Electronic Supplementary Information

Solvent control of optical resolution of 2-amino-1-phenylethanol using dehydroabietic acid

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1. Solvent dependency of molar rotation of enantiomers and the chiral salts

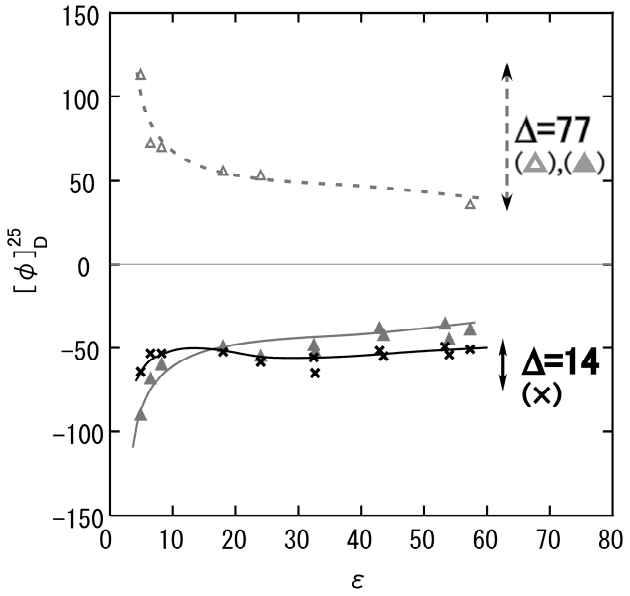

Fig. S1 Solvent dependency of molar rotation of (*R*)- and (*S*)-**1** and the chiral salt with CH_3COOH (**1**/CH_3COOH). (*R*)-**1**(▲), (*S*)-**1**(△), and **1**/CH_3COOH(×).

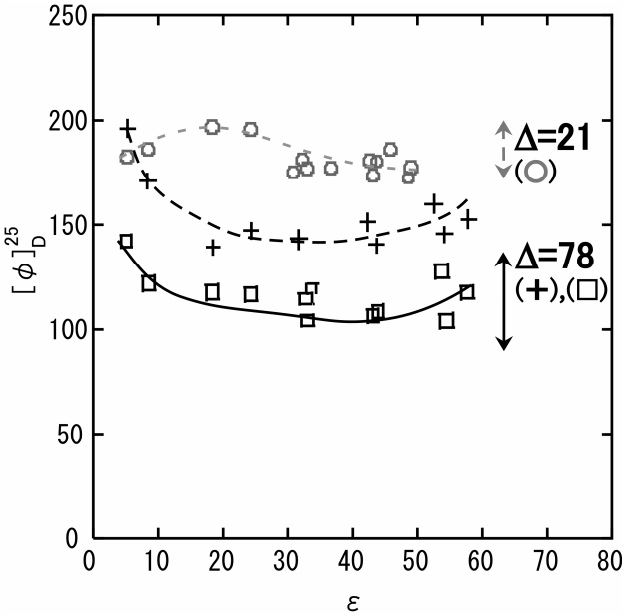

Fig. S2 Solvent dependency of molar rotation of **2** and the chiral salt with 2-AE (2-AE/**2**) and 2-$PrNH_2$ (2-$PrNH_2$/**2**). **2**(○), 2-AE/**2**(+), 2-$PrNH_2$/**2**(□).

2. Solvent dependency of molar rotation of diastereomeric salts

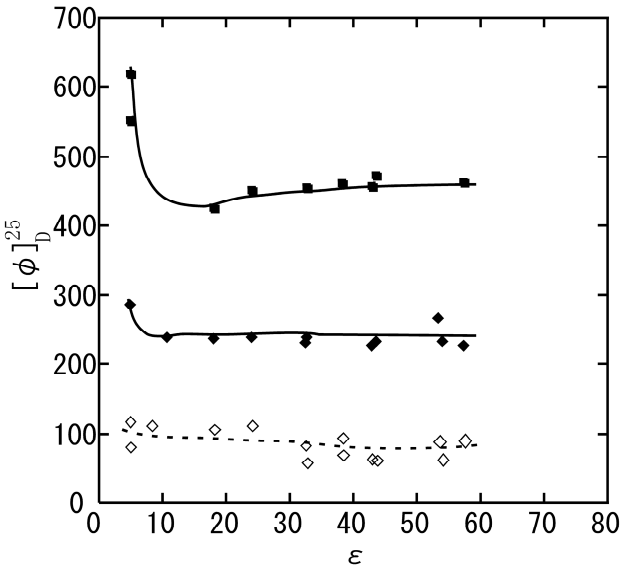

Fig. S3 Solvent dependence of molar rotation of the diastereomeric salts ((*R*)-**1**/**2** and (*S*)-**1**/**2**). (*R*)-**1**/**2** (◊), (*S*)-**1**/(**2**) (1:1) (♦), (*S*)-**1**/(**2**) (1:2) (■).

3. Hydrogen bonding geometry of the diastereomeric salts

Table S1 Hydrogen bonding geometry of the (*R*)-**1**/**2** salt.

D-H (Å)	D···A (Å)	H···A (Å)	D-H···A (°)	*Sym.
O4-H40	O4···O2	H40···O2	O4-H40···O2	(1)
0.84	2.709(4)	1.88	170	
N1-H30	N1···O2	H30···O2	N1-H30···O2	(2)
0.91	2.787(5)	1.93	155	
O3-H31	O3···O4	H31···O4	O3-H31···O4	(3)
0.84	2.714(5)	1.88	176	
N1-H28	N1···O1	H28···O1	N1-H28···O1	(4)
0.91	2.789(4)	1.90	166	
N1-H29	N1···O1	H29···O1	N1-H29···O1	(1)
0.91	2.721(5)	1.82	169	

* (1) +x, +y, +z; (2) +x, -1+y, +z; (3) 1-x, -3/2+y, 1-z; (4) 1-x, -1/2+y, 1-z.

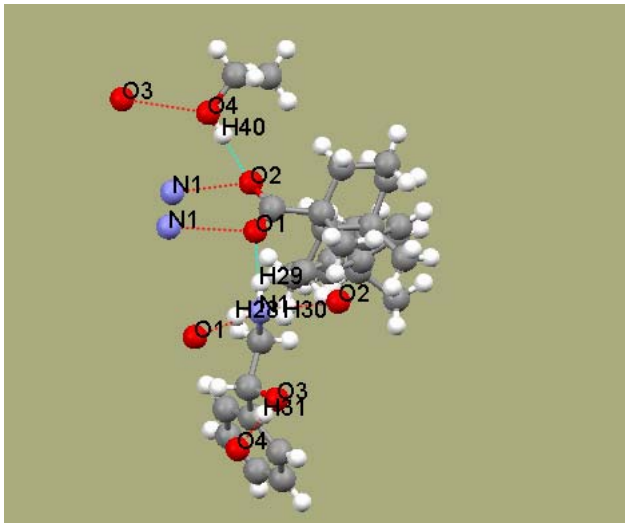

Fig. S4 Hydrogen bonding geometry of the (*R*)-**1**/**2** salt.

Table S2 Hydrogen bonding geometry of the (*S*)-**1**/**2** (1:2) salt.

D-H (Å)	D···A (Å)	H···A (Å)	D-H···A (°)	*Sym.
N1-H1	N1···O2	H1 ···O2	N1-H1···O2	(1)
0.91	2.788(5)	1.88	172	
N1-H2	N1···O3	H2···O3	N1-H2···O3	(2)
0.91	2.655(6)	1.87	144	
O5-H67	O5···O2	H67···O2	O5-H67···O2	(3)
0.84	2.582(5)	1.75	173	
O1-H7	O1···O4	H7···O4	O1-H7···O4	(5)
0.84	2.695(6)	1.91	155	
N1-H3	N1···O2	H3···O2	N1-H3···O2	(4)
0.91	3.049(5)	2.29	141	

*(1) 1+ x, +y, +z; (2) +x, +y, +z; (3) -x, -1/2+y, 1/2-z; (4) 1/2+x, 3/2-y, -z; (5) 3/2-x, 1-y, -1/2+z.

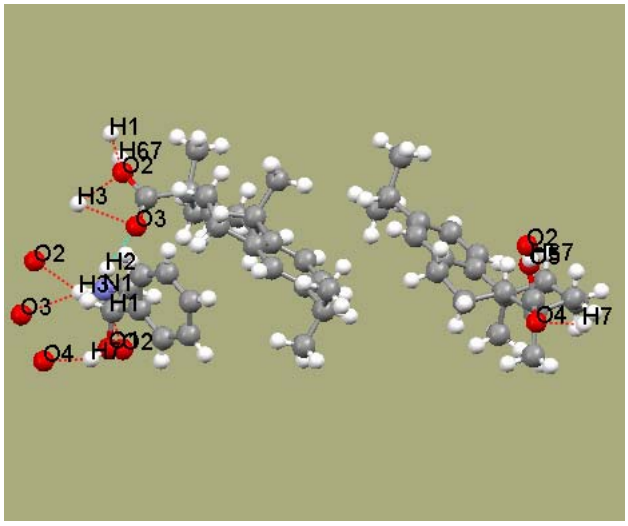

Fig. S5 Hydrogen bonding geometry of the (*S*)-**1**/**2** (1:2) salt.

Table S3 Hydrogen bonding geometry of the (*S*)-**1**/**2** (1:1) salt.

D-H (Å)	D·· A (Å)	H···A (Å)	D-H···A (°)	*Sym.
N1-H38	N1···O1	H38···O1	N1-H38···O1	(1)
0.91	2.729(3)	1.82	174	
N1-H39	N1···O2	H39···O2	N1-H39···O2	(2)
0.91	2.764(3)	1.86	170	
N1-H37	N1···O2	H37···O2	N1-H37···O2	(3)
0.91	2.744(3)	1.84	175	
O3-H34	O3···O1	H34···O1	O3-H34···O1	(2)
0.84	2.884(3)	2.09	159	

*(1) +x, +y, +z; (2) 1-x, -1/2+y, 1-z; (3) +x, -1+y, +z.

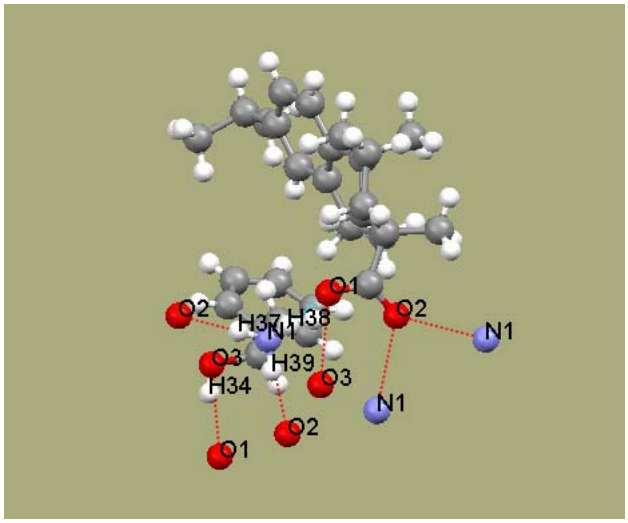

Fig. S6 Hydrogen bonding geometry of the (*S*)-**1**/**2** (1:1) salt.