*talo*-hepto-1,4-furanose

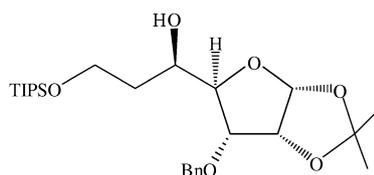
$[\alpha]_D = +67$ (*c* 1.0, DCM)

Source of chirality: 1,2:5,6-di-*O*-isopropylidene-D-allofuranose

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

Géraldine Le Bouc, Christine Thomassigny and Christine Greck*

Tetrahedron: Asymmetry 17 (2006) 2006



C₂₆H₄₄O₆Si

3-*O*-Benzyl-6-deoxy-1,2-*O*-isopropylidene-7-*O*-triisopropylsilyl- α -D-*allo*-hepto-1,4-furanose

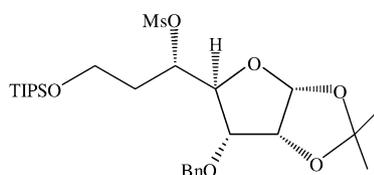
$[\alpha]_D = +64$ (*c* 2.0, DCM)

Source of chirality: 1,2:5,6-di-*O*-isopropylidene-D-allofuranose

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

Géraldine Le Bouc, Christine Thomassigny and Christine Greck*

Tetrahedron: Asymmetry 17 (2006) 2006



C₂₇H₄₆O₈SSi

3-*O*-Benzyl-6-deoxy-1,2-*O*-isopropylidene-5-*O*-methanesulfonyl-7-*O*-triisopropylsilyl- β -L-*talo*-hepto-1,4-furanose

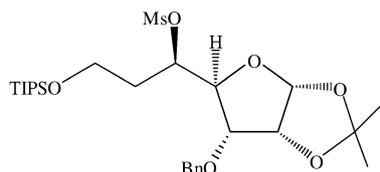
$[\alpha]_D = +41$ (*c* 0.8, DCM)

Source of chirality: 1,2:5,6-di-*O*-isopropylidene-D-allofuranose

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

Géraldine Le Bouc, Christine Thomassigny and Christine Greck*

Tetrahedron: Asymmetry 17 (2006) 2006



3-*O*-Benzyl-6-deoxy-1,2-*O*-isopropylidene-5-*O*-methanesulfonyl-7-*O*-triisopropylsilyl- α -D-*allo*-hepto-1,4-furanose

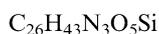
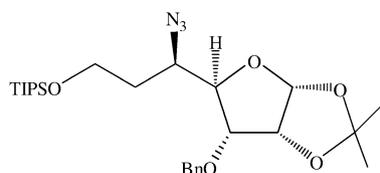
$[\alpha]_D = +61$ (*c* 1.7, DCM)

Source of chirality: 1,2:5,6-di-*O*-isopropylidene-D-allofuranose

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

Géraldine Le Bouc, Christine Thomassigny and Christine Greck*

Tetrahedron: Asymmetry 17 (2006) 2006



5-Azido-3-*O*-benzyl-5,6-dideoxy-1,2-*O*-isopropylidene-7-*O*-triisopropylsilyl- α -D-*allo*-hepto-1,4-furanose

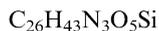
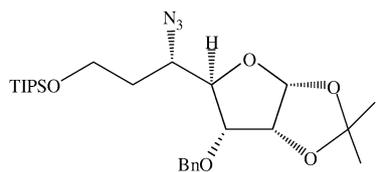
$[\alpha]_D = +105$ (*c* 1.4, DCM)

Source of chirality: 1,2:5,6-di-*O*-isopropylidene-D-allofuranose

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

Géraldine Le Bouc, Christine Thomassigny and Christine Greck*

Tetrahedron: Asymmetry 17 (2006) 2006



5-Azido-3-*O*-benzyl-5,6-dideoxy-1,2-*O*-isopropylidene-7-*O*-triisopropylsilyl- β -L-*talo*-hepto-1,4-furanose

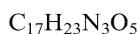
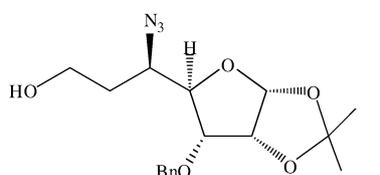
$[\alpha]_D = +48$ (*c* 1.1, DCM)

Source of chirality: 1,2:5,6-di-*O*-isopropylidene-D-allofuranose

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

Géraldine Le Bouc, Christine Thomassigny and Christine Greck*

Tetrahedron: Asymmetry 17 (2006) 2006



5-Azido-3-*O*-benzyl-5,6-dideoxy-1,2-*O*-isopropylidene- α -D-*allo*-hepto-1,4-furanose

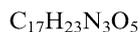
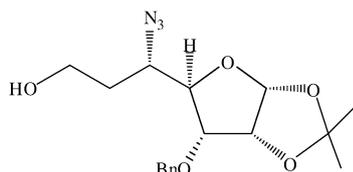
$[\alpha]_D = +152$ (*c* 2.1, DCM)

Source of chirality: 1,2:5,6-di-*O*-isopropylidene-D-allofuranose

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

Géraldine Le Bouc, Christine Thomassigny and Christine Greck*

Tetrahedron: Asymmetry 17 (2006) 2006



5-Azido-3-*O*-benzyl-5,6-dideoxy-1,2-*O*-isopropylidene- β -*L*-talo-hepto-1,4-furanose

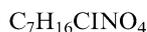
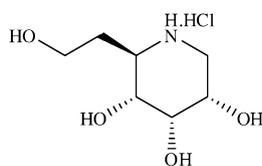
$[\alpha]_D = +97$ (*c* 2.0, DCM)

Source of chirality: 1,2:5,6-di-*O*-isopropylidene-*D*-allofuranose

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

Géraldine Le Bouc, Christine Thomassigny and Christine Greck*

Tetrahedron: Asymmetry 17 (2006) 2006



1,5,6-Trideoxy-1,5-imino-*D*-allo-heptitol hydrochloride

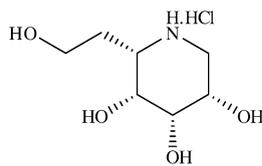
$[\alpha]_D = +19$ (*c* 0.1, MeOH)

Source of chirality: 1,2:5,6-di-*O*-isopropylidene-*D*-allofuranose

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

Géraldine Le Bouc, Christine Thomassigny and Christine Greck*

Tetrahedron: Asymmetry 17 (2006) 2006



1,5,6-Trideoxy-1,5-imino-*L*-talo-heptitol hydrochloride

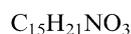
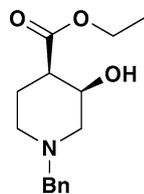
$[\alpha]_D = +24$ (*c* 0.6, MeOH)

Source of chirality: 1,2:5,6-di-*O*-isopropylidene-*D*-allofuranose

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

Zhiwei Guo, Bharat P. Patel, Richard M. Corbett,
Animesh Goswami and Ramesh N. Patel*

Tetrahedron: Asymmetry 17 (2006) 2015



Ethyl *cis*-(3*R*,4*R*)-1-benzyl-3-hydroxy-piperidine-4-carboxylate

Ee = 99.3%

De = 99.5%

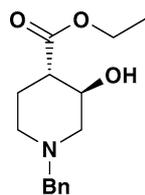
$[\alpha]_D = +48.4$ (*c* 2.35, CHCl₃)

Source of chirality: microbial reduction

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

Zhiwei Guo, Bharat P. Patel, Richard M. Corbett,
Animesh Goswami and Ramesh N. Patel*

Tetrahedron: Asymmetry 17 (2006) 2015



C₁₅H₂₁NO₃

Ethyl *trans*-(3*R*,4*S*)-1-benzyl-3-hydroxy-piperidine-4-carboxylate

Ee = 99.5%

De = 96%

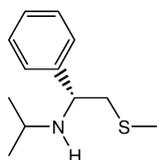
[α]_D = +23.6 (*c* 1.68, CHCl₃)

Source of chirality: microbial reduction

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

Johan Granander, Jonas Eriksson and Göran Hilmersson*

Tetrahedron: Asymmetry 17 (2006) 2021



C₁₂H₁₉NS

(*R*)-1-Isopropylamino-1-phenyl-2-thiomethylethane

Ee = 99%

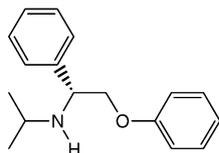
[α]_D²⁰ = -61.0 (*c* 1.05, CH₂Cl₂)

Source of chirality: (*R*)-phenylglycine

Absolute configuration: (*R*)

Johan Granander, Jonas Eriksson and Göran Hilmersson*

Tetrahedron: Asymmetry 17 (2006) 2021



C₁₇H₂₁NO

(*R*)-1-Isopropylamino-1-phenyl-2-phenoxyethane

Ee = 99%

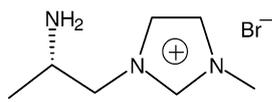
[α]_D²⁰ = -51.5 (*c* 1.06, CH₂Cl₂)

Source of chirality: (*R*)-phenylglycine

Absolute configuration: (*R*)

Shu-Ping Luo, Dan-Qian Xu, Hua-Dong Yue, Li-Ping Wang,
Wen-Long Yang and Zhen-Yuan Xu*

Tetrahedron: Asymmetry 17 (2006) 2028



C₇H₁₄N₃Br

1-[(*S*)-(2-Amino)propyl]-3-methylimidazolium bromide

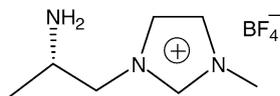
[α]_D²⁰ = +12.6 (*c* 2, EtOH)

Source of chirality: (*S*)-alanine

Absolute configuration: (*S*)

Shu-Ping Luo, Dan-Qian Xu, Hua-Dong Yue, Li-Ping Wang,
Wen-Long Yang and Zhen-Yuan Xu*

Tetrahedron: Asymmetry 17 (2006) 2028



1-[(*S*)-(2-Amino)propyl]-3-methylimidazolium tetrafluoroborate

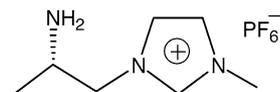
$$[\alpha]_D^{20} = +13.9 (c 2, EtOH)$$

Source of chirality: (*S*)-alanine

Absolute configuration: (*S*)

Shu-Ping Luo, Dan-Qian Xu, Hua-Dong Yue, Li-Ping Wang,
Wen-Long Yang and Zhen-Yuan Xu*

Tetrahedron: Asymmetry 17 (2006) 2028



1-[(*S*)-(2-Amino)propyl]-3-methylimidazolium hexafluorophosphate

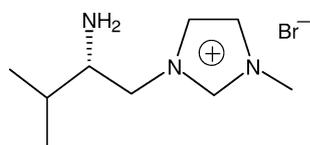
$$[\alpha]_D^{20} = +7.2 (c 2, EtOH)$$

Source of chirality: (*S*)-alanine

Absolute configuration: (*S*)

Shu-Ping Luo, Dan-Qian Xu, Hua-Dong Yue, Li-Ping Wang,
Wen-Long Yang and Zhen-Yuan Xu*

Tetrahedron: Asymmetry 17 (2006) 2028



1-[(*S*)-(2-Amino)-3-methylpentyl]-3-methylimidazolium bromide

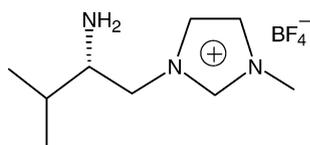
$$[\alpha]_D^{20} = +10.3 (c 2, EtOH)$$

Source of chirality: (*S*)-valine

Absolute configuration: (*S*)

Shu-Ping Luo, Dan-Qian Xu, Hua-Dong Yue, Li-Ping Wang,
Wen-Long Yang and Zhen-Yuan Xu*

Tetrahedron: Asymmetry 17 (2006) 2028



1-[(*S*)-(2-Amino)-3-methylpentyl]-3-methylimidazolium tetrafluoroborate

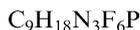
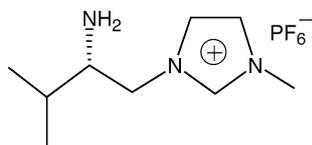
$$[\alpha]_D^{20} = +6.9 (c 2, EtOH)$$

Source of chirality: (*S*)-valine

Absolute configuration: (*S*)

Shu-Ping Luo, Dan-Qian Xu, Hua-Dong Yue, Li-Ping Wang,
Wen-Long Yang and Zhen-Yuan Xu*

Tetrahedron: Asymmetry 17 (2006) 2028



1-[(S)-(2-Amino)-3-methylpentyl]-3-methylimidazolium hexafluorophosphate

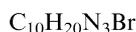
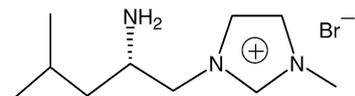
$$[\alpha]_D^{20} = +4.6 (c 2, EtOH)$$

Source of chirality: (S)-valine

Absolute configuration: (S)

Shu-Ping Luo, Dan-Qian Xu, Hua-Dong Yue, Li-Ping Wang,
Wen-Long Yang and Zhen-Yuan Xu*

Tetrahedron: Asymmetry 17 (2006) 2028



1-[(S)-(2-Amino)isoheptyl]-3-methylimidazolium bromide

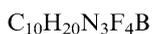
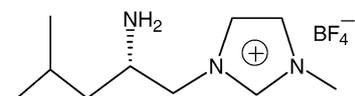
$$[\alpha]_D^{20} = +6.0 (c 2, EtOH)$$

Source of chirality: (S)-leucine

Absolute configuration: (S)

Shu-Ping Luo, Dan-Qian Xu, Hua-Dong Yue, Li-Ping Wang,
Wen-Long Yang and Zhen-Yuan Xu*

Tetrahedron: Asymmetry 17 (2006) 2028



1-[(S)-(2-Amino)isoheptyl]-3-methylimidazolium tetrafluoroborate

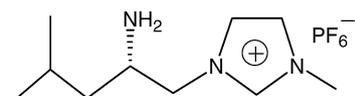
$$[\alpha]_D^{20} = +7.1 (c 2, EtOH)$$

Source of chirality: (S)-leucine

Absolute configuration: (S)

Shu-Ping Luo, Dan-Qian Xu, Hua-Dong Yue, Li-Ping Wang,
Wen-Long Yang and Zhen-Yuan Xu*

Tetrahedron: Asymmetry 17 (2006) 2028



1-[(S)-(2-Amino)isoheptyl]-3-methylimidazolium hexafluorophosphate

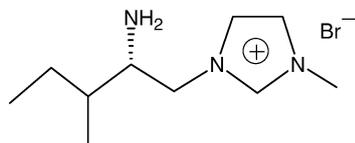
$$[\alpha]_D^{20} = +5.4 (c 2, EtOH)$$

Source of chirality: (S)-leucine

Absolute configuration: (S)

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Tetrahedron: Asymmetry 17 (2006) 2028



C₁₀H₂₀N₃Br

1-[(*S*)-(2-Amino)-3-methylpentyl]-3-methylimidazolium bromide

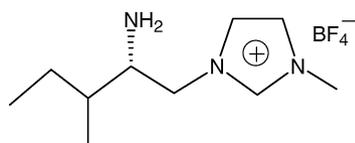
$[\alpha]_D^{20} = +11.7$ (*c* 2, EtOH)

Source of chirality: (*S*)-isoleucine

Absolute configuration: (*R*)

Shu-Ping Luo, Dan-Qian Xu, Hua-Dong Yue, Li-Ping Wang,
Wen-Long Yang and Zhen-Yuan Xu*

Tetrahedron: Asymmetry 17 (2006) 2028



C₁₀H₂₀N₃F₄B

1-[(*S*)-(2-Amino)-3-methylpentyl]-3-methylimidazolium tetrafluoroborate

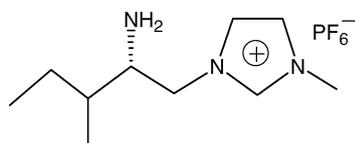
$[\alpha]_D^{20} = +10.1$ (*c* 2, EtOH)

Source of chirality: (*S*)-isoleucine

Absolute configuration: (*R*)

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Wen-Long Yang and Zhen-Yuan Xu*

Tetrahedron: Asymmetry 17 (2006) 2028



C₁₀H₂₀N₃F₆P

1-[(*S*)-(2-Amino)-3-methylpentyl]-3-methylimidazolium hexafluorophosphate

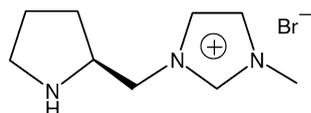
$[\alpha]_D^{20} = +3.9$ (*c* 2, EtOH)

Source of chirality: (*S*)-isoleucine

Absolute configuration: (*R*)

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Wen-Long Yang and Zhen-Yuan Xu*

Tetrahedron: Asymmetry 17 (2006) 2028



C₉H₁₆N₃Br

1-[(*S*)-(2-Pyrrolidinyl)methyl]-3-methylimidazolium bromide

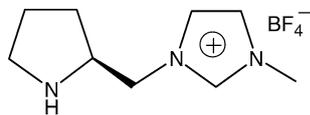
$[\alpha]_D^{20} = +6.5$ (*c* 2, EtOH)

Source of chirality: (*S*)-proline

Absolute configuration: (*S*)

Shu-Ping Luo, Dan-Qian Xu, Hua-Dong Yue, Li-Ping Wang,
Wen-Long Yang and Zhen-Yuan Xu*

Tetrahedron: Asymmetry 17 (2006) 2028



1-[(*S*)-(2-Pyrrolidinyl)methyl]-3-methylimidazolium tetrafluoroborate

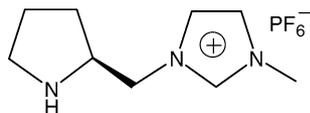
$$[\alpha]_D^{20} = +4.5 (c 2, \text{EtOH})$$

Source of chirality: (*S*)-proline

Absolute configuration: (*S*)

Shu-Ping Luo, Dan-Qian Xu, Hua-Dong Yue, Li-Ping Wang,
Wen-Long Yang and Zhen-Yuan Xu*

Tetrahedron: Asymmetry 17 (2006) 2028



1-[(*S*)-(2-Pyrrolidinyl)methyl]-3-methylimidazolium hexafluorophosphate

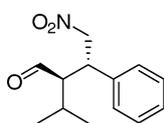
$$[\alpha]_D^{20} = +2.7 (c 2, \text{EtOH})$$

Source of chirality: (*S*)-proline

Absolute configuration: (*S*)

Yawen Li, Xin-Yuan Liu and Gang Zhao*

Tetrahedron: Asymmetry 17 (2006) 2034



(2*R*,3*S*)-2-Isopropyl-4-nitro-3-phenylbutanal

Ee = 99%

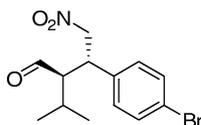
$$[\alpha]_D^{24.3} = +53.1 (c 0.77, \text{CHCl}_3)$$

Source of chirality: asymmetric conjugate addition

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

Yawen Li, Xin-Yuan Liu and Gang Zhao*

Tetrahedron: Asymmetry 17 (2006) 2034



(2*R*,3*S*)-3-(4-Bromophenyl)-2-isopropyl-4-nitrobutanal

Ee = 99%

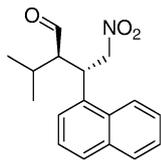
$$[\alpha]_D^{22.2} = +36.2 (c 1.60, \text{CHCl}_3)$$

Source of chirality: asymmetric conjugate addition

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

Yawen Li, Xin-Yuan Liu and Gang Zhao*

Tetrahedron: Asymmetry 17 (2006) 2034



$C_{17}H_{19}NO_3$

(2*R*,3*S*)-2-Isopropyl-3-(naphthalen-1-yl)-4-nitrobutanal

Ee = 99%

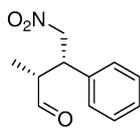
$[\alpha]_D^{22.5} = +49.5$ (*c* 0.45, $CHCl_3$)

Source of chirality: asymmetric conjugate addition

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

Yawen Li, Xin-Yuan Liu and Gang Zhao*

Tetrahedron: Asymmetry 17 (2006) 2034



$C_{11}H_{13}NO_3$

(2*R*,3*S*)-2-Methyl-4-nitro-3-phenylbutanal

Ee = 99%

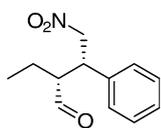
$[\alpha]_D^{22.3} = +29.7$ (*c* 1.00, $CHCl_3$)

Source of chirality: asymmetric conjugate addition

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

Yawen Li, Xin-Yuan Liu and Gang Zhao*

Tetrahedron: Asymmetry 17 (2006) 2034



$C_{12}H_{15}NO_3$

(2*R*,3*S*)-2-Ethyl-4-nitro-3-phenylbutanal

Ee = 99%

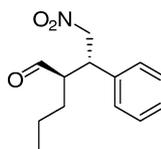
$[\alpha]_D^{23.7} = +59.6$ (*c* 0.60, $CHCl_3$)

Source of chirality: asymmetric conjugate addition

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

Yawen Li, Xin-Yuan Liu and Gang Zhao*

Tetrahedron: Asymmetry 17 (2006) 2034



$C_{13}H_{17}NO_3$

(*R*)-2-((*S*)-2-Nitro-1-phenylethyl)pentanal

Ee = 97%

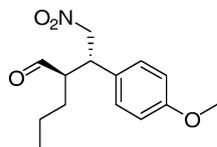
$[\alpha]_D^{23.8} = +69.1$ (*c* 0.60, $CHCl_3$)

Source of chirality: asymmetric conjugate addition

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

Yawen Li, Xin-Yuan Liu and Gang Zhao*

Tetrahedron: Asymmetry 17 (2006) 2034



C₁₄H₁₉NO₄

(*R*)-2-((*S*)-1-(4-Methoxyphenyl)-2-nitroethyl)pentanal

Ee = 99%

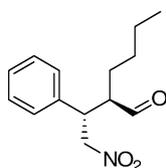
$[\alpha]_D^{24.1} = +47.2$ (*c* 1.30, CHCl₃)

Source of chirality: asymmetric conjugate addition

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

Yawen Li, Xin-Yuan Liu and Gang Zhao*

Tetrahedron: Asymmetry 17 (2006) 2034



C₁₄H₁₉NO₃

(*R*)-2-((*S*)-2-Nitro-1-phenylethyl)hexanal

Ee = 99%

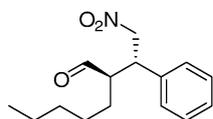
$[\alpha]_D^{24.6} = +35.5$ (*c* 1.05, CHCl₃)

Source of chirality: asymmetric conjugate addition

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

Yawen Li, Xin-Yuan Liu and Gang Zhao*

Tetrahedron: Asymmetry 17 (2006) 2034



C₁₅H₂₁NO₃

(*R*)-2-((*S*)-2-Nitro-1-phenylethyl)heptanal

Ee = 99%

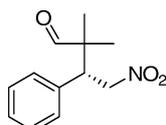
$[\alpha]_D^{24.0} = +34.1$ (*c* 2.35, CHCl₃)

Source of chirality: asymmetric conjugate addition

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

Yawen Li, Xin-Yuan Liu and Gang Zhao*

Tetrahedron: Asymmetry 17 (2006) 2034



C₁₂H₁₄BrNO₃

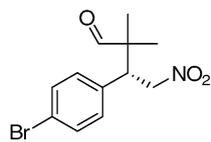
(*R*)-2,2-Dimethyl-4-nitro-3-phenylbutanal

Ee = 89%

$[\alpha]_D^{21.5} = +5.6$ (*c* 1.00, CHCl₃)

Source of chirality: asymmetric conjugate addition

Absolute configuration: (*R*)



(*R*)-3-(4-Bromophenyl)-2,2-dimethyl-4-nitrobutanal

Ee = 77%

$[\alpha]_D^{24.1} = +8.1$ (*c* 0.60, $CHCl_3$)

Source of chirality: asymmetric conjugate addition

Absolute configuration: (*R*)