Supporting Information

Nitrile Biotransformations for Highly Efficient and Enantioselective Syntheses of Electrophilic Oxiranecarboxamides

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1. ¹H and ¹³C NMR spectra of amides.

¹H NMR of 2a

Current Data Parameters
NAME: 100-1H
EXPNO: 27
PROCNO: 1

F2 - Acquisition Parameters
Date_: 20030827
Time: 9.02
INSTRUM: ctk300
PROBHD: BBI

PULPROG: zg
TD: 12048
SOLVENT: CDCl3
NS: 16
DS: 0
SWH: 6009.615 Hz
FIDRES: 0.490006 Hz
AQ: 1.0024496 sec
RG: 512
CW: 83.200 uscc
DE: 4.50 usec
TE: 300.0 K
P1: 3.00000000 sec
P2: 5.50 usec
SFO1: 300.1316512 MHz
NUC1: 1H
PL1: 0.00 dB

F2 - Processing parameters
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GB: 0.1
PC: 0.10

10 NMR plot parameters
CX: 21.00 cm
F1P: 9.000 ppm
F1: 2701.17 Hz
F2: -0.500 ppm
F2: -150.06 Hz
PCKN: 0.45238 ppm/cm
HZCN: 135.77310 Hz/cm

¹³C NMR of 2a

¹H NMR of 2b

¹³C NMR of **2b**

¹H NMR of 2c

¹³C NMR of 2c

¹H NMR of 2d

¹³C NMR of 2d

¹H NMR of 2e

¹³C NMR of 2e

¹³C NMR of 2f

¹H NMR of 5a

¹³C NMR of 5a

¹H NMR of 5d

¹³C NMR of 5d

2. Chiral HPLC analysis of (+/-)-amides **2** and **5** and nitrile (+/-)-**1a**

Table S1. HPLC retention times of enantiomers of amides and nitrile

(The enantiomeric excesses of all compounds were obtained with a Shimadzu LC-10AVP HPLC system using a Chiracel OD column. A mixture of hexane:2-propanol [9:1] as the mobile phase at a flow rate of 0.8ml/min was employed).

(+/-)-amide and nitrile	$t_{2S,3R}$ (min.)	$t_{2R,3S}$ (min.)
(+/-)- 2a	25.51	28.60
(+/-)- 2b	22.33	24.14
(+/-)- 2c	17.97	24.02
(+/-)- 2d	24.89	28.27
(+/-)- 2e	26.58	30.01
(+/-)- 2f	21.79	24.59
(+/-)- 5a	14.37	16.25
(+/-)- 5d	14.62	16.61
(+/-)- 1a	19.78	21.79