Supporting Information
Stereoselective Conjugate Addition of the Lithium Anion of N-allyl Imine to
Unsaturated Esters: Application to the Enantiospecific Total Synthesis of (–)-
Epibatidine

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¹ H & ¹³ C NMR spectrum of 7a	S3-S4
¹ H & ¹³ C NMR spectrum of 8a	S5-S6
¹ H & ¹³ C NMR spectrum of 7b	S7-S8
¹ H & ¹³ C NMR spectrum of 8b	S9-S10
¹ H & ¹³ C NMR spectrum of 7c	S11-S12
¹ H & ¹³ C NMR spectrum of 7d	S13-S14
¹ H & ¹³ C NMR spectrum of 8d	S15-S16
¹ H & ¹³ C NMR spectrum of 7e	S17-S18
¹ H & ¹³ C NMR spectrum of 8e	S19-S20
¹ H & ¹³ C NMR spectrum of 7f	S21-S22
¹ H & ¹³ C NMR spectrum of 7g	S23-S24
¹ H & ¹³ C NMR spectrum of 7h	S25-S26
¹ H & ¹³ C NMR spectrum of 8h	S27-S28
¹ H & ¹³ C NMR spectrum of 7i	S29-S30
¹ H & ¹³ C NMR spectrum of 8i	S31-S32
¹ H & ¹³ C NMR spectrum of 7j	S33-S34
¹ H & ¹³ C NMR spectrum of 8j	S35-S36
¹ H & ¹³ C NMR spectrum of 7k	S37-S38
¹ H & ¹³ C NMR spectrum of 7l	S39-S40

¹ H & ¹³ C NMR spectrum of 8l	S41-S42
¹ H & ¹³ C NMR spectrum of 7m	S43-S44
¹ H & ¹³ C NMR spectrum of 7m'	S45-S46
¹ H & ¹³ C NMR spectrum of 8m	S47-S48
¹ H & ¹³ C NMR spectrum of 7n	S49-S50
¹ H & ¹³ C NMR spectrum of 7o	S51-S52
¹ H & ¹³ C NMR spectrum of 9a	S53-S54
¹ H & ¹³ C NMR spectrum of 9b	S55-S56
¹ H & ¹³ C NMR spectrum of 10a	S57-S58
¹ H & ¹³ C NMR spectrum of 10a'	S59-S60
¹ H & ¹³ C NMR spectrum of 10b	S61-S62
¹ H & ¹³ C NMR spectrum of 10c	S63-S64
¹ H & ¹³ C NMR spectrum of 11	S65-S66
¹ H & ¹³ C NMR spectrum of 12	S67-S68
¹ H & ¹³ C NMR spectrum of (+)-12	S69-S70
¹ H & ¹³ C NMR spectrum of 13	S71-S72
¹ H & ¹³ C NMR spectrum of (+)-13	S73-S74
¹ H & ¹³ C NMR spectrum of 14	S75-S76
¹ H & ¹³ C NMR spectrum of 18	S77-S78
¹ H & ¹³ C NMR spectrum of 17	S79-S80
¹ H & ¹³ C NMR spectrum of 19	S81-S82
¹ H & ¹³ C NMR spectrum of 16	S83-S84
¹ H & ¹³ C NMR spectrum of 20	S85-S86
¹ H & ¹³ C NMR spectrum of 15	S87-S88
Single crystal X-ray diffraction analysis and ORTEP image of compound 7j	S89
Crystal data of compound 7j	S90

¹H NMR spectrum (400 MHz, CDCl₃) of **7a**

^{13}C NMR spectrum (100 MHz, CDCl_3) of **7a**

¹H NMR spectrum (400 MHz, CDCl₃) of **8a**

¹H NMR spectrum (400 MHz, CDCl₃) of **7b**

¹H NMR spectrum (400 MHz, CDCl₃) of **8b**

¹H NMR spectrum (400 MHz, CDCl₃) of **7c**

¹H NMR spectrum (400 MHz, CDCl₃) of **7d**

¹³C NMR spectrum (100 MHz, CDCl₃) of **8d**

¹³C NMR spectrum (100 MHz, CDCl₃) of **7e**

¹H NMR spectrum (400 MHz, CDCl₃) of **8e**

¹³C NMR spectrum (100 MHz, CDCl₃) of **8e**

¹H NMR spectrum (400 MHz, CDCl₃) of **7f**

¹³C NMR spectrum (100 MHz, CDCl₃) of **7f**

¹H NMR spectrum (400 MHz, CDCl₃) of **7g**

¹³C NMR spectrum (125 MHz, CDCl₃) of **7g**

¹³C NMR spectrum (100 MHz, CDCl₃) of **8h**

¹³C NMR spectrum (100 MHz, CDCl₃) of **7i**

¹H NMR spectrum (400 MHz, CDCl₃) of **8i**

¹³C NMR spectrum (100 MHz, CDCl₃) of **8i**

¹H NMR spectrum (400 MHz, CDCl₃) of **7j**

¹³C NMR spectrum (100 MHz, CDCl₃) of **7j**

¹H NMR spectrum (400 MHz, CDCl₃) of **8j**

¹H NMR spectrum (400 MHz, CDCl₃) of **7k**

¹H NMR spectrum (400 MHz, CDCl₃) of **7l**

¹H NMR spectrum (400 MHz, CDCl₃) of **8I**

¹H NMR spectrum (400 MHz, CDCl₃) of **7m'**

¹³C NMR spectrum (100 MHz, CDCl₃) of **7m'**

¹H NMR spectrum (400 MHz, CDCl₃) of **8m**

¹³C NMR spectrum (100 MHz, CDCl₃) of **8m**

¹H NMR spectrum (400 MHz, CDCl₃) of **7n**

¹³C NMR spectrum (100 MHz, CDCl₃) of **7n**

¹H NMR spectrum (400 MHz, CDCl₃) of **7o**

¹³C NMR spectrum (100 MHz, CDCl₃) of **7o**

¹H NMR spectrum (400 MHz, CDCl₃) of **9a**

¹³C NMR spectrum (100 MHz, CDCl₃) of **9a**

¹H NMR spectrum (400 MHz, CDCl₃) of **9b**

¹H NMR spectrum (400 MHz, CDCl₃) of **10a**

¹H NMR spectrum (400 MHz, CDCl₃) of **10a'**

¹H NMR spectrum (400 MHz, CDCl₃) of **10b**

¹H NMR spectrum (400 MHz, CDCl₃) of **10c**

¹H NMR spectrum (400 MHz, CDCl₃) of **11**

¹H NMR spectrum (400 MHz, CDCl₃) of **12**

^{13}C NMR spectrum (100 MHz, CDCl₃) of (+)-12

¹³C NMR spectrum (100 MHz, CDCl₃) of **13**

¹H NMR spectrum (400 MHz, CDCl₃) of (+)-13

^{13}C NMR spectrum (100 MHz, CDCl_3) of (+)-13

¹³C NMR spectrum (100 MHz, CDCl₃) of **14**

¹³C NMR spectrum (100 MHz, CDCl₃) of **18**

¹H NMR spectrum (400 MHz, CDCl₃) of **17**

¹H NMR spectrum (400 MHz, CDCl₃) of **16**

¹H NMR spectrum (400 MHz, CDCl₃) of **15**

¹³C NMR spectrum (100 MHz, CDCl₃) of **15**

Single crystal X-ray diffraction analysis of compound **7j**:

The compound **7j** was crystallized from 4:1 Hexane:EtOAc at room temperature by slow evaporation method. A single crystal of **7j** was mounted and the diffraction data was collected at 296 K on a Bruker SMART APEX-III CCD diffractometer using SMART/SAINT software. The ORTEP image of compound **7j** and crystallographic refinement parameters are given below:

ORTEP image of compound **7j** (Thermal ellipsoids at 30% probability, Temp 296 K)

Datablock: Manoj_7a

Bond precision: C-C = 0.0057 Å Wavelength=0.71073

Cell: a=19.832(2) b=7.3079(8) c=16.6183(17)
 alpha=90 beta=90.843(3) gamma=90

Temperature: 296 K

	Calculated	Reported
Volume	2408.2(4)	2408.3(4)
Space group	P 21/c	P 21/c
Hall group	-P 2ybc	-P 2ybc
Moiety formula	C27 H26 Br N O2	C27 H26 Br N O2
Sum formula	C27 H26 Br N O2	C27 H26 Br N O2
Mr	476.39	476.40
Dx, g cm ⁻³	1.314	1.314
Z	4	4
Mu (mm ⁻¹)	1.729	1.729
F000	984.0	984.0
F000'	983.21	
h,k,lmax	25,9,21	25,9,21
Nref	5604	5583
Tmin,Tmax	0.740,0.813	0.741,0.811
Tmin'	0.643	

Correction method= # Reported T Limits: Tmin=0.741 Tmax=0.811
AbsCorr = EMPIRICAL

Data completeness= 0.996 Theta(max)= 27.617

R(reflections)= 0.0678(3128) wR2(reflections)= 0.1803(5583)

S = 1.015 Npar= 281

Crystal data of compound **7j** (CCDC number 1862479)