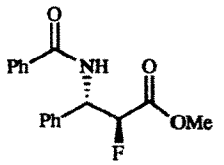
Franklin A. Davis* and Rajarathnam E. Reddy

Tetrahedron: Asymmetry **1994**, *5*, 955



$C_{17}H_{16}NO_3F$

Methyl-2-fluoro-3-(N-benzoylamino)
-3-phenylpropanoate

d.e.= >95% (by 250MHz ^{1}H nmr spectrcropy)

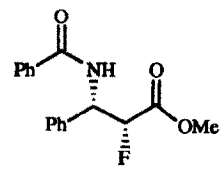
$[\alpha]_D^{20}$ = +8.09 (c, 0.92, MeOH)

Source of chirality: Optically active precussor, electrophilic fluorination and asymm. synth.

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

Franklin A. Davis* and Rajarathnam E. Reddy

Tetrahedron: Asymmetry **1994**, *5*, 955



$C_{17}H_{16}NO_3F$

Methyl-2-fluoro-3-(N-benzoylamino)
-3-phenylpropanoate

d.e.= >95% (by 250MHz ^{1}H nmr spectrcropy)

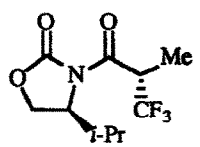
$[\alpha]_D^{20}$ = -31.95 (c, 0.77, MeOH)

Source of chirality: Optically active precussor, electrophilic fluorination and asymm. synth.

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

Katsuhiko Iseki,* Takabumi Nagai and Yoshiro Kobayashi*

Tetrahedron: Asymmetry **1994**, *5*, 961



$[\alpha]_D^{22}$ +63.7 (c 5.49, $CHCl_3$)

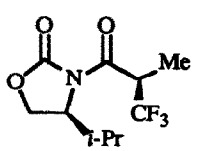
Source of chirality: (*S*)-4-Isopropyl-3-propionyl-2-oxazolidinone

$C_{10}H_{14}NO_3F_3$

(2'*S*,4*S*)-4-Isopropyl-3-(3',3',3'-trifluoro-2'-methylpropionyl)-2-oxazolidinone

Katsuhiko Iseki,* Takabumi Nagai and Yoshiro Kobayashi*

Tetrahedron: Asymmetry **1994**, *5*, 961



$[\alpha]_D^{23}$ +86.5 (c 4.51, $CHCl_3$)

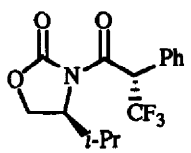
Source of chirality: (*S*)-4-Isopropyl-3-propionyl-2-oxazolidinone

$C_{10}H_{14}NO_3F_3$

(2'*R*,4*S*)-4-Isopropyl-3-(3',3',3'-trifluoro-2'-methylpropionyl)-2-oxazolidinone

Katsuhiko Iseki,* Takabumi Nagai and Yoshiro Kobayashi*

Tetrahedron: Asymmetry **1994,** *5,* 961

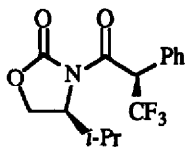


$[\alpha]_D^{21}$ +151.9 (c 1.03, $CHCl_3$)
Source of chirality: (*S*)-4-Isopropyl-3-(2-phenylacetyl)-2-oxazolidinone

$C_{15}H_{16}NO_3F_3$
(2'*S*,4*S*)-4-Isopropyl-3-(3',3',3'-trifluoro-2'-phenylpropionyl)-2-oxazolidinone

Katsuhiko Iseki,* Takabumi Nagai and Yoshiro Kobayashi*

Tetrahedron: Asymmetry **1994,** *5,* 961

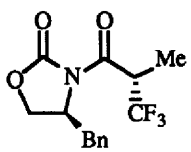


$[\alpha]_D^{22}$ -45.6 (c 0.94, $CHCl_3$)
Source of chirality: (*S*)-4-Isopropyl-3-(2-phenylacetyl)-2-oxazolidinone

$C_{15}H_{16}NO_3F_3$
(2'*R*,4*S*)-4-Isopropyl-3-(3',3',3'-trifluoro-2'-phenylpropionyl)-2-oxazolidinone

Katsuhiko Iseki,* Takabumi Nagai and Yoshiro Kobayashi*

Tetrahedron: Asymmetry **1994,** *5,* 961

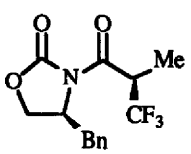


$[\alpha]_D^{21}$ +53.6 (c 1.25, $CHCl_3$)
Source of chirality: (*S*)-4-Benzyl-3-propionyl-2-oxazolidinone

$C_{14}H_{14}NO_3F_3$
(2'*S*,4*S*)-4-Benzyl-3-(3',3',3'-trifluoro-2'-methylpropionyl)-2-oxazolidinone

Katsuhiko Iseki,* Takabumi Nagai and Yoshiro Kobayashi*

Tetrahedron: Asymmetry **1994,** *5,* 961

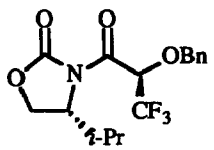


$[\alpha]_D^{21}$ +60.3 (c 1.16, $CHCl_3$)
Source of chirality: (*S*)-4-Benzyl-3-propionyl-2-oxazolidinone

$C_{14}H_{14}NO_3F_3$
(2'*R*,4*S*)-4-Benzyl-3-(3',3',3'-trifluoro-2'-methylpropionyl)-2-oxazolidinone

Katsuhiko Iseki,* Takabumi Nagai and Yoshiro Kobayashi*

Tetrahedron: Asymmetry **1994,** *5,* 961

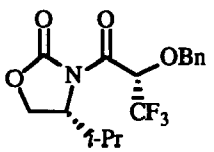


$[\alpha]_D^{20}$ -74.0 (c 1.27, $CHCl_3$)
Source of chirality: (*R*)-3-(2-Benzyloxyacetyl)-4-isopropyl-2-oxazolidinone

$C_{16}H_{18}NO_4F_3$
(2'*R*,4*R*)-3-(2'-Benzyloxy-3',3',3'-trifluoropropionyl)-4-isopropyl-2-oxazolidinone

Katsuhiko Iseki,* Takabumi Nagai and Yoshiro Kobayashi*

Tetrahedron: Asymmetry **1994,** *5,* 961

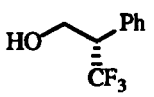


$[\alpha]_D^{21}$ -26.5 (c 1.06, $CHCl_3$)
Source of chirality: (*R*)-3-(2-Benzyloxyacetyl)-4-isopropyl-2-oxazolidinone

$C_{16}H_{18}NO_4F_3$
(2'*S*,4*R*)-3-(2'-Benzyloxy-3',3',3'-trifluoropropionyl)-4-isopropyl-2-oxazolidinone

Katsuhiko Iseki,* Takabumi Nagai and Yoshiro Kobayashi*

Tetrahedron: Asymmetry **1994,** *5,* 961

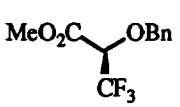


$[\alpha]_D^{22}$ -37.3 (c 2.29, $CHCl_3$)
Source of chirality:(2'*S*,4*S*)-4-Isopropyl-3-(3',3',3'-trifluoro-2'-phenylpropionyl)-2-oxazolidinone

$C_9H_9OF_3$
(*S*)-3,3,3-Trifluoro-2-phenylpropanol

Katsuhiko Iseki,* Takabumi Nagai and Yoshiro Kobayashi*

Tetrahedron: Asymmetry **1994,** *5,* 961

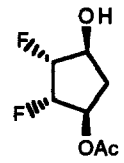


$[\alpha]_D^{22}$ -59.1 (c 1.97, $CHCl_3$)
Source of chirality:(2'*R*,4*R*)-3-(2'-Benzyloxy-3',3',3'-trifluoropropionyl)-4-isopropyl-2-oxazolidinone

$C_{11}H_{11}O_3F_3$
Methyl (*R*)-2-Benzyloxy-3,3,3-trifluoropropionate

M. Sato, T. Hirokawa, H. Hattori, A. Toyota, and C. Kaneko

Tetrahedron: Asymmetry **1994**, *5*, 975



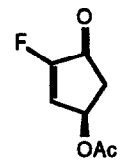
E. e. = 100%
$[\alpha]_D^{24}$ -54.5 (c 1.0, $CHCl_3$)
Source of chirality: enzymatic dissymmetrization
Absolute configuration: 1*S*, 2*R*, 3*S*, 4*R*
(assigned by Mosher's method)

$C_7H_{10}FO_3$

(1*S*, 2*R*, 3*S*, 4*R*)-4-Acetoxy-2,3-difluorocyclopentan-1-ol

M. Sato, T. Hirokawa, H. Hattori, A. Toyota, and C. Kaneko

Tetrahedron: Asymmetry **1994**, *5*, 975



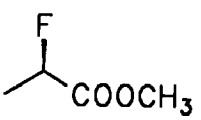
E. e. = 100%
$[\alpha]_D^{24}$ +34.5 (c 0.9, $CHCl_3$)
Source of chirality: enzymatic dissymmetrization
Absolute configuration: *R*
(assigned by Mosher's method)

$C_7H_7FO_3$

(*R*)-4-Acetoxy-2-fluoro-2-cyclopenten-1-one

E. Fritz-Langhals

Tetrahedron: Asymmetry **1994**, *5*, 981

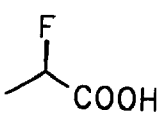


E.e. = 96% [by GC on Lipodex A and C]
$[\alpha]_D^{28}$ = + 2.15 (neat)
source of chirality: methyl (S)-lactate, S_N2 of sulfonate with KF in formamide or C- or N-monomethylated analogs
Absolute configuration: R (inversion)

$C_4H_7FO_2$
Methyl 2-fluoropropanoate

E. Fritz-Langhals

Tetrahedron: Asymmetry **1994**, *5*, 981

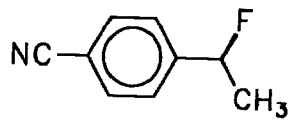


E.e. > 92% [by GC of the acid chloride on Chiraldex G-TA, Astec]
$[\alpha]_D^{23}$ = -0.320 (neat)
source of chirality: methyl (S)-lactate, S_N2 of sulfonate with KF in formamide, transesterification (formic acid)
Absolute configuration: R (inversion)

$C_3H_5FO_2$
2-Fluoropropanoic acid

E. Fritz-Langhals

Tetrahedron: Asymmetry **1994**, *5*, 981

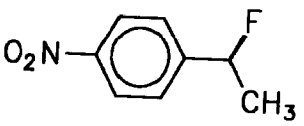


E.e. = 96.0% [by GC on Chiraldex B-PH, Astec]
$[\alpha]_D^{20}$ = + 27.1 (c 1.00, CH_2Cl_2)
source of chirality: (R)-1-(4-cyanophenyl)ethanol (from asym. reduction), S_N2 of methanesulfonate with CsF in N-methylformamide
Absolute configuration: S (inversion)

C_9H_8FN
1-(4-Cyanophenyl)-1-fluoroethane

E. Fritz-Langhals

Tetrahedron: Asymmetry **1994**, *5*, 981

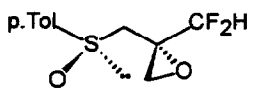


E.e. = 91.4% [by GC on Lipodex C]
$[\alpha]_D^{22}$ = + 18.3 (c 1.00, CH_2Cl_2)
source of chirality: (R)-1-(4-nitrophenyl)ethanol (from asym. reduction), S_N2 of methanesulfonate with CsF in N-methylformamide or acetamide
Absolute configuration: S (inversion)

$C_8H_8FNO_2$
1-(4-Nitrophenyl)-1-fluoroethane

P. Bravo, A. Farina, M. Frigerio, V. Meille, V. Soloshonok and F. Viani

Tetrahedron: Asymmetry **1994**, *5*, 987

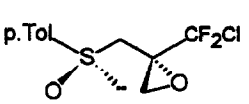


D.e. = 66%
$[\alpha]_D^+$ 232.3 (c 1.1, $CHCl_3$)
Source of chirality: (1R)-menthyl (S)-*p*-toluenesulfinate
Absolute configuration: 2S, R_S

$C_{11}H_{12}F_2O_2S$
(2S,R_S)-2-(difluoromethyl) -2-{[(4-methylphenyl)sulphinyl]methyl} oxirane

P. Bravo, A. Farina, M. Frigerio, V. Meille, V. Soloshonok and F. Viani

Tetrahedron: Asymmetry **1994**, *5*, 987

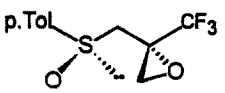


D.e. = > 94%
$[\alpha]_D^+$ 163.2 (c 1.1, $CHCl_3$)
Source of chirality: (1R)-menthyl (S)-*p*-toluenesulfinate
Absolute configuration: 2S, R_S

$C_{11}H_{11}ClF_2O_2S$
(2S,R_S)-2-(chlorodifluoromethyl) -2-{[(4-methylphenyl)sulphinyl]methyl} oxirane

P. Bravo, A. Farina, M. Frigerio, V. Meille, V. Soloshonok and F. Viani

Tetrahedron: Asymmetry **1994,** *5,* 987



D.e. = > 94%

$[\alpha]_D^+$ 165.8 (c 1.1, $CHCl_3$)

Source of chirality: (1R)-menthyl (S)-*p*-toluenesulfinate

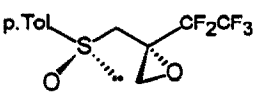
Absolute configuration: 2S, R_S

$C_{11}H_{11}F_3O_2S$

(2S,R_S)-2-{[(4-methylphenyl)sulphinyl]methyl}-2-(trifluoromethyl) oxirane

P. Bravo, A. Farina, M. Frigerio, V. Meille, V. Soloshonok and F. Viani

Tetrahedron: Asymmetry **1994,** *5,* 987



D.e. = > 94%

$[\alpha]_D^+$ 160.2 (c 0.8, $CHCl_3$)

Source of chirality: (1R)-menthyl (S)-*p*-toluenesulfinate

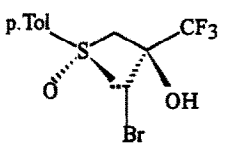
Absolute configuration: 2S, R_S

$C_{12}H_{11}F_5O_2S$

(2S,R_S)-2-{[(4-methylphenyl)sulphinyl]methyl}-2-(pentafluoroethyl) oxirane

P. Bravo, A. Farina, M. Frigerio, V. Meille, V. Soloshonok and F. Viani

Tetrahedron: Asymmetry **1994,** *5,* 987



D.e. = >94%

$[\alpha]_D$- 195.3 (c 1.1, $CHCl_3$)

Source of Chirality : (1S)-menthyl (R)-*p*-toluenesulfinate

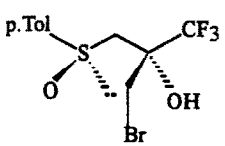
Absolute configuration: 2R, S_S (assignment *via* X-ray analysis)

$C_{11}H_{12}BrF_3O_2S$

(2R,S_S)-1-bromo-2-{[(4-methylphenyl)sulphinyl]methyl}-3,3,3-trifluoro-propan-2-ol

P. Bravo, A. Farina, M. Frigerio, V. Meille, V. Soloshonok and F. Viani

Tetrahedron: Asymmetry **1994,** *5,* 987



D.e. = >94%

$[\alpha]_D$ + 194.5 (c 1.2, $CHCl_3$)

Source of Chirality : (1R)-menthyl (S)-*p*-toluenesulfinate

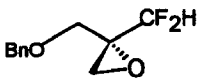
Absolute configuration: 2S, R_S

$C_{11}H_{12}BrF_3O_2S$

(2S,R_S)-1-bromo-2-{[(4-methylphenyl)sulphinyl]methyl}-3,3,3-trifluoro-propan-2-ol

P. Bravo, A. Farina, M. Frigerio, V. Meille, V. Soloshonok and F. Viani

Tetrahedron: Asymmetry **1994**, *5*, 987



E.e. = > 94%

$[\alpha]_D$ + 3.2 (c 1.6, $CHCl_3$)

Source of chirality: (1R)-menthyl (S)-*p*-toluenesulfinate

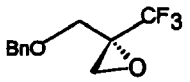
$C_{11}H_{12}F_2O_2$

Absolute configuration: 2S

(2S)-2-(benzyloxymethyl)-2-(difluoromethyl) oxirane

P. Bravo, A. Farina, M. Frigerio, V. Meille, V. Soloshonok and F. Viani

Tetrahedron: Asymmetry **1994**, *5*, 987



E.e. = > 94%

$[\alpha]_D$ + 5.10 (c 1.6, $CHCl_3$)

$[\alpha]_{365}$ + 20.60 (c 1.6, CHCl3)

Source of chirality: (1R)-menthyl (S)-*p*-toluenesulfinate

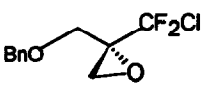
$C_{11}H_{11}F_3O_2$

Absolute configuration: 2S

(2S)-2-(benzyloxymethyl)-2-(trifluoromethyl) oxirane

P. Bravo, A. Farina, M. Frigerio, V. Meille, V. Soloshonok and F. Viani

Tetrahedron: Asymmetry **1994**, *5*, 987



E.e. = > 94%

$[\alpha]_D$ + 0.2 (c 0.5, $CHCl_3$)

Source of chirality: (1R)-menthyl (S)-*p*-toluenesulfinate

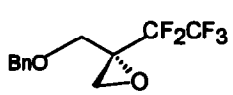
$C_{11}H_{11}ClF_2O_2$

Absolute configuration: 2S

(2S)-2-(benzyloxymethyl)-2-(chlorodifluoromethyl) oxirane

P. Bravo, A. Farina, M. Frigerio, V. Meille, V. Soloshonok and F. Viani

Tetrahedron: Asymmetry **1994**, *5*, 987



E.e. = > 94%

$[\alpha]_D$ + 4.02 (c 0.7, $CHCl_3$)

Source of chirality: (1R)-menthyl (S)-*p*-toluenesulfinate

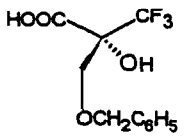
$C_{12}H_{11}F_5O_2$

Absolute configuration: 2S

(2S)-2-(benzyloxymethyl)-2-(pentafluoroethyl) oxirane

P. Bravo, A. Farina, M. Frigerio, V. Meille, V. Soloshonok and F. Viani

Tetrahedron: Asymmetry **1994**, *5*, 987



E.e. = > 94%

$[\alpha]_D$ + 14.2 (c 0.3, CH_3OH)

Source of chirality: (1R)-menthyl (S)-*p*-toluenesulfinate

Absolute configuration: 2R

$C_{11}H_{11}F_3O_4$

(2R)-3-(benzyloxy)-2-hydroxy-2-(trifluoromethyl)-propanoic acid

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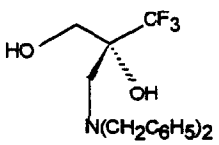
P. Bravo, A. Farina, M. Frigerio, V. Meille, V. Soloshonok and F. Viani

Tetrahedron: Asymmetry **1994**, *5*, 987



E.e. = >94%

$[\alpha]_D$ + 15.9 (c 0.5, $CHCl_3$)

Source of chirality : (1R)-menthyl (S)-*p*-toluenesulfinate

Absolute configuration: 2R

$C_{18}H_{20}F_3NO_2$

(2R)-1-(dibenzylamino)-2-hydroxy-2-(trifluoromethyl)-propan-3-ol

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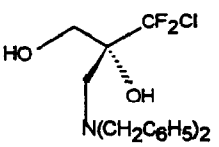
P. Bravo, A. Farina, M. Frigerio, V. Meille, V. Soloshonok and F. Viani

Tetrahedron: Asymmetry **1994**, *5*, 987



E.e. = >94%

$[\alpha]_D$ + 47.0 (c 1.0, $CHCl_3$)

Source of chirality : (1R)-menthyl (S)-*p*-toluenesulfinate

Absolute configuration: 2R

$C_{18}H_{20}ClF_2NO_2$

(2R)-2-(chlorodifluoromethyl)-3-(dibenzylamino)-2-hydroxy-propan-1-ol

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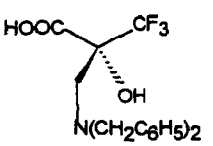
P. Bravo, A. Farina, M. Frigerio, V. Meille, V. Soloshonok and F. Viani

Tetrahedron: Asymmetry **1994**, *5*, 987



E.e. = >94%

$[\alpha]_D$ + 2.4 (c 0.6, $CHCl_3$)

Source of chirality : (1R)-menthyl (S)-*p*-toluenesulfinate

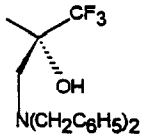
Absolute configuration: 2R

$C_{18}H_{18}F_3NO_3$

(2R)-3-(dibenzylamino)-2-hydroxy-2-(trifluoromethyl)-propanoic acid

P. Bravo, A. Farina, M. Frigerio, V. Meille, V. Soloshonok and F. Viani

Tetrahedron: Asymmetry **1994**, *5*, 987

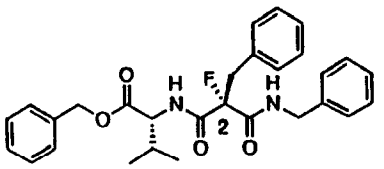


E.e. = >94%
$[\alpha]_D$ + 32.4 (c 1.0, $CHCl_3$)
Source of chirality : (1R)-menthyl (S)-*p*-toluenesulfinate
Absolute configuration: 2S

$C_{18}H_{20}F_3NO$
(2S)-1-(dibenzylamino)-2-methyl-3,3,3-trifluoro-propan-2-ol

A. Abouabdellah and J. T. Welch

Tetrahedron: Asymmetry **1994**, *5*, 1005

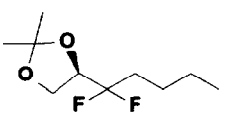


$C_{29}H_{31}FO_4N_2$
(2*R*)-2-Fluoro-2-(benzyloxy-*D*-valyl carbonyl)-3-phenylpropanoic acid benzylamide

$[\alpha]_D^{22}$= +7.3 (c, 1.5, CH_2Cl_2)
Source of chirality: chemical synthesis from (3*R*,4*S*,4'*S*)-*N*-(*p*-anizyl)-3-benzyl-3-fluoro-4-(2',2'-dimethyl-1',3'-dioxolan-4'-yl)-2-azetidinone
Absolute configuration: 2*R*

A.M.Kornilov, A.E.Sorochinsky, V.P.Kukhar

Tetrahedron: Asymmetry **1994**, *5*, 1015

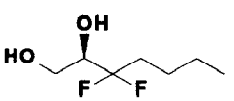


$C_{10}H_{18}O_2F_2$
3,3-difluoro-1,2-dihydroxyheptane 1,2-acetonide

$[\alpha]_D^{20}$= +4.0 (c 1.18, $CHCl_3$)
Source of chirality: synthesis from D-glyceraldehyde acetonide
Absolute configuration R

A.M.Kornilov, A.E.Sorochinsky, V.P.Kukhar

Tetrahedron: Asymmetry **1994**, *5*, 1015

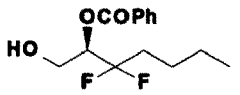


$C_7H_{14}O_2F_2$
3,3-difluoro-1,2-dihydroxyheptane

$[\alpha]_D^{20}$= +8.7 (c 1.19, $CHCl_3$)
Source of chirality: synthesis from D-glyceraldehyde acetonide
Absolute configuration R

A.M.Kornilov, A.E.Sorochinsky, V.P.Kukhar

Tetrahedron: Asymmetry **1994**, *5*, 1015



$C_{14}H_{18}O_3F_2$

2-(benzoyloxy)-3,3-difluoro-1-hydroxyheptane

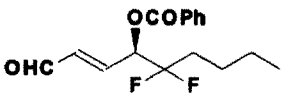
$[\alpha]_D^{20}$= -2.3 (c 2.1, $CHCl_3$)

Source of chirality: synthesis from D-glyceraldehyde acetonide

Absolute configuration R

A.M.Kornilov, A.E.Sorochinsky, V.P.Kukhar

Tetrahedron: Asymmetry **1994**, *5*, 1015



$C_{16}H_{18}O_3F_2$

4-(benzoyloxy)-5,5-difluoro-2E-nonenal

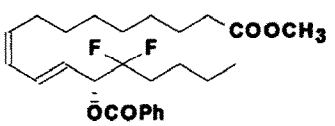
$[\alpha]_D^{20}$= +134.3 (c 1.7, $CHCl_3$)

Source of chirality: synthesis from D-glyceraldehyde acetonide

Absolute configuration R

A.M.Kornilov, A.E.Sorochinsky, V.P.Kukhar

Tetrahedron: Asymmetry **1994**, *5*, 1015



$C_{26}H_{36}O_4F_2$

Methyl 13-(benzoyloxy)-14,14-difluoro-9E,11Z-octadecadienoate

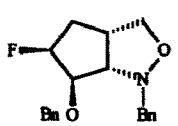
$[\alpha]_D^{20}$= +145.0 (c 1.7, $CHCl_3$)

Source of chirality: synthesis from D-glyceraldehyde acetonide

Absolute configuration R

Alberto Arnone, Marcello Cavicchioli, Alessandro Donadelli, Giuseppe Resnati

Tetrahedron: Asymmetry **1994**, *5*, 1019



$C_{20}H_{22}FNO_2$

2-Benzyl-3-benzyloxy-4-fluoro-cyclopentano[c]isoxazolidine

E.e. >98%

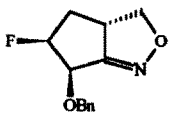
$[\alpha]_D^{20}$ +26 (c 1.23, MeOH)

Source of chirality: (+)-(*R*)-methyl *p*-tolyl sulfoxide.

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

Alberto Arnone, Marcello Cavicchioli, Alessandro Donadelli, Giuseppe Resnati

Tetrahedron: Asymmetry **1994,** *5,* 1019



$C_{13}H_{14}FNO_2$

3-Benzyloxy-4-fluoro-cyclopentano[c]2-isoxazoline

E.e. >98%

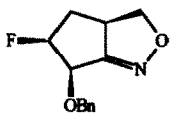
$[\alpha]_D^{20}$ -23.7 (c 0.7, $CHCl_3$)

Source of chirality: (+)-(*R*)-methyl *p*-tolyl sulfoxide.

Absolute configuraion: (3*R*,4*S*,5a*S*)

Alberto Arnone, Marcello Cavicchioli, Alessandro Donadelli, Giuseppe Resnati

Tetrahedron: Asymmetry **1994,** *5,* 1019



$C_{13}H_{14}FNO_2$

3-Benzyloxy-4-fluoro-cyclopentano[c]2-isoxazoline

E.e. >98%

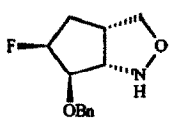
$[\alpha]_D^{20}$ -160 (c 0.4, $CHCl_3$)

Source of chirality: (+)-(*R*)-methyl *p*-tolyl sulfoxide.

Absolute configuraion: (3*R*,4*S*,5a*R*)

Alberto Arnone, Marcello Cavicchioli, Alessandro Donadelli, Giuseppe Resnati

Tetrahedron: Asymmetry **1994,** *5,* 1019



$C_{13}H_{16}FNO_2$

3-Benzyloxy-4-fluoro-cyclopentano[c]isoxazolidine

E.e. >98%

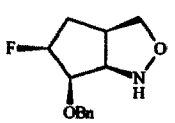
$[\alpha]_D^{20}$ +120 (c 0.7, $CHCl_3$)

Source of chirality: (+)-(*R*)-methyl *p*-tolyl sulfoxide.

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

Alberto Arnone, Marcello Cavicchioli, Alessandro Donadelli, Giuseppe Resnati

Tetrahedron: Asymmetry **1994,** *5,* 1019



$C_{13}H_{16}FNO_2$

3-Benzyloxy-4-fluoro-cyclopentano[c]isoxazolidine

E.e. >98%

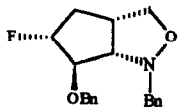
$[\alpha]_D^{20}$ -19.0 (c 0.7, $CHCl_3$)

Source of chirality: (+)-(*R*)-methyl *p*-tolyl sulfoxide.

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

Alberto Arnone, Marcello Cavicchioli, Alessandro Donadelli, Giuseppe Resnati

Tetrahedron: Asymmetry **1994,** *5,* 1019



$C_{20}H_{22}FNO_2$

2-Benzyl-3-benzyloxy-4-fluoro-cyclopentano[c]isoxazolidine

E.e. >98%

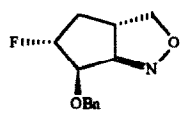
$[\alpha]_D^{20}$ -4.8 (c 2.06, MeOH)

Source of chirality: (+)-(*R*)-methyl *p*-tolyl sulfoxide.

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

Alberto Arnone, Marcello Cavicchioli, Alessandro Donadelli, Giuseppe Resnati

Tetrahedron: Asymmetry **1994,** *5,* 1019



$C_{13}H_{14}FNO_2$

3-Benzyloxy-4-fluoro-cyclopentano[c]2-isoxazoline

E.e. >98%

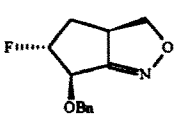
$[\alpha]_D^{20}$ -19.2 (c 1.00, $CHCl_3$)

Source of chirality: (+)-(*R*)-methyl *p*-tolyl sulfoxide.

Absolute configuraion: (3*R*,4*R*,5a*S*)

Alberto Arnone, Marcello Cavicchioli, Alessandro Donadelli, Giuseppe Resnati

Tetrahedron: Asymmetry **1994,** *5,* 1019



$C_{13}H_{14}FNO_2$

3-Benzyloxy-4-fluoro-cyclopentano[c]2-isoxazoline

E.e. >98%

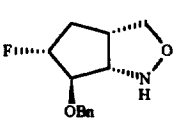
$[\alpha]_D^{20}$ -206 (c 1.0, $CHCl_3$)

Source of chirality: (+)-(*R*)-methyl *p*-tolyl sulfoxide.

Absolute configuraion: (3*R*,4*R*,5a*R*)

Alberto Arnone, Marcello Cavicchioli, Alessandro Donadelli, Giuseppe Resnati

Tetrahedron: Asymmetry **1994,** *5,* 1019



$C_{13}H_{16}FNO_2$

3-Benzyloxy-4-fluoro-cyclopentano[c]isoxazolidine

E.e. >98%

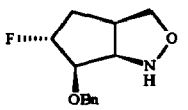
$[\alpha]_D^{20}$ +59.2 (c 0.5, $CHCl_3$)

Source of chirality: (+)-(*R*)-methyl *p*-tolyl sulfoxide.

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

Alberto Arnone, Marcello Cavicchioli, Alessandro Donadelli, Giuseppe Resnati

Tetrahedron: Asymmetry **1994**, *5*, 1019



$C_{13}H_{16}FNO_2$

3-Benzyloxy-4-fluoro-cyclopentano[c]isoxazolidine

E.e. >98%

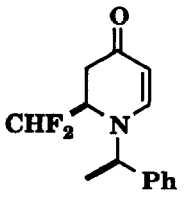
$[\alpha]_D^{20}$ -81.6 (c 0.7, $CHCl_3$)

Source of chirality: (+)-(*R*)-methyl *p*-tolyl sulfoxide.

Absolute configuraion: (2a*R*,3*R*,4*R*,5a*R*)

Tomoya Kitazume, Kouichi Murata, Akiko Okabe, Youichiro Takahashi, Takashi Yamazaki

Tetrahedron: Asymmetry **1994**, *5*, 1029



$C_{14}H_{15}F_2NO$

D.e = >99% [by ^{19}F NMR]

$[\alpha]_D^{19}$ 523.7 (c = 1.07, MeOH)

Absolute configuration αR, 6R

(α*R*, 6*R*)-N-(α-methylbenzyl)-6-difluoromethyl-5,6-dihydro-4-pyridone

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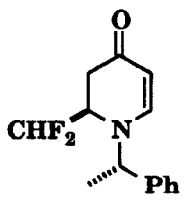
Tomoya Kitazume, Kouichi Murata, Akiko Okabe, Youichiro Takahashi, Takashi Yamazaki

Tetrahedron: Asymmetry **1994**, *5*, 1029



$C_{14}H_{15}F_2NO$

D.e = >99% [by ^{19}F NMR]

$[\alpha]_D^{19}$ 332.7 (c = 0.30, $CHCl_3$)

Absolute configuration αS, 6R

(α*S*, 6*R*)-N-(α-methylbenzyl)-6-difluoromethyl-5,6-dihydro-4-pyridone

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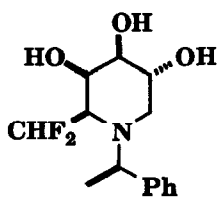
Tomoya Kitazume, Kouichi Murata, Akiko Okabe, Youichiro Takahashi, Takashi Yamazaki

Tetrahedron: Asymmetry **1994**, *5*, 1029



$C_{14}H_{19}F_2NO_3$

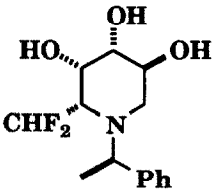
$[\alpha]_D^{25}$ 55.8 (c = 0.30, $CHCl_3$)

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

(α*R*, 3*R*, 4*S*, 5*R*, 6*R*)-N-(α-methylbenzyl)-6-difluoromethyl-3,4,5-trihydroxypiperidine

Tomoya Kitazume, Kouichi Murata, Akiko Okabe, Youichiro Takahashi, Takashi Yamazaki

Tetrahedron: Asymmetry **1994**, *5*, 1029



$[\alpha]_D^{14}$ **-9.2 (c = 0.29, MeOH)**

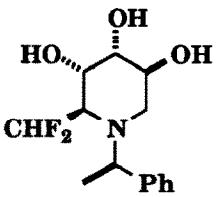
Absolute configuration
αR, 3S, 4R, 5S, 6S

$C_{14}H_{19}F_2NO_3$

(α*R*, 3*S*, 4*R*, 5*S*, 6*S*)-N-(α-methylbenzyl)-6-difluoromethyl-3,4,5-trihydroxypiperidine

Tomoya Kitazume, Kouichi Murata, Akiko Okabe, Youichiro Takahashi, Takashi Yamazaki

Tetrahedron: Asymmetry **1994**, *5*, 1029



$[\alpha]_D^{18}$ **-7.2 (c = 0.21, MeOH)**

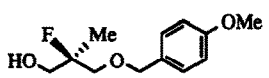
Absolute configuration
αR, 3S, 4R, 5S, 6R

$C_{14}H_{19}F_2NO_3$

(α*R*, 3*S*, 4*R*, 5*S*, 6*R*)-N-(α-methylbenzyl)-6-difluoromethyl-3,4,5-trihydroxypiperidine

M. Ihara, T. Kawabuchi, Y. Tokunaga and K. Fukumoto

Tetrahedron: Asymmetry **1994**, *5*, 1041



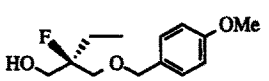
$C_{12}H_{17}O_3F$

2-Flouoro-3-(*p*-methoxybenzyloxy)-2-methyl-1-propanol

E.e. = 100.0% (by NMR of the MTPA-ester)
$[\alpha]_D^{25}$ -6.1 (c 0.62, $CHCl_3$)
Source of chirality: alkylation of 8-phenylmenthyl hydrogen fluoromealonate
Absolute configuration: R
[assigned by chemical correlation]

M. Ihara, T. Kawabuchi, Y. Tokunaga and K. Fukumoto

Tetrahedron: Asymmetry **1994**, *5*, 1041



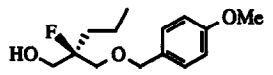
$C_{13}H_{19}O_3F$

2-Flouoro-2-(*p*-methoxybenzyloxymethyl)-1-butanol

E.e. = 82.0% (by NMR of the MTPA-ester)
$[\alpha]_D^{29}$ -8.3 (c 0.65, $CHCl_3$)
Source of chirality: alkylation of 8-phenylmenthyl hydrogen fluoromalonate
Absolute configuration: R
[assigned by chemical correlation]

M. Ihara, T. Kawabuchi, Y. Tokunaga and K. Fukumoto

Tetrahedron: Asymmetry **1994**, *5*, 1041



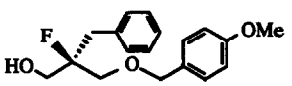
$C_{14}H_{21}O_3F$

2-Fluoro-2-(*p*-methoxybenzyloxymethyl)-1-pentanol

E.e. = 75.0% (by NMR of the MTPA-ester)
$[\alpha]_D^{29}$ -5.1 (c 1.31, $CHCl_3$)
Source of chirality: alkylation of 8-phenylmenthyl hydrogen fluoromalonate
Absolute configuration: R
[assigned by chemical correlation]

M. Ihara, T. Kawabuchi, Y. Tokunaga and K. Fukumoto

Tetrahedron: Asymmetry **1994**, *5*, 1041



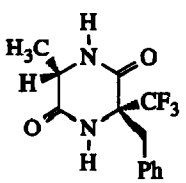
$C_{18}H_{21}O_3F$

2-Benzyl-2-fluoro-3-(*p*-methoxybenzyloxy)-1-propanol

E.e. = 100.0% (by NMR of the MTPA-ester)
$[\alpha]_D^{24}$ -5.3 (c 0.93, $CHCl_3$)
Source of chirality: alkylation of 8-phenylmenthyl hydrogen fluoromalonate
Absolute configuration: R
[assigned by chemical correlation]

Norbert Sewald, Liza C. Seymour, Klaus Burger, Sergey N. Osipov, Alexey F. Kolomiets, and Alexander V. Fokin

Tetrahedron: Asymmetry **1994**, *5*, 1051



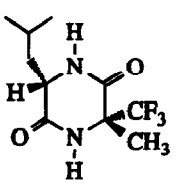
$C_{13}H_{13}F_3N_2O_2$

(3R,6S)-3-Benzyl-6-methyl-3-trifluoromethylpiperazine-2,5-dione

de = 82 % (^{19}F-NMR)
$[\alpha]_D^{20}$ = -13.7 (d.e. > 99 %, c 1.0, DMSO)
Source of chirality: L-Alanine, asymmetric synthesis
Absolute configuration: 3R,6S

Norbert Sewald, Liza C. Seymour, Klaus Burger, Sergey N. Osipov, Alexey F. Kolomiets, and Alexander V. Fokin

Tetrahedron: Asymmetry **1994**, *5*, 1051



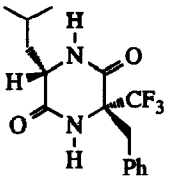
$C_{10}H_{15}F_3N_2O_2$

(3R,6S)-6-Isobutyl-3-methyl-3-trifluoromethylpiperazine-2,5-dione

d.e. = 72 % (^{19}F-NMR)
$[\alpha]_D^{20}$ = -11.5 (d.e. > 99 %, c 1.0, DMSO)
Source of chirality: L-Leucine, asymmetric synthesis
Absolute configuration: 3R,6S

Norbert Sewald, Liza C. Seymour, Klaus Burger, Sergey N. Osipov, Alexey F. Kolomiets, and Alexander V. Fokin

Tetrahedron: Asymmetry **1994**, *5*, 1051



$C_{16}H_{19}F_3N_2O_2$

(3R,6S)-3-Benzyl-6-isobutyl-3-trifluoromethylpiperazine-2,5-dione

de = 70 % (^{19}F-NMR)

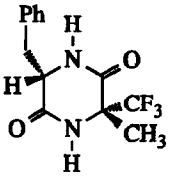
$[\alpha]_D^{20}$ = -25.4 (d.e. > 99 %, c 1.0, DMSO)

Source of chirality: L-Leucine, asymmetric synthesis

Absolute configuration: 3R,6S

Norbert Sewald, Liza C. Seymour, Klaus Burger, Sergey N. Osipov, Alexey F. Kolomiets, and Alexander V. Fokin

Tetrahedron: Asymmetry **1994**, *5*, 1051



$C_{13}H_{13}F_3N_2O_2$

(3R,6S)-6-Benzyl-3-methyl-3-trifluoromethylpiperazine-2,5-dione

de = 64 % (^{19}F-NMR)

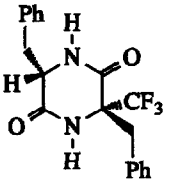
$[\alpha]_D^{20}$ = -15.9 (d.e. >99 %, c 1.0, DMSO)

Source of chirality: L-Phenylalanine, asymmetric synthesis

Absolute configuration: 3R,6S

Norbert Sewald, Liza C. Seymour, Klaus Burger, Sergey N. Osipov, Alexey F. Kolomiets, and Alexander V. Fokin

Tetrahedron: Asymmetry **1994**, *5*, 1051



$C_{19}H_{17}F_3N_2O_2$

(3R,6S)-3,6-Dibenzyl-3-trifluoromethylpiperazine-2,5-dione

de = 67 % (^{19}F-NMR)

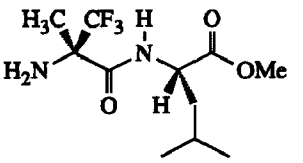
$[\alpha]_D^{20}$ = -13.3 (d.e. > 99 %, c 1.0, DMSO)

Source of chirality: L-Phenylalanine, asymmetric synthesis

Absolute configuration: 3R,6S

Norbert Sewald, Liza C. Seymour, Klaus Burger, Sergey N. Osipov, Alexey F. Kolomiets, and Alexander V. Fokin

Tetrahedron: Asymmetry **1994**, *5*, 1051



$C_{11}H_{19}F_3N_2O_3$

Methyl (R)-2-Trifluoromethylalanyl-(S)-leucinate

de > 99 % (^{19}F-NMR)

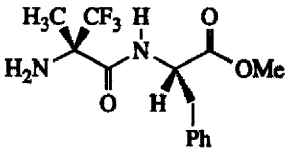
$[\alpha]_D^{20}$ = -16.2 (c 0.65, MeOH)

Source of chirality: L-Leucine, asymmetric synthesis

Absolute configuration: R-(α-TFM)Ala-S-Leu-OMe

Norbert Sewald, Liza C. Seymour, Klaus Burger, Sergey N. Osipov, Alexey F. Kolomiets, and Alexander V. Fokin

Tetrahedron: Asymmetry **1994,** *5,* 1051



$C_{14}H_{17}F_3N_2O_3$

Methyl (R)-2-Trifluoromethylalanyl-(S)-phenylalaninate

de > 99 % (^{19}F-NMR)

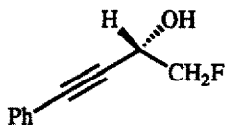
$[\alpha]_D^{20}$ = - 9.1 (c 1.35, MeOH)

Source of chirality: L-Phenylalanine, asymmetric synthesis

Absolute configuration: R-(α-TFM)Ala-S-Phe-OMe

Tetrahedron: Asymmetry **1994,** *5,* 1061

P. V. Ramachandran, B. Gong, A. V. Teodorovic and Herbert C. Brown



$C_{10}H_9FO$

1-Fluoro-4-phenyl-3-butyn-2-ol

E. e. = 78% [by capillary GC analysis]

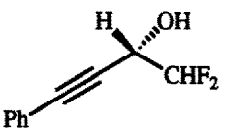
$[\alpha]_D^{20}$ = +14.89 (*c* 2.5, $CHCl_3$)

Source of chirality: asymmetric reduction

Absolute configuration: S

Tetrahedron: Asymmetry **1994,** *5,* 1061

P. V. Ramachandran, B. Gong, A. V. Teodorovic and Herbert C. Brown*



$C_{10}H_8F_2O$

1,1-Difluoro-4-phenyl-3-butyn-2-ol

E. e. = 82% [by capillary GC analysis]

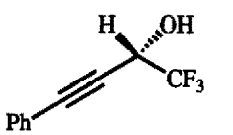
$[\alpha]_D^{21}$ = –14.80 (*c* 0.94, $CHCl_3$)

Source of chirality: asymmetric reduction

Absolute configuration: S

Tetrahedron: Asymmetry **1994,** *5,* 1061

P. V. Ramachandran, B. Gong, A. V. Teodorovic and Herbert C. Brown*



$C_{10}H_7F_3O$

1,1,1-Trifluoro-4-phenyl-3-butyn-2-ol

E. e. = 98% [by capillary GC analysis]

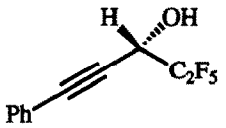
$[\alpha]_D^{20}$ = –13.10 (*c* 2.6, $CHCl_3$)

Source of chirality: asymmetric reduction

Absolute configuration: S

Tetrahedron: Asymmetry **1994,** *5,* 1061

P. V. Ramachandran, B. Gong, A. V. Teodorovic and Herbert C. Brown*

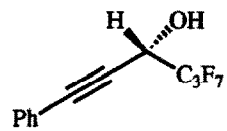


E. e. = 97% [by capillary GC analysis]
$[\alpha]_D^{21} = -7.63$ (*c* 1.6, $CHCl_3$)
Source of chirality: asymmetric reduction
Absolute configuration: S

$C_{11}H_7F_5O$
1,1,1,2,2-Pentafluoro-5-phenyl-4-pentyn-3-ol

Tetrahedron: Asymmetry **1994,** *5,* 1061

P. V. Ramachandran, B. Gong, A. V. Teodorovic and Herbert C. Brown*

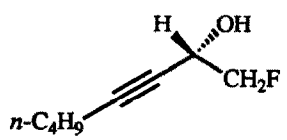


E. e. = 96% [by capillary GC analysis]
$[\alpha]_D^{21} = -4.10$ (*c* 2.1, $CHCl_3$)
Source of chirality: asymmetric reduction
Absolute configuration: S

$C_{12}H_7F_7O$
4,4,5,5,6,6,6-Heptafluoro-1-phenyl-1-hexyn-3-ol

Tetrahedron: Asymmetry **1994,** *5,* 1061

P. V. Ramachandran, B. Gong, A. V. Teodorovic and Herbert C. Brown*

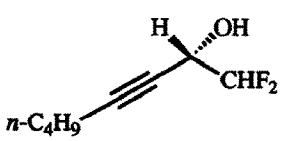


E. e. = 78% [by capillary GC analysis]
$[\alpha]_D^{21} = +12.97$ (*c* 2.5, $CHCl_3$)
Source of chirality: asymmetric reduction
Absolute configuration: S

$C_8H_{13}FO$
1-Fluoro-3-octyn-2-ol

Tetrahedron: Asymmetry **1994,** *5,* 1061

P. V. Ramachandran, B. Gong, A. V. Teodorovic and Herbert C. Brown*

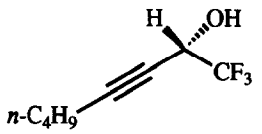


E. e. = 88% [by capillary GC analysis]
$[\alpha]_D^{21} = -2.52$ (*c* 3.4, $CHCl_3$)
Source of chirality: asymmetric reduction
Absolute configuration: S

$C_8H_{12}F_2O$
1,1-Difluoro-3-octyn-2-ol

Tetrahedron: Asymmetry **1994,** *5,* 1061

P. V. Ramachandran, B. Gong, A. V. Teodorovic and Herbert C. Brown*

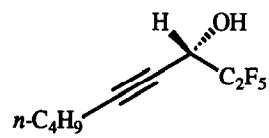


$C_8H_{11}F_3O$
1,1,1-Trifluoro-3-octyn-2-ol

E. e. = ≥99% [by capillary GC analysis]
$[\alpha]_D^{21.5} = -13.18$ (*c* 3.1, $CHCl_3$)
Source of chirality: asymmetric reduction
Absolute configuration: S

Tetrahedron: Asymmetry **1994,** *5,* 1061

P. V. Ramachandran, B. Gong, A. V. Teodorovic and Herbert C. Brown*

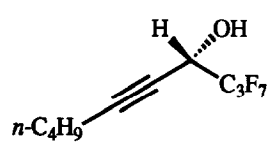


$C_9H_{11}F_5O$
1,1,1,2,2-Pentafluoro-4-nonyn-3-ol

E. e. = 98% [by capillary GC analysis]
$[\alpha]_D^{21} = -4.16$ (*c* 3.6, $CHCl_3$)
Source of chirality: asymmetric reduction
Absolute configuration: S

Tetrahedron: Asymmetry **1994,** *5,* 1061

P. V. Ramachandran, B. Gong, A. V. Teodorovic and Herbert C. Brown*

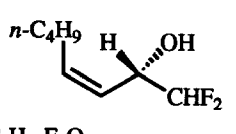


$C_{10}H_{11}F_7O$
1,1,1,2,2,3,3-Heptafluoro-5-decyn-4-ol

E. e. = 98% [by capillary GC analysis]
$[\alpha]_D^{21} = -2.95$ (*c* 3.3, $CHCl_3$)
Source of chirality: asymmetric reduction
Absolute configuration: S

Tetrahedron: Asymmetry **1994,** *5,* 1061

P. V. Ramachandran, B. Gong, A. V. Teodorovic and Herbert C. Brown*

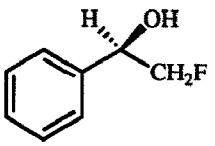


$C_8H_{14}F_2O$
1,1-Difluoro-Z-oct-3-en-2-ol

E. e. = 88% [by capillary GC analysis]
$[\alpha]_D^{21} = -8.9$ (*c* 1.7, $CHCl_3$)
Source of chirality: asymmetric reduction
Absolute configuration: S

Tetrahedron: Asymmetry **1994,** *5,* 1075

P. V. Ramachandran, A. V. Teodorovic, B. Gong and Herbert C. Brown*

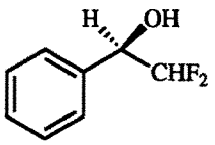


C_8H_9FO
1-Phenyl-2-fluoroethanol

E. e. = 95% [by capillary GC analysis]
$[\alpha]_D^{23} = -76.2$ (*c* 3, MeOH)
Source of chirality: asymmetric reduction
Absolute configuration: R

Tetrahedron: Asymmetry **1994,** *5,* 1075

P. V. Ramachandran, A. V. Teodorovic, B. Gong and Herbert C. Brown*

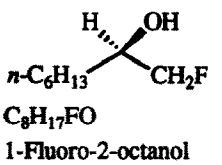


$C_8H_8F_2O$
1-Phenyl-2,2-difluoroethanol

E. e. = 97% [by capillary GC analysis]
$[\alpha]_D^{22} = -16.3$ (*c* 3, CH_2Cl_2)
Source of chirality: asymmetric reduction
Absolute configuration: R

Tetrahedron: Asymmetry **1994,** *5,* 1075

P. V. Ramachandran, A. V. Teodorovic, B. Gong and Herbert C. Brown*

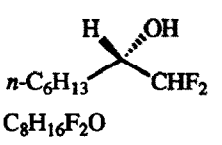


$C_8H_{17}FO$
1-Fluoro-2-octanol

E. e. = 65% [by capillary GC analysis]
$[\alpha]_D^{21} = +7.41$ (*c* 1.0, MeOH)
Source of chirality: asymmetric reduction
Absolute configuration: R

Tetrahedron: Asymmetry **1994,** *5,* 1075

P. V. Ramachandran, A. V. Teodorovic, B. Gong and Herbert C. Brown*

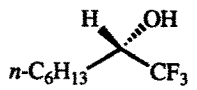


$C_8H_{16}F_2O$
1,1-Difluoro-2-octanol

E. e. = 88% [by capillary GC analysis]
$[\alpha]_D^{21} = -21.63$ (*c* 2.0, $CHCl_3$)
Source of chirality: asymmetric reduction
Absolute configuration: S

Tetrahedron: Asymmetry **1994,** *5,* 1075

P. V. Ramachandran, A. V. Teodorovic, B. Gong and Herbert C. Brown*

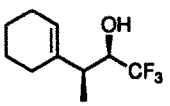


$C_8H_{15}F_3O$
1,1,1-Trifluoro-2-octanol

E. e. = 91% [by capillary GC analysis]
$[\alpha]_D^{21} = -24.19$ (*c* 1.5, $CHCl_3$)
Source of chirality: asymmetric reduction
Absolute configuration: S

Koichi Mikami, Tomoko Yajima, Masahiro Terada
Etsuko Kato and Masamichi Maruta

Tetrahedron: Asymmetry **1994,** *5,* 1087



$C_{10}F_3H_{15}O$
3-(1-Cyclohexenyl)-1,1,1-trifluoro-2-butanol

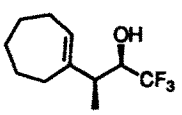
E.e.=96% [by nmr after transformation to the (*R*)- and (*S*)- MTPA esters]
$[\alpha]_D^{24}$=+13.5 (c 1.0, $CHCl_3$) (98:2 *syn*/*anti*-mixture)

Sourse of chirality: asymm. synth.

Absolute configuration 2R,3S
(assigned by the Mosher method)

Koichi Mikami, Tomoko Yajima, Masahiro Terada
Etsuko Kato and Masamichi Maruta

Tetrahedron: Asymmetry **1994,** *5,* 1087



$C_{11}F_3H_{17}O$
3-(1-Cycloheptenyl)-1,1,1-trifluoro-2-butanol

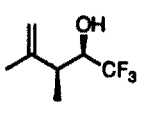
E.e.=95% [by nmr after transformation to the (*R*)- and (*S*)- MTPA esters]
$[\alpha]_D^{24}$=+8.7 (c 1.0, $CHCl_3$) (94:6 *syn*/*anti*-mixture)

Sourse of chirality: asymm. synth.

Absolute configuration 2R,3S
(assigned by the Mosher method)

Koichi Mikami, Tomoko Yajima, Masahiro Terada
Etsuko Kato and Masamichi Maruta

Tetrahedron: Asymmetry **1994,** *5,* 1087



$C_7F_3H_{11}O$
1,1,1-Trifluoro-3,4-dimethyl-4-penten-2-ol

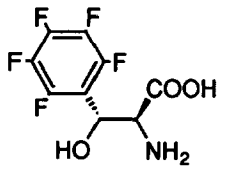
E.e.=78% [by nmr after transformation to the (*R*)- and (*S*)- MTPA esters]
$[\alpha]_D^{24}$=+2.9 (c 1.0, $CHCl_3$) (91:9 *syn*/*anti*-mixture)

Sourse of chirality: asymm. synth.

Absolute configuration 2R,3S
(assigned by the Mosher method)

V. A. Soloshonok and T. Hayashi*

Tetrahedron: Asymmetry **1994**, *5*, 1091



$C_9H_6F_5NO_3$

β-(pentafluorophenyl)serine

E.e. = 93% [by optical rotation value]

$[\alpha]_D^{25}$ +12.1 (*c* 0.5, 6 N HCl)

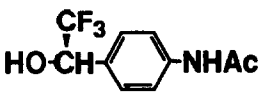
Source of chirality: Catalytic asymmetric synthesis

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

(assigned by optical rotation value)

Tetrahedron: Asymmetry **1994**, *5*, 1095

T. Fujisawa,* T. Sugimoto, and M. Shimizu



$C_{10}H_{10}NO_2F_3$

ee = 92% [determined by HPLC analysis of the corresponding MTPA ester]

$[\alpha]_D^{23}$ -27.0 (c 0.20, $CHCl_3$)

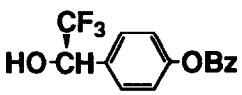
Source of chirality: Bakers' yeast reduction

Absolute configuration: *R* (assigned by transforming into the known (*R*)-*p*-(1-hydroxy-2,2,2-trifluoroethyl)bromobenzene)

(*R*)-4'-(1-Hydroxy-2,2,2-trifluoroethyl)acetanilide

Tetrahedron: Asymmetry **1994**, *5*, 1095

T. Fujisawa,* T. Sugimoto, and M. Shimizu



$C_{15}H_{11}O_3F_3$

ee = 91% [determined by HPLC analysis of the corresponding MTPA ester]

$[\alpha]_D^{23}$ -20.0 (c 0.48, $CHCl_3$)

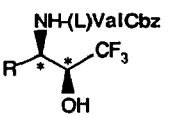
Source of chirality: Bakers' yeast reduction

Absolute configuration: *R* (assigned by comparisom with the authentic sample preparted from (*R*)-4'-(1-hydroxy-2,2,2-trifluoroethyl)acetanilide)

(*R*)-4'-(1-Hydroxy-2,2,2-trifluoroethyl)benzoyloxybenzene

Tetrahedron: Asymmetry **1994**, *5*, 1099

J.P. Bégué, D. Bonnet-Delpon, N. Fischer-Durand, M. Reboud and A. Amour



E.e > 99% (^{19}F NMR)

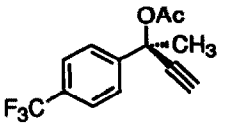
$[\alpha]_D$ = + 0.7 (MeOH, c = 0 865)

Source of chirality: *L*-Valine

R,S,S or S,R,S

D. O'Hagan and N. A. Zaidi

Tetrahedron: Asymmetry **1994**, *5*, 1111



$C_{13}H_{11}F_3O_2$

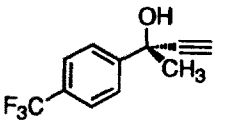
3-Acetoxy-(4-trifluoromethylphenyl)but-1-yne

E.e = 60% [by nmr with Eu(hfc)$_3$]
$[\alpha]_D^{24}$ = -21.1 (c 1, CH_2Cl_2)
Source of chirality: lipase resolution

Absolute configuration (S)
(assignment tentative, deduced by extrapolation from related lipase resolutions in this study)

D. O'Hagan and N. A. Zaidi

Tetrahedron: Asymmetry **1994**, *5*, 1111



$C_{11}H_9F_3O$

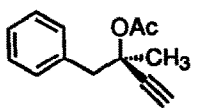
3-(4-Trifluoromethylphenyl)but-1-yne-3-ol

E.e = 52% [by nmr of acetate with Eu(hfc)$_3$]
$[\alpha]_D^{24}$ = +16.4 (c 0.2, CH_2Cl_2)
Source of chirality: lipase resolution

Absolute configuration (R)
(assignment tentative, deduced by extrapolation from related lipase resolutions in this study)

D. O'Hagan and N. A. Zaidi

Tetrahedron: Asymmetry **1994**, *5*, 1111



$C_{13}H_{14}O_2$

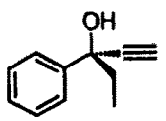
3-Acetoxy-3-methyl-4-phenylbut-1-yne

E.e = 66% [by nmr with Eu(hfc)$_3$]
$[\alpha]_D^{24}$ = +15.3 (c 1.2, CH_2Cl_2)
Source of chirality: lipase resolution

Absolute configuration (R)
(after conversion to (R)-2-hydroxy-2-methyl-3-phenyl propionic acid)

D. O'Hagan and N. A. Zaidi

Tetrahedron: Asymmetry **1994**, *5*, 1111



$C_{11}H_{12}O$

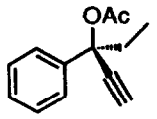
3-Phenylpent-1-yne-3-ol

E.e = 75% [by nmr of acetate with Eu(hfc)$_3$]
$[\alpha]_D^{24}$ = +5 (c 1.2, CH_2Cl_2)
Source of chirality: lipase resolution

Absolute configuration (R)
(assignment tentative, deduced by extrapolation from related lipase resolutions in this study)

D. O'Hagan and N. A. Zaidi

Tetrahedron: Asymmetry **1994,** *5,* 1111



E.e = 31% [by nmr with Eu(hfc)$_3$]
$[\alpha]_D^{24}$ = -25 (c 1.3, CH_2Cl_2)
Source of chirality: lipase resolution

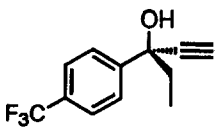
Absolute configuration (S)
(assignment tentative, deduced by extrapolation from related lipase resolutions in this study)

$C_{13}H_{14}O_2$

3-Acetoxy-3-phenylpent-1-yne

D. O'Hagan and N. A. Zaidi

Tetrahedron: Asymmetry **1994,** *5,* 1111



E.e = 32% [by nmr of acetate with Eu(hfc)$_3$]
$[\alpha]_D^{24}$ = +1.2 (c 3.4, CH_2Cl_2)
Source of chirality: lipase resolution

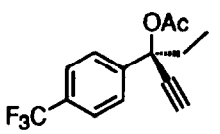
Absolute configuration (R)
(assignment tentative, deduced by extrapolation from related lipase resolutions in this study)

$C_{12}H_{11}F_3O$

3-(4-Trifluoromethylphenyl)pent-1-yne-3-ol

D. O'Hagan and N. A. Zaidi

Tetrahedron: Asymmetry **1994,** *5,* 1111



E.e = 23% [by nmr with Eu(hfc)$_3$]
$[\alpha]_D^{24}$ = -12 (c 1, CH_2Cl_2)
Source of chirality: lipase resolution

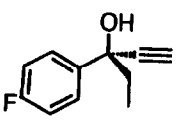
Absolute configuration (S)
(assignment tentative, deduced by extrapolation from related lipase resolutions in this study)

$C_{14}H_{13}F_3O_2$

3-Acetoxy-3-(4-trifluoromethylphenyl)pent-1-yne

D. O'Hagan and N. A. Zaidi

Tetrahedron: Asymmetry **1994,** *5,* 1111



E.e = 36% [by nmr of acetate with Eu(hfc)$_3$]
$[\alpha]_D^{24}$ = +4.4 (c 1.2, CH_2Cl_2)
Source of chirality: lipase resolution

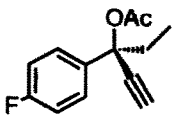
Absolute configuration (R)
(assignment tentative, deduced by extrapolation from related lipase resolutions in this study)

$C_{11}H_{11}FO$

3-(4-Fluorophenyl)pent-1-yne-3-ol

D. O'Hagan and N. A. Zaidi

Tetrahedron: Asymmetry **1994,** *5,* 1111



$C_{13}H_{13}FO_2$

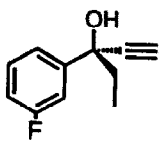
3-Acetoxy-3-(4-fluorophenyl)pent-1-yne

E.e = 20% [by nmr with Eu(hfc)$_3$]
$[\alpha]_D^{24}$ = -12.4 (c 1.1, CH_2Cl_2)
Source of chirality: lipase resolution

Absolute configuration (S)
(assignment tentative, deduced by extrapolation from related lipase resolutions in this study)

D. O'Hagan and N. A. Zaidi

Tetrahedron: Asymmetry **1994,** *5,* 1111



$C_{11}H_{11}FO$

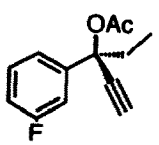
2-(3-Fluorophenyl)pent-1-yne-3-ol

E.e = 77% [by nmr of acetate with Eu(hfc)$_3$]
$[\alpha]_D^{24}$ = +6.3 (c 0.8, CH_2Cl_2)
Source of chirality: lipase resolution

Absolute configuration (R)
(assignment tentative, deduced by extrapolation from related lipase resolutions in this study)

D. O'Hagan and N. A. Zaidi

Tetrahedron: Asymmetry **1994,** *5,* 1111



$C_{13}H_{13}FO_2$

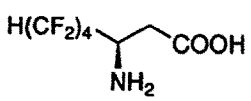
3-Acetoxy-3-(3-fluorophenyl)pent-1-yne

E.e = 55% [by nmr with Eu(hfc)$_3$]
$[\alpha]_D^{24}$ = -36.5 (c 0.9, CH_2Cl_2)
Source of chirality: lipase resolution

Absolute configuration (S)
(assignment tentative, deduced by extrapolation from related lipase resolutions in this study)

V. A. Soloshonok,* A. G. Kirilenko, N. A. Fokina, I. P. Shishkina, S. V. Galushko, V. P. Kukhar, V. K. Švedas,* E. V. Kozlova

Tetrahedron: Asymmetry **1994,** *5,* 1119

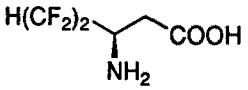


$C_7H_7F_8NO_2$
7,7,6,6,5,5,4,4-Octafluoro-3-aminoheptanoic acid

E.e. = >95% [by HPLC analysis of free amino acid on Nucleasil Chiral, Macherey-Nagel]
$[\alpha]_D^{22}$ +12.2 (*c* 0.1, MeOH)
Source of chirality: Biocatalytic resolution
Absolute configuration: *R*
(assigned by similarity in both the rate of enzymatic hydrolysis and the order of elution in the HPLC analysis)

V. A. Soloshonok,* A. G. Kirilenko, N. A. Fokina, I. P. Shishkina, S. V. Galushko, V. P. Kukhar, V. K. Švedas,* E. V. Kozlova

Tetrahedron: Asymmetry **1994,** *5,* 1119

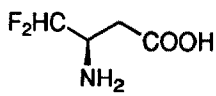


$C_5H_7F_4NO_2$
5,5,4,4-Tetrafluoro-3-aminopentanoic acid

E.e. = >95% [by HPLC analysis of free amino acid on Nucleasil Chiral, Macherey-Nagel]
$[\alpha]_D^{22}$ +23.2 (*c* 0.4, MeOH)
Source of chirality: Biocatalytic resolution
Absolute configuration: *R*
(assigned by similarity in both the rate of enzymatic hydrolysis and the order of elution in the HPLC analysis)

V. A. Soloshonok,* A. G. Kirilenko, N. A. Fokina, I. P. Shishkina, S. V. Galushko, V. P. Kukhar, V. K. Švedas,* E. V. Kozlova

Tetrahedron: Asymmetry **1994,** *5,* 1119

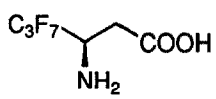


$C_4H_7F_2NO_2$
4,4-Difluoro-3-aminobutanoic acid

E.e. = >95% [by HPLC analysis of free amino acid on Nucleasil Chiral, Macherey-Nagel]
$[\alpha]_D^{25}$ +19.5 (*c* 0.2, H_2O)
Source of chirality: Biocatalytic resolution
Absolute configuration: *R*
(assigned by similarity in both the rate of enzymatic hydrolysis and the order of elution in the HPLC analysis)

V. A. Soloshonok,* A. G. Kirilenko, N. A. Fokina, I. P. Shishkina, S. V. Galushko, V. P. Kukhar, V. K. Švedas,* E. V. Kozlova

Tetrahedron: Asymmetry **1994,** *5,* 1119

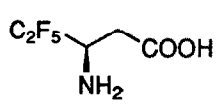


$C_6H_6F_7NO_2$
6,6,6,5,5,4,4-Heptafluoro-3-aminohexanoic acid

E.e. = >95% [by HPLC analysis of free amino acid on Nucleasil Chiral, Macherey-Nagel]
$[\alpha]_D^{22}$ +27.0 (*c* 0.1, H_2O)
Source of chirality: Biocatalytic resolution
Absolute configuration: *R*
(assigned by similarity in both the rate of enzymatic hydrolysis and the order of elution in the HPLC analysis)

V. A. Soloshonok,* A. G. Kirilenko, N. A. Fokina, I. P. Shishkina, S. V. Galushko, V. P. Kukhar, V. K. Švedas,* E. V. Kozlova

Tetrahedron: Asymmetry **1994,** *5,* 1119

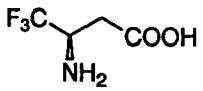


$C_5H_6F_5NO_2$
5,5,5,4,4-Pentafluoro-3-aminopentanoic acid

E.e. = >95% [by HPLC analysis of free amino acid on Nucleasil Chiral, Macherey-Nagel]
$[\alpha]_D^{22}$ +37.1 (*c* 0.3, H_2O)
Source of chirality: Biocatalytic resolution
Absolute configuration: *R*
(assigned by similarity in both the rate of enzymatic hydrolysis and the order of elution in the HPLC analysis)

Tetrahedron: Asymmetry **1994**, *5*, 1119

V. A. Soloshonok,* A. G. Kirilenko, N. A. Fokina, I. P. Shishkina, S. V. Galushko, V. P. Kukhar, V. K. Švedas,* E. V. Kozlova



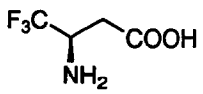
$C_4H_6F_3NO_2$
4,4,4-Trifluoro-3-aminobutanoic acid

E.e. = >95% [by HPLC analysis of free amino acid on Nucleasil Chiral, Macherey-Nagel]
$[\alpha]_D^{25}$ -27.1 (*c* 1.4, 6 N HCl)

Source of chirality: Biocatalytic resolution
Absolute configuration: *S*
(assigned by X-Ray analysis)

Tetrahedron: Asymmetry **1994**, *5*, 1119

V. A. Soloshonok,* A. G. Kirilenko, N. A. Fokina, I. P. Shishkina, S. V. Galushko, V. P. Kukhar, V. K. Švedas,* E. V. Kozlova



$C_4H_6F_3NO_2$
4,4,4-Trifluoro-3-aminobutanoic acid

E.e. = >95% [by HPLC analysis of free amino acid on Nucleasil Chiral, Macherey-Nagel]
$[\alpha]_D^{25}$ +27.6 (*c* 2.6, 6 N HCl)

Source of chirality: Biocatalytic resolution
Absolute configuration: *R*
(assigned by optical rotation value)