Supporting Information

Entrainer Effects on Enantiodifferentiating Photocyclization of 5-Hydroxy-1,1-diphenylpentene in Near- and Supercritical Carbon Dioxide

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Table S1. Enantiodifferentiating photocyclization of **1** sensitized by **2** in near- and supercritical carbon dioxide (nc- and $scCO_2$) and conventional organic solvents[a]

run	medium	entrainer	concentra-tion/M	tempera-ture/°C	pressure/ MPa	ee/%[b]
1	methylcyclohexane[c]	none	0	25	0.1	35
2				0	0.1	33
3	diethyl ether[c]	none	0	25	0.1	28
4				0	0.1	35
5	acetonitrile[c,d]	none	0	25	0.1	5
6				0	0.1	1
7	nc/$scCO_2$	none	0	45	8.2	18
8					8.6	13
9					8.9	5
10					9.3	14
11					10.0	21
12					12.0	41
13					13.9	37
14					15.7	37
15					18.0	40
16		toluene	0.6	45	8.4	36
17					9.1	43
18					9.3	42
19					10.0	44
20					11.4	47

21				13.4	49
22				15.7	42
23				17.6	45
24	diethyl ether	0.3	45	8.2	17
25				8.6	20
26				8.8	21
27				9.4	27
28				9.8	31
29				12.2	44
30				14.1	44
31				15.7	46
32				18.4	46
33		0.6	45	7.8	28
34				8.3	34
35				8.8	35
36				9.3	40
37				9.8	44
38				12.1	43
39				13.9	40
40				15.7	46
41				18.3	47
42	acetonitrile	0.1	45	8.1	28
43				8.5	27
44				9.1	26
45				9.5	24
46				10.0	27
47				12.4	42
48				14.2	40
49				15.6	41
50				17.0	43
51		0.3	45	8.2	38
52				8.6	28
53				8.9	28
53				9.5	30
54				9.9	37
55				12.0	44
56				14.1	41
57				16.0	43
58				17.9	43
59		0.6	45	8.2	32
60				8.7	35
61				8.8	34

62			9.2	37
63			9.9	39
64			11.6	44
65			13.5	42
66			15.6	38
67			17.0	38
68	1.0	45	8.0	41
69			8.6	39
70			8.8	35
71			9.4	34
72			9.5	33
73			11.2	39
74			16.4	39
75			17.1	36

[a] [**1**] = 2 mM; [**2**] = 0.3 mM. [b] Enantiomeric excess of **3** determined by chiral HPLC analysis on a Chiralpak IB column eluted with *n*-hexane/isopropanol/1,2-dichloroethane (98:1:1); error in ee <±2%. The sign of ee does not mean the sign of optical rotation or absolute configuration, but is tentatively assigned according to the elution order; the first eluted enantiomer is given a positive sign. [c] Data cited from reference 12. [d] [**1**] = 20 mM; [**2**] = 3 mM.