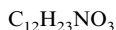
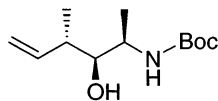


Angela Zampella and Maria Valeria D'Auria*

Tetrahedron: Asymmetry 12 (2001) 1543



(2*R*,3*S*,4*S*)-2-(*N*-*tert*-Butoxycarbonyl)amino-4-methyl-5-hexen-3-ol

E.e. = 100%

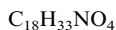
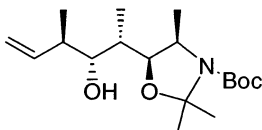
$[\alpha]_D = +16.5$ (*c* 0.2, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Angela Zampella and Maria Valeria D'Auria*

Tetrahedron: Asymmetry 12 (2001) 1543



(4*R*,5*S*)-*N*-*tert*-Butoxycarbonyl-2,2,4-trimethyl-5-[(1'*S*,2'*R*,3'*R*)-1',3'-dimethyl-2'-hydroxy-4'-pentenyl]-oxazolidine

E.e. = 100%

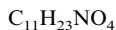
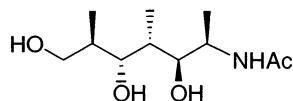
$[\alpha]_D = -16.3$ (*c* 0.4, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Angela Zampella and Maria Valeria D'Auria*

Tetrahedron: Asymmetry 12 (2001) 1543



(2*R*,3*R*,4*S*,5*S*,6*R*)-6-(*N*-Acetyl)amino-2,4-dimethyl-1,3,5-heptanetriol

E.e. = 100%

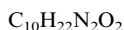
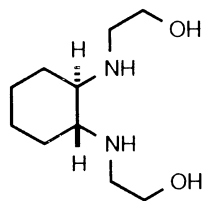
$[\alpha]_D = +3.4$ (*c* 0.5, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (2*R*,3*R*,4*S*,5*S*,6*R*)

Alexander J. A. Cobb and Charles M. Marson*

Tetrahedron: Asymmetry 12 (2001) 1547



(1*R*,2*R*)-(-)-*N,N'*-Bis(1-hydroxyethyl)-*trans*-1,2-diaminocyclohexane

E.e. = 100%

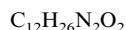
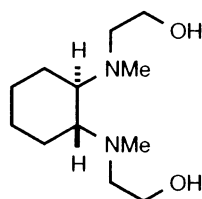
$[\alpha]_D^{20} = -44.4$ (*c* 0.15, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (1*R*,2*R*)

Alexander J. A. Cobb and Charles M. Marson*

Tetrahedron: Asymmetry 12 (2001) 1547



(1*R*,2*R*)-(-)-*N,N'*-Dimethyl-*N,N'*-bis(1-hydroxyethyl)-*trans*-1,2-diaminocyclohexane

E.e. = 100%

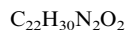
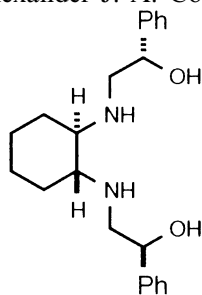
$[\alpha]_D^{20} = -32.8$ (*c* 0.01, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (1*R*,2*R*)

Alexander J. A. Cobb and Charles M. Marson*

Tetrahedron: Asymmetry 12 (2001) 1547



(1*R*,2*R*)-(+)-*N,N'*-Bis(ethan-(1-(*R*)-phenyl)-1-ol)-*trans*-1,2-diaminocyclohexane

E.e. = 100%

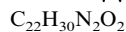
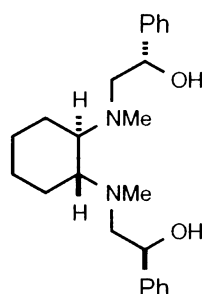
$[\alpha]_D^{20} = +1.9$ (*c* 1.55, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (1*R*,2*R*,1'*R*,2'*R*)

Alexander J. A. Cobb and Charles M. Marson*

Tetrahedron: Asymmetry 12 (2001) 1547



(1*R*,2*R*)-(-)-*N,N'*-Dimethyl-*N,N'*-bis(ethan-(1-(*R*)-phenyl)-1-ol)-*trans*-1,2-diaminocyclohexane

E.e. = 100%

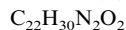
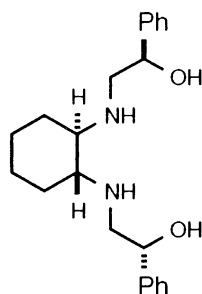
$[\alpha]_D^{20} = -27.7$ (*c* 0.76, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (1*R*,2*R*,1'*R*,2'*R*)

Alexander J. A. Cobb and Charles M. Marson*

Tetrahedron: Asymmetry 12 (2001) 1547



(1*R*,2*R*)-(-)-*N,N'*-Bis(ethan-(1-(*S*)-phenyl)-1-ol)-*trans*-1,2-diaminocyclohexane

E.e. = 100%

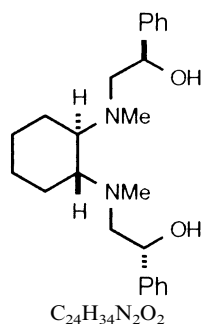
$[\alpha]_D^{20} = -96.6$ (*c* 0.50, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Alexander J. A. Cobb and Charles M. Marson*

Tetrahedron: Asymmetry 12 (2001) 1547



(1*R*,2*R*)-(-)-*N,N'*-Dimethyl-*N,N'*-bis(ethan-(1-(*S*)-phenyl)-1-ol)-*trans*-1,2-diaminocyclohexane

E.e. = 100%

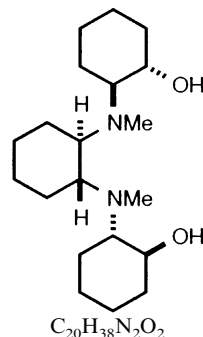
$[\alpha]_D^{20} = -111.6$ (*c* 0.57, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Alexander J. A. Cobb and Charles M. Marson*

Tetrahedron: Asymmetry 12 (2001) 1547



(1*R*,2*R*)-(+)-*N,N'*-Dimethyl-*N,N'*-bis((1'*S*,2'*S*)-4-hydroxycyclohexyl)-*trans*-1,2-diaminocyclohexane

E.e. = 100%

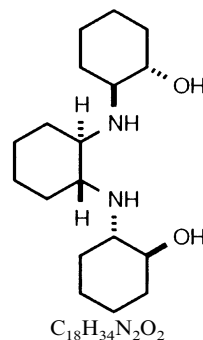
$[\alpha]_D^{20} = +42.2$ (*c* 0.53, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Alexander J. A. Cobb and Charles M. Marson*

Tetrahedron: Asymmetry 12 (2001) 1547



(1*R*,2*R*)-(+)-*N,N'*-Bis((1'*S*,2'*S*)-4-hydroxycyclohexyl)-*trans*-1,2-diaminocyclohexane

E.e. = 100%

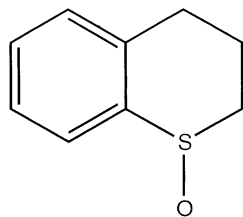
$[\alpha]_D^{20} = +11.2$ (*c* 1.0, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

F. J. Devlin, P. J. Stephens,* P. Scafato, S. Superchi and C. Rosini

Tetrahedron: Asymmetry 12 (2001) 1551



(*R*)-(-)-1-Thiochroman-*S*-oxide

E.e. = 90%

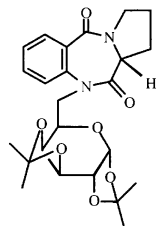
$[\alpha]_D^{20} = -167$ (*c* 0.95, $CHCl_3$)

Absolute configuration: (*R*_S)

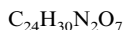
Source of chirality: Ti(*iso*-PrO)₄-catalyzed asymmetric sulfoxidation

Driss Bouhlal, Patrick Martin,* Mohamed Massoui,
Guy Nowogrocki, Serge Pilard, Pierre Villa and Gérard Goethals

Tetrahedron: Asymmetry 12 (2001) 1573



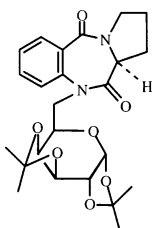
$$[\alpha]_{\text{D}}^{25} = -152.5 \text{ (} c \text{ 0.9, CHCl}_3 \text{)}$$



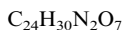
(11aR)-10-*N*-(6-Deoxy-1,2:3,4-di-*O*-isopropylidene- α -D-galactopyranos-6-yl)-pyrrolo[2,1-*c*][1,4]benzodiazepin-5,11-dione

Driss Bouhlal, Patrick Martin,* Mohamed Massoui,
Guy Nowogrocki, Serge Pilard, Pierre Villa and Gérard Goethals

Tetrahedron: Asymmetry 12 (2001) 1573



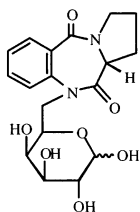
$$[\alpha]_{\text{D}}^{25} = +199.6 \text{ (} c \text{ 0.9, CHCl}_3 \text{)}$$



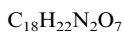
(11aS)-10-*N*-(6-Deoxy-1,2:3,4-di-*O*-isopropylidene- α -D-galactopyranos-6-yl)-pyrrolo[2,1-*c*][1,4]benzodiazepin-5,11-dione

Driss Bouhlal, Patrick Martin,* Mohamed Massoui,
Guy Nowogrocki, Serge Pilard, Pierre Villa and Gérard Goethals

Tetrahedron: Asymmetry 12 (2001) 1573



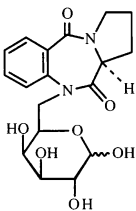
$$[\alpha]_{\text{D}}^{25} = -175.6 \text{ (} c \text{ 0.9, 72 h, MeOH)}$$



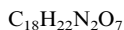
(11aR)-10-*N*-(6-Deoxy-D-galactopyranos-6-yl)-pyrrolo[2,1-*c*][1,4]benzodiazepin-5,11-dione

Driss Bouhlal, Patrick Martin,* Mohamed Massoui,
Guy Nowogrocki, Serge Pilard, Pierre Villa and Gérard Goethals

Tetrahedron: Asymmetry 12 (2001) 1573



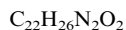
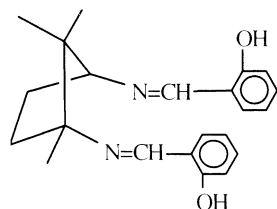
$$[\alpha]_{\text{D}}^{25} = +234.4 \text{ (} c \text{ 0.9, 72 h, MeOH)}$$



(11aS)-10-*N*-(6-Deoxy-D-galactopyranos-6-yl)-pyrrolo[2,1-*c*][1,4]benzodiazepin-5,11-dione

Zhuo-Hong Yang, Li-Xin Wang, Zheng-Hong Zhou, Qi-Lin Zhou and Chu-Chi Tang*

Tetrahedron: Asymmetry 12 (2001) 1579



(+)-*cis*-*N,N'*-(2-Hydroxybenzylidene)-1,2,2-trimethylcyclopenta-1,3-diamine

E.e. = 100%

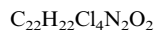
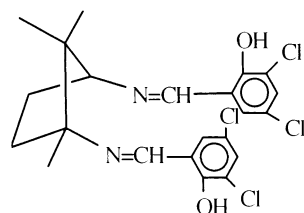
$[\alpha]_{\text{D}}^{25} = +34.0$ (*c* 2, CHCl_3)

Source of chirality: D-camphor

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

Zhuo-Hong Yang, Li-Xin Wang, Zheng-Hong Zhou, Qi-Lin Zhou and Chu-Chi Tang*

Tetrahedron: Asymmetry 12 (2001) 1579



(+)-*cis*-*N,N'*-(2-Hydroxy-3,5-dichlorobenzylidene)-1,2,2-trimethylcyclopenta-1,3-diamine

E.e. = 100%

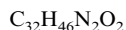
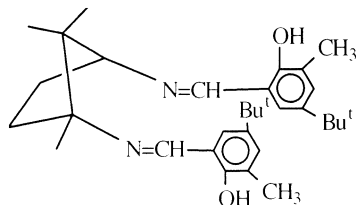
$[\alpha]_{\text{D}}^{25} = +37.7$ (*c* 1, CHCl_3)

Source of chirality: D-camphor

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

Zhuo-Hong Yang, Li-Xin Wang, Zheng-Hong Zhou, Qi-Lin Zhou and Chu-Chi Tang*

Tetrahedron: Asymmetry 12 (2001) 1579



(+)-*cis*-*N,N'*-(2-Hydroxy-3-methyl-5-*tert*-butylbenzylidene)-1,2,2-trimethylcyclopenta-1,3-diamine

E.e. = 100%

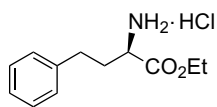
$[\alpha]_{\text{D}}^{25} = +41.9$ (*c* 1.5, CHCl_3)

Source of chirality: D-camphor

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

Wen-Qing Lin, Ze He, Yi Jing, Xin Cui, Hui Liu and Ai-Qiao Mi*

Tetrahedron: Asymmetry 12 (2001) 1583



D-Homophenylalanine ethyl ester hydrochloride

E.e. = 99%

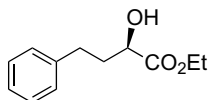
$[\alpha]_{\text{D}}^{25} = -38.6$ (*c* 1, H_2O)

Source of chirality: chiral pool

Absolute configuration: *R*

Wen-Qing Lin, Ze He, Yi Jing, Xin Cui, Hui Liu and Ai-Qiao Mi*

Tetrahedron: Asymmetry 12 (2001) 1583



$C_{12}H_{16}O_3$

Ethyl (*R*)-2-hydroxyl-4-phenylbutanoate

E.e. = 97%

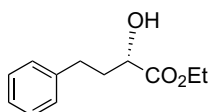
$[\alpha]_D^{23} = -8.4$ (*c* 1.25, EtOH)

Source of chirality: chiral pool

Absolute configuration: *R*

Wen-Qing Lin, Ze He, Yi Jing, Xin Cui, Hui Liu and Ai-Qiao Mi*

Tetrahedron: Asymmetry 12 (2001) 1583



$C_{12}H_{16}O_3$

Ethyl (*S*)-2-hydroxyl-4-phenylbutanoate

E.e. = 99%

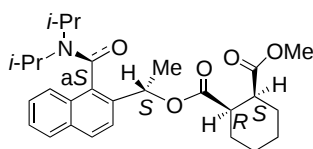
$[\alpha]_D^{23} = +8.4$ (*c* 1.23, EtOH)

Source of chirality: chiral pool

Absolute configuration: *S*

Wei-Min Dai,* Kelly Ka Yim Yeung, Chun Wo Chow and Ian D. Williams

Tetrahedron: Asymmetry 12 (2001) 1603



$C_{28}H_{37}NO_5$

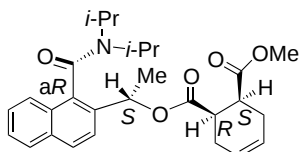
(-)-(a*S*,1'*S*,1''*R*,2'*S*)-*N,N*-Diisopropyl-2-[1'-(2''-methoxycarbonylcyclohexane-1''-carboxyloxy)ethyl]-1-naphthamide

$[\alpha]_D^{20} = -0.9$ (*c* 0.54, $CHCl_3$)

Source of chirality: asymmetric reaction

Wei-Min Dai,* Kelly Ka Yim Yeung, Chun Wo Chow and Ian D. Williams

Tetrahedron: Asymmetry 12 (2001) 1603



$C_{28}H_{35}NO_5$

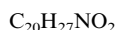
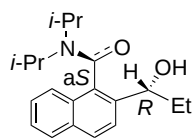
(-)-(a*R*,1'*S*,1''*R*,2''*S*)-*N,N*-Diisopropyl-2-[1'-(2''-methoxycarbonylcyclohex-4''-ene-1''-carboxyloxy)ethyl]-1-naphthamide

$[\alpha]_D^{20} = -51.0$ (*c* 1.00, $CHCl_3$)

Source of chirality: asymmetric reaction

Wei-Min Dai,* Kelly Ka Yim Yeung, Chun Wo Chow
and Ian D. Williams

Tetrahedron: Asymmetry 12 (2001) 1603



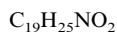
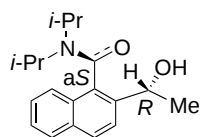
(+)-(aS,1'R)-N,N-Diisopropyl-2-(1'-hydroxypropyl)-1-naphthamide

$[\alpha]_D^{20} = +100.9$ (*c* 0.98, $CHCl_3$)

Source of chirality: HPLC resolution

Wei-Min Dai,* Kelly Ka Yim Yeung, Chun Wo Chow
and Ian D. Williams

Tetrahedron: Asymmetry 12 (2001) 1603



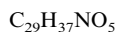
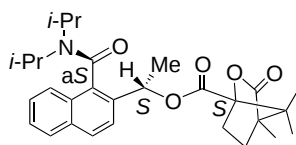
(+)-(aS,1'R)-N,N-Diisopropyl-2-(1'-hydroxyethyl)-1-naphthamide

$[\alpha]_D^{20} = +116.4$ (*c* 1.09, $CHCl_3$)

Source of chirality: HPLC resolution

Wei-Min Dai,* Kelly Ka Yim Yeung, Chun Wo Chow
and Ian D. Williams

Tetrahedron: Asymmetry 12 (2001) 1603



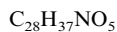
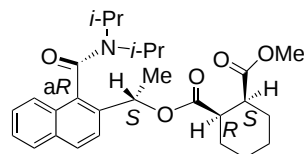
(+)-(aS,1'S,1''S,4''R)-N,N-Diisopropyl-2-[1'-(4'',7'',7'''-trimethyl-3''-oxo-2''-oxabicyclo[2.2.1]heptanecarbonyloxy)ethyl]-1-naphthamide

$[\alpha]_D^{20} = +49.4$ (*c* 0.85, $CHCl_3$)

Source of chirality: (1S)-(-)-camphanic chloride

Wei-Min Dai,* Kelly Ka Yim Yeung, Chun Wo Chow
and Ian D. Williams

Tetrahedron: Asymmetry 12 (2001) 1603



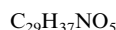
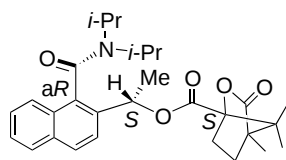
(-)-(aR,1'S,1''R,2''S)-N,N-Diisopropyl-2-[1'-(2''-methoxycarbonylcyclohexane-1''-carbonyloxy)ethyl]-1-naphthamide

$[\alpha]_D^{20} = -47.4$ (*c* 0.98, $CHCl_3$)

Source of chirality: asymmetric reaction

Wei-Min Dai,* Kelly Ka Yim Yeung, Chun Wo Chow
and Ian D. Williams

Tetrahedron: Asymmetry 12 (2001) 1603



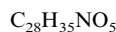
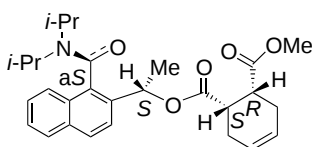
(-)-(aR,1'S,1''S,4'R)-N,N-Diisopropyl-2-[1'-(4'',7'',7'''-trimethyl-3''-oxo-2''-oxabicyclo[2.2.1]heptanecarbonyloxy)ethyl]-1-naphthamide

$[\alpha]_D^{20} = -9.9$ (c 1.05, $CHCl_3$)

Source of chirality: (1S)-(-)-camphanic chloride

Wei-Min Dai,* Kelly Ka Yim Yeung, Chun Wo Chow
and Ian D. Williams

Tetrahedron: Asymmetry 12 (2001) 1603



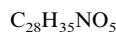
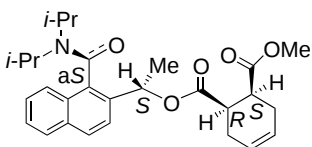
(-)-(aS,1'S,1''S,2''R)-N,N-Diisopropyl-2-[1'-(2''-methoxycarbonylcyclohex-4''-ene-1''-carboxyloxy)ethyl]-1-naphthamide

$[\alpha]_D^{20} = -12.4$ (c 0.48, $CHCl_3$)

Source of chirality: asymmetric reaction

Wei-Min Dai,* Kelly Ka Yim Yeung, Chun Wo Chow
and Ian D. Williams

Tetrahedron: Asymmetry 12 (2001) 1603



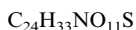
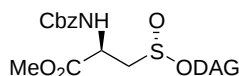
(-)-(aS,1'S,1''R,2''S)-N,N-Diisopropyl-2-[1'-(2''-methoxycarbonylcyclohex-4''-ene-1''-carboxyloxy)ethyl]-1-naphthamide

$[\alpha]_D^{20} = -5.1$ (c 1.10, $CHCl_3$)

Source of chirality: asymmetric reaction

Victor Guerrero de la Rosa, Mario Ordóñez and José Manuel Llera*

Tetrahedron: Asymmetry 12 (2001) 1615



(1,2:5,6-di-O-Isopropylidene-α-D-glucofuranosyl) (R_C, R_S)-2-[(benzyloxycarbonyl)amino]-2-methoxycarbonyl ethanesulphinate

E.e. 100%

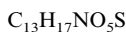
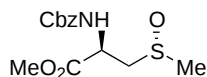
$[\alpha]_D = -41.0$ (c 6.7, acetone)

Source of chirality: asymmetric synthesis+chiral pool

Absolute configuration: (R_C, R_S)

Victor Guerrero de la Rosa, Mario Ordóñez and José Manuel Llera*

Tetrahedron: Asymmetry 12 (2001) 1615



(R_C, R_S)-*N*-(Benzyloxycarbonyl)-*S*-methyl-*S*-oxo-*L*-cysteine methyl ester

E.e. 100%

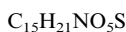
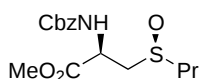
$[\alpha]_D = +196.0$ (c 2.1, acetone)

Source of chirality: asymmetric synthesis+chiral pool

Absolute configuration: (R_C, R_S)

Victor Guerrero de la Rosa, Mario Ordóñez and José Manuel Llera*

Tetrahedron: Asymmetry 12 (2001) 1615



(R_C, S_S)-*N*-(Benzyloxycarbonyl)-*S*-oxo-*S*-propyl-*L*-cysteine methyl ester

E.e. 100%

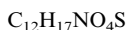
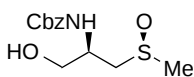
$[\alpha]_D = +36.0$ (c 1.0, acetone)

Source of chirality: asymmetric synthesis+chiral pool

Absolute configuration: (R_C, S_S)

Victor Guerrero de la Rosa, Mario Ordóñez and José Manuel Llera*

Tetrahedron: Asymmetry 12 (2001) 1615



(R_C, S_S)-*N*-(Benzyloxycarbonyl)-(*S*)-*S*-methyl-*S*-oxo-*L*-cysteinol

E.e. 100%

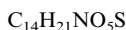
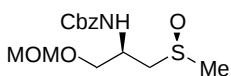
$[\alpha]_D = +66.0$ (c 2.1, $CHCl_3$)

Source of chirality: asymmetric synthesis+chiral pool

Absolute configuration: (R_C, S_S)

Victor Guerrero de la Rosa, Mario Ordóñez and José Manuel Llera*

Tetrahedron: Asymmetry 12 (2001) 1615



(R_C, S_S)-*N*-(Benzyloxycarbonyl)-*O*-methoxymethyl-*S*-methyl-*S*-oxo-*L*-cysteinol

E.e. 100%

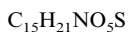
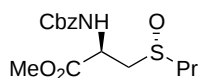
$[\alpha]_D = -76.4$ (c 1.1, acetone)

Source of chirality: asymmetric synthesis+chiral pool

Absolute configuration: (R_C, S_S)

Victor Guerrero de la Rosa, Mario Ordóñez and José Manuel Llera*

Tetrahedron: Asymmetry 12 (2001) 1615



(R_C, R_S)-*N*-(Benzyloxycarbonyl)-*S*-propyl-*S*-oxo-*L*-cysteine methyl ester

E.e. 100%

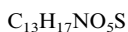
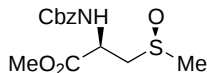
$[\alpha]_D = -27.0$ (c 1.5, CHCl_3)

Source of chirality: asymmetric synthesis+chiral pool

Absolute configuration: (R_C, R_S)

Victor Guerrero de la Rosa, Mario Ordóñez and José Manuel Llera*

Tetrahedron: Asymmetry 12 (2001) 1615



(R_C, S_S)-*N*-(Benzyloxycarbonyl)-*S*-methyl-*S*-oxo-*L*-cysteine methyl ester

E.e. 100%

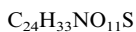
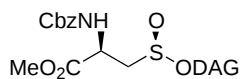
$[\alpha]_D = +10.3$ (c 2.7, acetone)

Source of chirality: asymmetric synthesis+chiral pool

Absolute configuration: (R_C, S_S)

Victor Guerrero de la Rosa, Mario Ordóñez and José Manuel Llera*

Tetrahedron: Asymmetry 12 (2001) 1615



(1,2:5,6-Di-*O*-isopropylidene- α -*D*-glucofuranosyl) (R_C, S_S)-2-[(benzyloxycarbonyl)amino]-2-methoxycarbonylthanesulphinate

E.e. = 100%

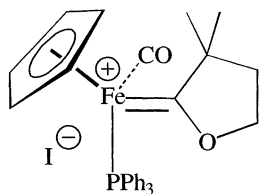
$[\alpha]_D = +2.8$ (c 2.0, acetone)

Source of chirality: asymmetric synthesis+chiral pool

Absolute configuration: (R_C, S_S)

Andrew P. Ayscough, James F. Costello* and Stephen G. Davies*

Tetrahedron: Asymmetry 12 (2001) 1621



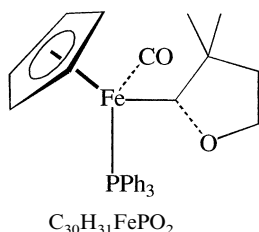
E.e. = 100%

$[\alpha]_D^{20} = -321$

Absolute configuration: (R_{Fe}, P)

Andrew P. Ayscough, James F. Costello* and Stephen G. Davies*

Tetrahedron: Asymmetry 12 (2001) 1621



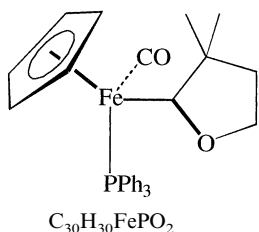
E.e. = 100%

$[\alpha]_D^{20} = +535$

Absolute configuration: (R_{Fe}, R, M)

Andrew P. Ayscough, James F. Costello* and Stephen G. Davies*

Tetrahedron: Asymmetry 12 (2001) 1621



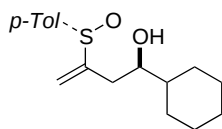
E.e. = 100%

$[\alpha]_D^{20} = -320$

Absolute configuration: (R_{Fe}, S, P)

Francesc Márquez, Amadeu Llebaria and Antonio Delgado*

Tetrahedron: Asymmetry 12 (2001) 1625



$C_{17}H_{24}SO_2$

(R,R)-1-Cyclohexyl-3-(*p*-tolylsulfinyl)-3-buten-1-ol

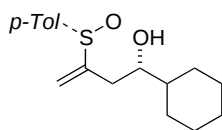
$[\alpha]_D = +89.2$ (*c* 0.8, acetone)

Source of chirality: diastereoselective allylation of cyclohexane carbaldehyde with (S_S)-(+)-3-chloro-2-(*p*-tolylsulfinyl)prop-2-ene or (S_S)-(+)-2-(*p*-tolylsulfinyl)prop-2-en-ol

Absolute configuration: (R, R_S)

Francesc Márquez, Amadeu Llebaria and Antonio Delgado*

Tetrahedron: Asymmetry 12 (2001) 1625



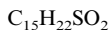
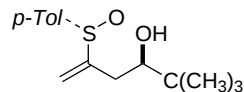
$C_{17}H_{24}SO_2$

(S, R_S)-1-Cyclohexyl-3-(*p*-tolylsulfinyl)-3-buten-1-ol

$[\alpha]_D = +6.0$ (*c* 0.40, acetone)

Source of chirality: diastereoselective allylation of cyclohexane carbaldehyde with (S_S)-(+)-3-chloro-2-(*p*-tolylsulfinyl)prop-2-ene or (S_S)-(+)-2-(*p*-tolylsulfinyl)prop-2-en-ol

Absolute configuration: (S, R_S)

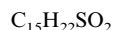
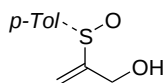


(3*R*,*R*_S)-2,2-Dimethyl-5-(*p*-tolylsulfinyl)-5-hexen-3-ol

$[\alpha]_D = +135.2$ (*c* 0.75, acetone)

Source of chirality: diastereoselective allylation of pivalaldehyde with (*S*_S)-(+)-3-chloro-2-(*p*-tolylsulfinyl)prop-2-ene or (*S*_S)-(+)-2-(*p*-tolylsulfinyl)prop-2-en-ol

Absolute configuration: (*R*,*R*_S)



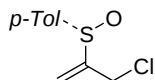
(*S*_S)-(+)-2-(*p*-Tolylsulfinyl)prop-2-en-1-ol

E.e. = 91%

$[\alpha]_D = +170$ (*c* 0.55, EtOH)

Source of chirality: condensation of 2-lithio-2-propen-1-ol (lithium salt) with (*S*_S)-menthyl *p*-toluenesulfinate

Absolute configuration: (*S*_S)



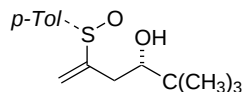
(*S*_S)-(+)-3-Chloro-(*p*-tolylsulfinyl)prop-2-ene

E.e. = 90%

$[\alpha]_D = +128$ (*c* 0.68, MeOH)

Source of chirality: treatment of (*S*_S)-(+)-2-(*p*-tolylsulfinyl)prop-2-en-1-ol with methanesulfonyl chloride

Absolute configuration: (*S*_S)



(3*S*,*R*_S)-2,2-Dimethyl-5-(*p*-tolylsulfinyl)-5-hexen-3-ol

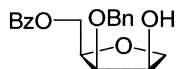
$[\alpha]_D = -19.75$ (*c* 0.80, acetone)

Source of chirality: diastereoselective allylation of pivalaldehyde with (*S*_S)-(+)-3-chloro-2-(*p*-tolylsulfinyl)prop-2-ene or (*S*_S)-(+)-2-(*p*-tolylsulfinyl)prop-2-en-1-ol

Absolute configuration: (*S*,*R*_S)

Fernando Bravo, Yolanda Díaz and Sergio Castellón*

Tetrahedron: Asymmetry 12 (2001) 1635



(3*R*,4*R*,5*R*)-5-[(Benzoyloxy)methyl]-4-(benzyloxy)tetrahydrofuran-3-ol

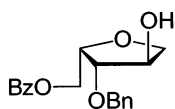
$[\alpha]_D = +13.4$ (*c* 1.80, $CHCl_3$)

Source of chirality: D-glyceraldehyde

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

Fernando Bravo, Yolanda Díaz and Sergio Castellón*

Tetrahedron: Asymmetry 12 (2001) 1635



(3*R*,4*S*,5*S*)-5-[(Benzoyloxy)methyl]-4-(benzyloxy)tetrahydrofuran-3-ol

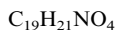
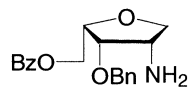
$[\alpha]_D = +21.8$ (*c* 1.22, $CHCl_3$)

Source of chirality: D-glyceraldehyde

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

Fernando Bravo, Yolanda Díaz and Sergio Castellón*

Tetrahedron: Asymmetry 12 (2001) 1635



(2*S*,3*S*,4*S*)-4-Amino-2-[(benzoyloxy)methyl]-3-(benzyloxy)tetrahydrofuran

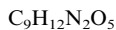
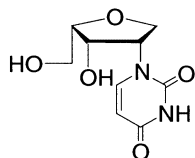
$[\alpha]_D = +6.5$ (*c* 0.82, $CHCl_3$)

Source of chirality: D-glyceraldehyde

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

Fernando Bravo, Yolanda Díaz and Sergio Castellón*

Tetrahedron: Asymmetry 12 (2001) 1635



1-[(3*S*,4*S*,5*S*)-4-Hydroxy-5-(hydroxymethyl)tetrahydrofuran-3-yl]uracil

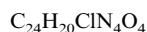
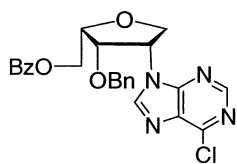
$[\alpha]_D = -85.2$ (*c* 0.72, $CHCl_3$)

Source of chirality: D-glyceraldehyde

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

Fernando Bravo, Yolanda Díaz and Sergio Castellón*

Tetrahedron: Asymmetry 12 (2001) 1635



9-[(3*S*,4*S*,5*S*)-5-[(Benzoyloxy)methyl]-4-(benzyloxy)tetrahydrofuran-3-yl]-6-chloropurine

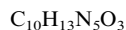
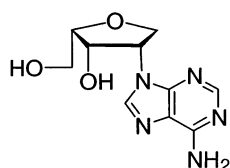
$[\alpha]_D = -56.2$ (*c* 1.30, $CHCl_3$)

Source of chirality: D-glyceraldehyde

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

Fernando Bravo, Yolanda Díaz and Sergio Castellón*

Tetrahedron: Asymmetry 12 (2001) 1635



6-Amino-9-[(3*S*,4*S*,5*S*)-4-hydroxy-5-(hydroxymethyl)tetrahydrofuran-3-yl]purine

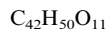
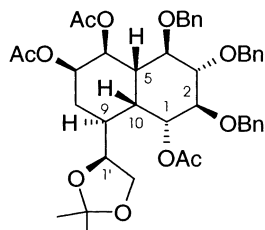
$[\alpha]_D = -26.6$ (*c* 0.270, $CHCl_3$)

Source of chirality: D-glyceraldehyde

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

Sławomir Jarosz* and Stanisław Skóra

Tetrahedron: Asymmetry 12 (2001) 1651



1,6,7-Tri-acetoxy-2,3,4-tri-benzyloxy-9-[5,5-dimethyl-2,4-dioxolane-1'-yl]decalin

$[\alpha]_D = -13.7$ (*c* 1.50, $CHCl_3$)

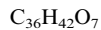
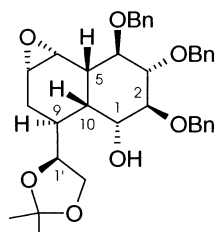
Source of chirality: chiral pool

Absolute configuration:

(1*R*,1'*S*,2*S*,3*S*,4*R*,5*R*,6*S*,7*R*,9*S*,10*R*)

Sławomir Jarosz* and Stanisław Skóra

Tetrahedron: Asymmetry 12 (2001) 1651



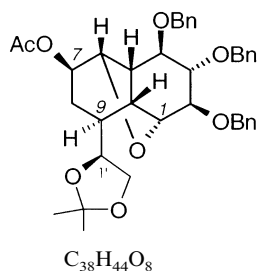
6,7-Anhydro-1-hydroxy-2,3,4-tri-benzyloxy-9-[5,5-dimethyl-2,4-dioxolane-1'-yl]decalin

$[\alpha]_D = +35.8$ (*c* 1.50, $CHCl_3$)

Source of chirality: chiral pool

Absolute configuration:

(1*R*,1'*S*,2*S*,3*S*,4*R*,5*R*,6*R*,7*S*,9*S*,10*R*)

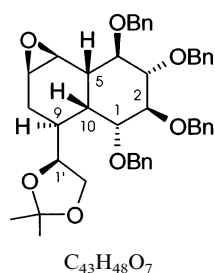


7-O-Acetyl-1,6-anhydro-2,3,4-tri-benzyloxy-9-[5,5-dimethyl-2,4-dioxolane-1'-yl]decalin

[α]_D = -11.7 (c 1.50, CHCl₃)

Source of chirality: chiral pool

Absolute configuration:

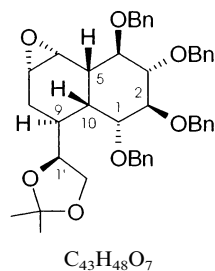
(1*R*,1'*S*,2*S*,3*S*,4*R*,5*R*,6*R*,7*R*,9*S*,10*R*)

6,7-Anhydro-1,2,3,4-tetra-benzyloxy-9-[5,5-dimethyl-2,4-dioxolane-1'-yl]decalin

[α]_D = +70.5 (c 1.50, CHCl₃)

Source of chirality: chiral pool

Absolute configuration:

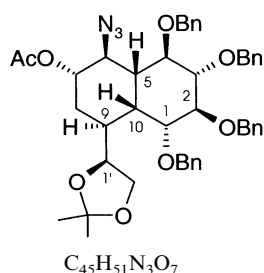
(1*R*,1'*S*,2*S*,3*S*,4*R*,5*R*,6*S*,7*R*,9*S*,10*R*)

6,7-Anhydro-1,2,3,4-tetra-benzyloxy-9-[5,5-dimethyl-2,4-dioxolane-1'-yl]decalin

[α]_D = +42.3 (c 1.50, CHCl₃)

Source of chirality: chiral pool

Absolute configuration:

(1*R*,1'*S*,2*S*,3*S*,4*R*,5*R*,6*R*,7*S*,9*S*,10*R*)

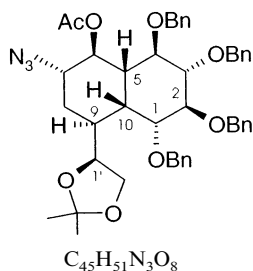
6-Azido-7-acetoxy-1,2,3,4-tetra-benzyloxy-9-[5,5-dimethyl-2,4-dioxolane-1'-yl]decalin

[α]_D = +10.7 (c 1.50, CHCl₃)

Source of chirality: chiral pool

Absolute configuration:

(1*R*,1'*S*,2*S*,3*S*,4*R*,5*R*,6*S*,7*S*,9*S*,10*R*)

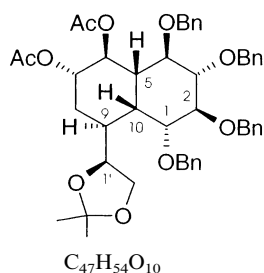


7-Azido-6-acetoxy-1,2,3,4-tetra-benzyloxy-9-[5,5-dimethyl-2,4-dioxolane-1'-yl]decalin

[α]_D = +34.2 (*c* 1.50, CHCl₃)

Source of chirality: chiral pool

Absolute configuration:

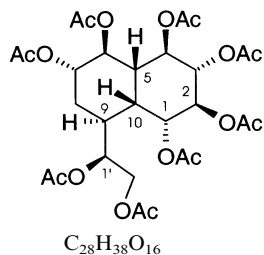
(1*R*,1'*S*,2*S*,3*S*,4*R*,5*R*,6*S*,7*S*,9*S*,10*R*)

6,7-Di-acetoxy-1,2,3,4-tetrabenzyloxy-9-[5,5-dimethyl-2,4-dioxolane-1'-yl]decalin

[α]_D = +17.9 (*c* 1.50, CHCl₃)

Source of chirality: chiral pool

Absolute configuration:

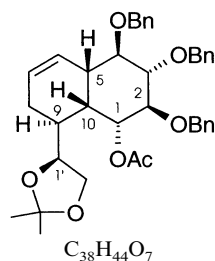
(1*R*,1'*S*,2*S*,3*S*,4*R*,5*R*,6*S*,7*S*,9*S*,10*R*)

1,2,3,4,6,7-Hexa-acetoxy-9-C-(1',2'-diacetoxy-1'ethyl)decalin

[α]_D = +10.3 (*c* 1.50, CHCl₃)

Source of chirality: chiral pool

Absolute configuration:

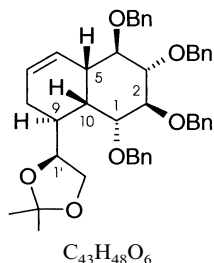
(1*R*,1'*S*,2*S*,3*S*,4*R*,5*S*,6*S*,7*S*,9*S*,10*R*)

1-Acetoxy-2,3,4-tri-benzyloxy-6,7-ene-9-[5,5-dimethyl-2,4-dioxolane-1'-yl]decalin

[α]_D = +91.5 (*c* 1.50, CHCl₃)

Source of chirality: chiral pool

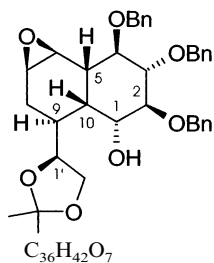
Absolute configuration: (1*R*,1'*S*,2*S*,3*S*,4*R*,5*S*,9*S*,10*R*)



1-Benzyloxy-2,3,4-tri-benzyloxy-6,7-ene-9-[5,5-dimethyl-2,4-dioxolane-1'-yl]decalin

[α]_D = +87.8 (*c* 1.50, CHCl₃)

Source of chirality: chiral pool

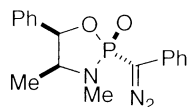
Absolute configuration: (1*R*,1'*S*,2*S*,3*S*,4*R*,5*S*,9*S*,10*R*)

6,7-Anhydro-1-hydroxy-2,3,4-tri-benzyloxy-9-[5,5-dimethyl-2,4-dioxolane-1'-yl]decalin

[α]_D = +68.4 (*c* 1.50, CHCl₃)

Source of chirality: chiral pool

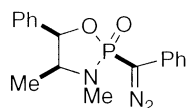
Absolute configuration:

(1*R*,1'*S*,2*S*,3*S*,4*R*,5*R*,6*S*,7*R*,9*S*,10*R*)(2*R*,4*S*,5*R*)-2-(α -Diazobenzyl)-3,4-dimethyl-2-oxo-5-phenyl-1,3,2 λ^5 -oxazaphospholidine

Ee >99%

[α]_D²¹ = -43.2 (*c* 1.0, CHCl₃)

Source of chirality: (-)-ephedrine

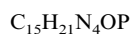
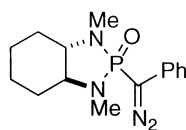
Absolute configuration: (2*R*,4*S*,5*R*)(2*S*,4*S*,5*R*)-2-(α -Diazobenzyl)-3,4-dimethyl-2-oxo-5-phenyl-1,3,2 λ^5 -oxazaphospholidine

Ee >99%

[α]_D²¹ = -15.6 (*c* 1.0, CHCl₃)

Source of chirality: (-)-ephedrine

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



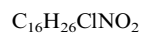
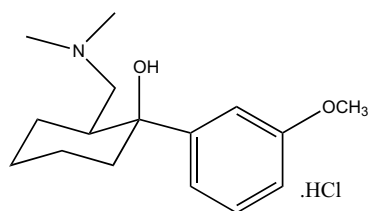
(3a*S*,7a*S*)-2-Diazobenzyl-1,3,3a,4,5,6,7,7a-octahydro-1,3-dimethyl-1*H*-1,3,2λ⁵-benzodiazaphosphole-2-oxide

Ee >99%

$[\alpha]_{\text{D}}^{21} = +7.3$ (*c* 1.0, CHCl₃)

Source of chirality: (*S,S*)-1,2-diaminocyclohexane

Absolute configuration: (3a*S*,7a*S*)



(-)-Tramadol hydrochloride

E.e. >99.5%

$[\alpha]_{\text{D}} = -34.3$ (*c* 1.27, MeOH)

Source of chirality: resolution with DTTA

Absolute configuration: (1*S*,2*S*)