Supporting information

The Synthesis of Cyclic β -Amino Acids from Methionine, Allylglycine, and Serine.

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CONTENTS

General Methods	S2
^1H and ^{13}C NMR of all new compounds	S3-S28

General Experimental Methods. Melting points were taken on an electrothermal apparatus and are uncorrected. NMR experiments were performed at 500 MHz for ^1H NMR and at 75 MHz for ^{13}C NMR with internal standard TMS (^1H NMR) and the solvent signal (^{13}C NMR). Optical rotations were obtained on a digital polarimeter and data are reported as $[\alpha]^{25}_{\text{D}}$ (concentration g/100 mL, solvent). All reactions were carried out in oven-dried glassware under an argon atmosphere. THF was distilled from Na/Ph₂CO, while CH₂Cl₂, Et₃N, and benzene were distilled from CaH₂. Solvents were degassed by the freeze-pump-thaw method prior to RCM using catalysts **3** and **4** (obtained from Strem Chemicals, Newburyport, MA 01950, USA).

The 500 MHz ¹H NMR Spectrum of Compound (-)-**8** in CDCl₃

The 75 MHz ¹³C NMR Spectrum of Compound (-)-**8** in CDCl₃

The 500 MHz ¹H NMR Spectrum of Compound **9** in CDCl₃

The 500 MHz ^1H NMR Spectrum of Compound **(-)-10** in CDCl_3

The 75 MHz ^{13}C NMR Spectrum of Compound **(-)-10** in CDCl_3

The 500 MHz ^1H NMR Spectrum of Compound **(-)-11** in CDCl_3

The 75 MHz ^{13}C NMR Spectrum of Compound **(-)-11** in CDCl_3

The 500 MHz ^1H NMR Spectrum of Compound (+)-**12** in CDCl_3

The 75 MHz ^{13}C NMR Spectrum of Compound (+)-**12** in CDCl_3

The 500 MHz ^1H NMR Spectrum of Compound (+)-**13** in CDCl_3

The 75 MHz ^{13}C NMR Spectrum of Compound **13** in CDCl_3

The 500 MHz ¹H NMR Spectrum of Compound (-)-**15** in CDCl₃

The 500 MHz ^1H NMR Spectrum of Compound **(-)-16** in CDCl_3

The 75 MHz ^{13}C NMR Spectrum of Compound **(-)-16** in CDCl_3

The 500 MHz ^1H NMR Spectrum of Compound (-)-17 in CDCl_3

The 75 MHz ^{13}C NMR Spectrum of Compound (-)-17 in CDCl_3

The 500 MHz ^1H NMR Spectrum of Compound (-)-18 in CDCl_3

The 75 MHz ^{13}C NMR Spectrum of Compound (-)-18 in CDCl_3

The 500 MHz ^1H NMR Spectrum of Compound **(-)-19** in CDCl_3

The 75 MHz ^{13}C NMR Spectrum of Compound **(-)-19** in CDCl_3

The 500 MHz ^1H NMR Spectrum of Compound (+/-)-**20a** in CDCl_3

The 75 MHz ^{13}C NMR Spectrum of Compound (+/-)-**20a** in CDCl_3

The 500 MHz ^1H NMR Spectrum of Compound (+/-)-**20b** in CDCl_3

The 75 MHz ^{13}C NMR Spectrum of Compound (+/-)-**20b** in CDCl_3

The 500 MHz ^1H NMR Spectrum of Compound (+/-)-**21a** in CDCl_3

The 75 MHz ^{13}C NMR Spectrum of Compound (+/-)-**21a** in CDCl_3

The 500 MHz ¹H NMR Spectrum of Compound (+/-)-**22** in CDCl₃

The 500 MHz ^1H NMR Spectrum of Compound (+)-**23** in CDCl_3

The 75 MHz ^{13}C NMR Spectrum of Compound (+)-**23** in CDCl_3

The 500 MHz ^1H NMR Spectrum of Compound **24** in CDCl_3

The 75 MHz ^{13}C NMR Spectrum of Compound **24** in CDCl_3

The 500 MHz ^1H NMR Spectrum of Compound (+)-**25** in CDCl_3

The 75 MHz ^{13}C NMR Spectrum of Compound (+)-**25** in CDCl_3

The 500 MHz ^1H NMR Spectrum of Compound (+)-**26** in CDCl_3

The 75 MHz ^{13}C NMR Spectrum of Compound (+)-**26** in CDCl_3

The 500 MHz ¹H NMR Spectrum of Compound (+/-)-**27a** in CDCl₃

The 500 MHz ^1H NMR Spectrum of Compound (+/-)-**27b** in CDCl_3

The 75 MHz ^{13}C NMR Spectrum of Compound (+/-)-**27b** in CDCl_3

The 500 MHz ^1H NMR Spectrum of Compound (+/-)-**28** in CDCl_3

The 75 MHz ^{13}C NMR Spectrum of Compound (+/-)-**28** in CDCl_3

The 500 MHz ^1H NMR Spectrum of Compound (+)-**30** in CDCl_3

The 500 MHz ^1H NMR Spectrum of Compound **(-)-31** in CDCl_3

The 75 MHz ^{13}C NMR Spectrum of Compound **(-)-31** in CDCl_3

The 500 MHz ^1H NMR Spectrum of Compound (+)-**32** in CDCl_3

The 75 MHz ^{13}C NMR Spectrum of Compound (+)-**32** in CDCl_3