

Electronic Supplementary Information

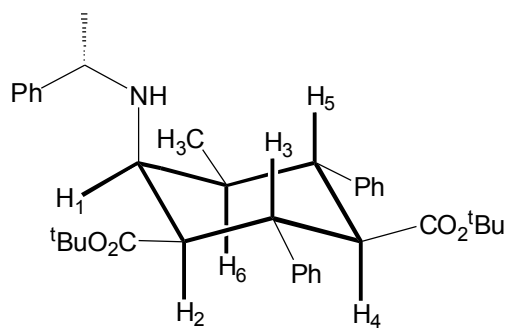
**A New Diastereoselective Aza-Allyl – Michael Addition – Ring Closure
Reaction Sequence and its Application in the Construction of Six
Contiguous Stereogenic Centres**

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2

Coupling constants

$$J_{(H1-H6)} = 3.2 \text{ Hz}$$

$$J_{(H1-H2)} = 3.2 \text{ Hz}$$

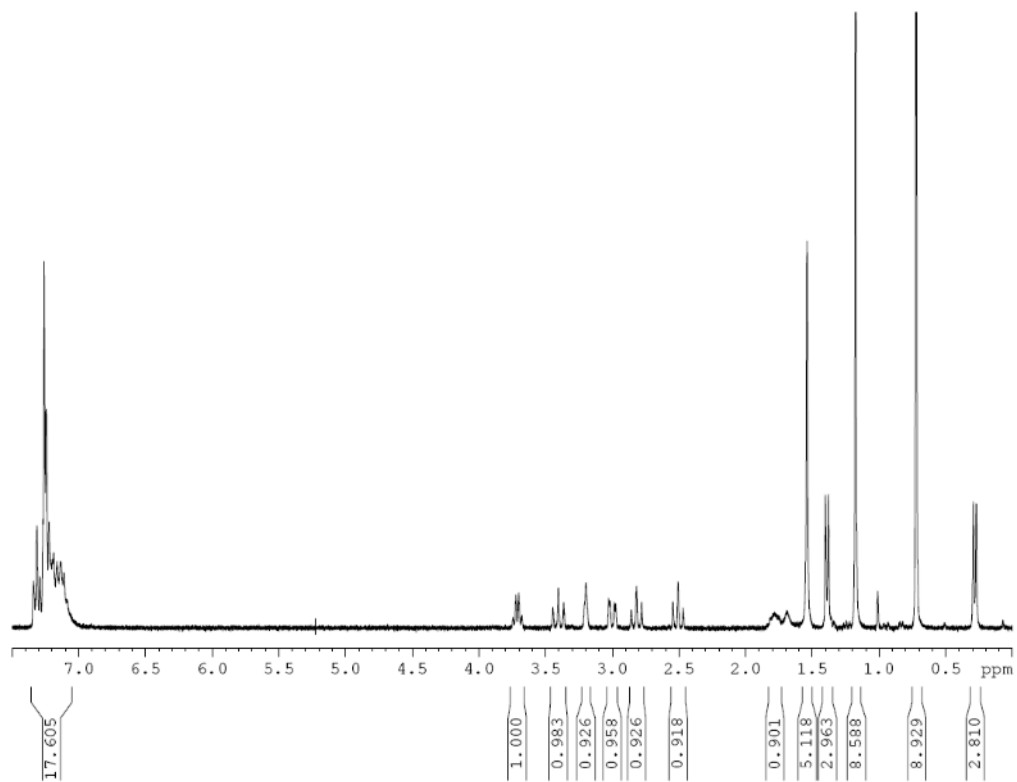
$$J_{(H2-H3)} = 11.5 \text{ Hz}$$

$$J_{(H3-H4)} = 11.5 \text{ Hz}$$

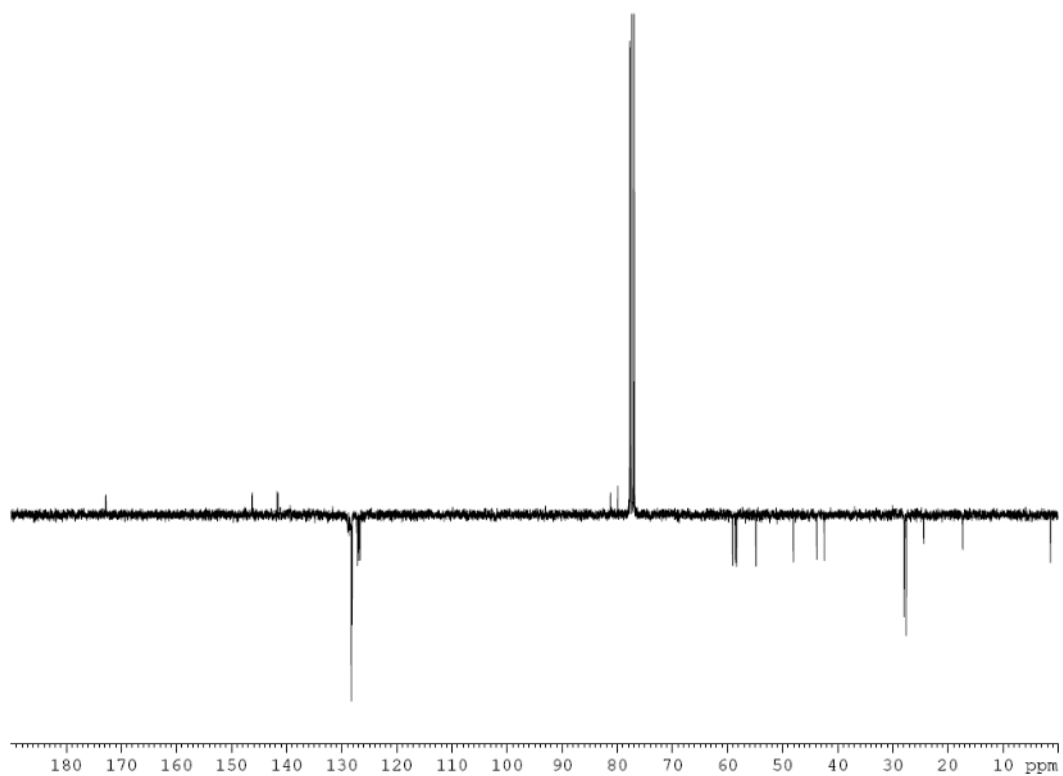
$$J_{(H4-H5)} = 11.6 \text{ Hz}$$

$$J_{(H5-H6)} = 11.6 \text{ Hz}$$

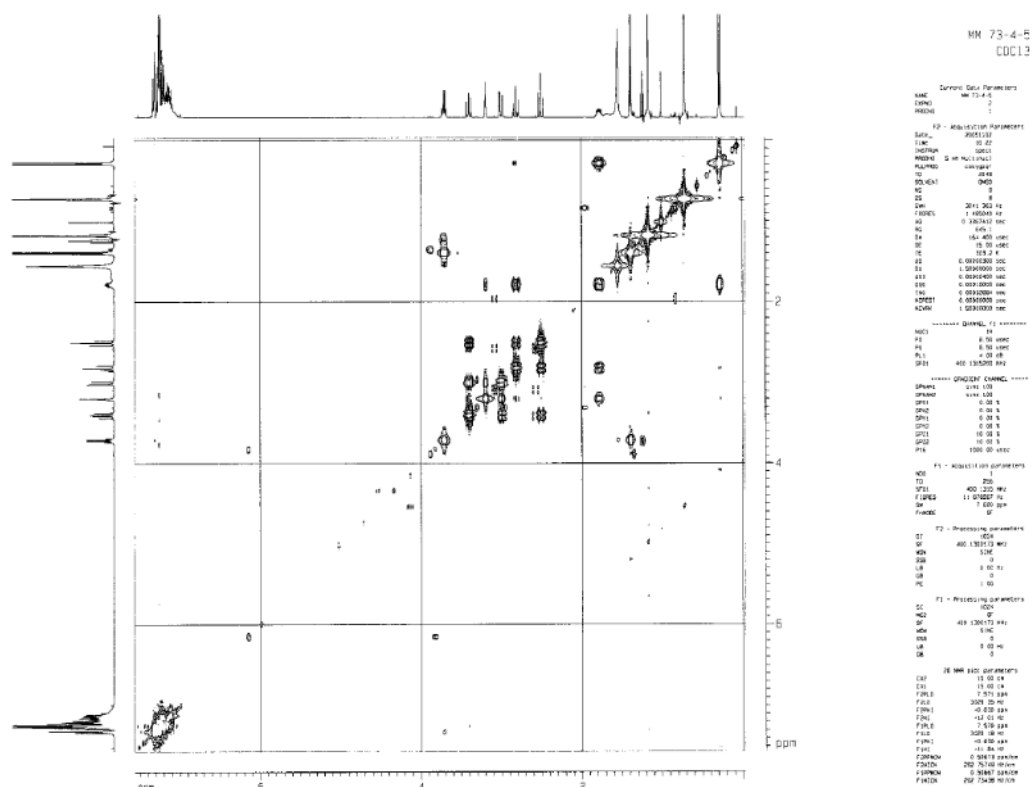
Supporting Figure 1: Coupling constants used in aiding assignment of the relative stereochemistry of the cyclohexyl substituents of aminocyclohexane 2.



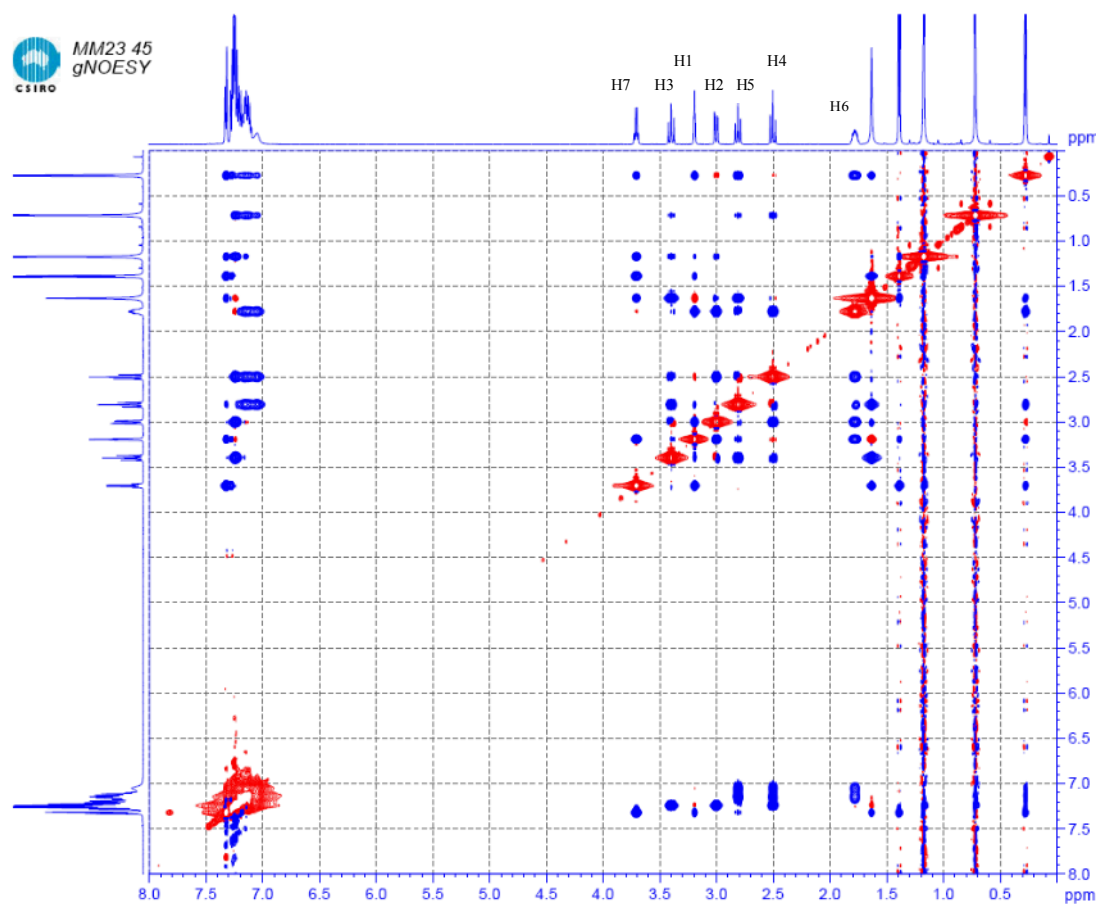
Supporting Figure 2: ¹H-NMR spectrum of aminocyclohexane 2.



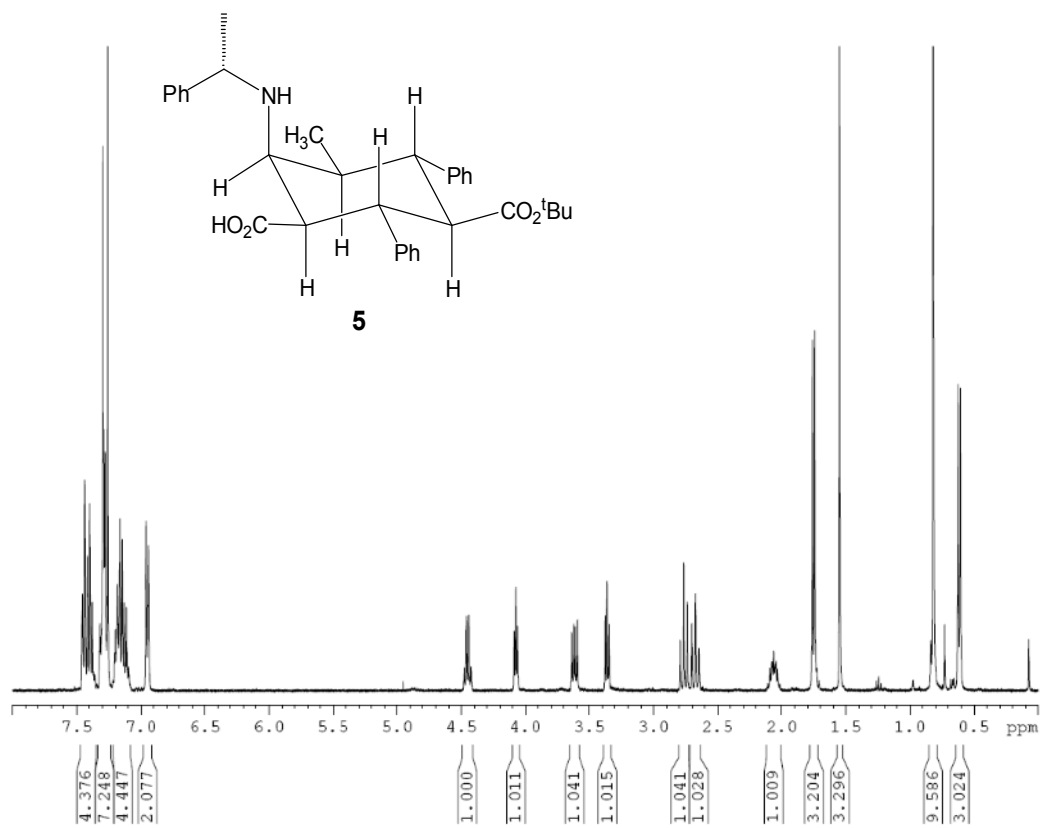
Supporting Figure 3: ^{13}C -NMR spectrum of aminocyclohexane 2.



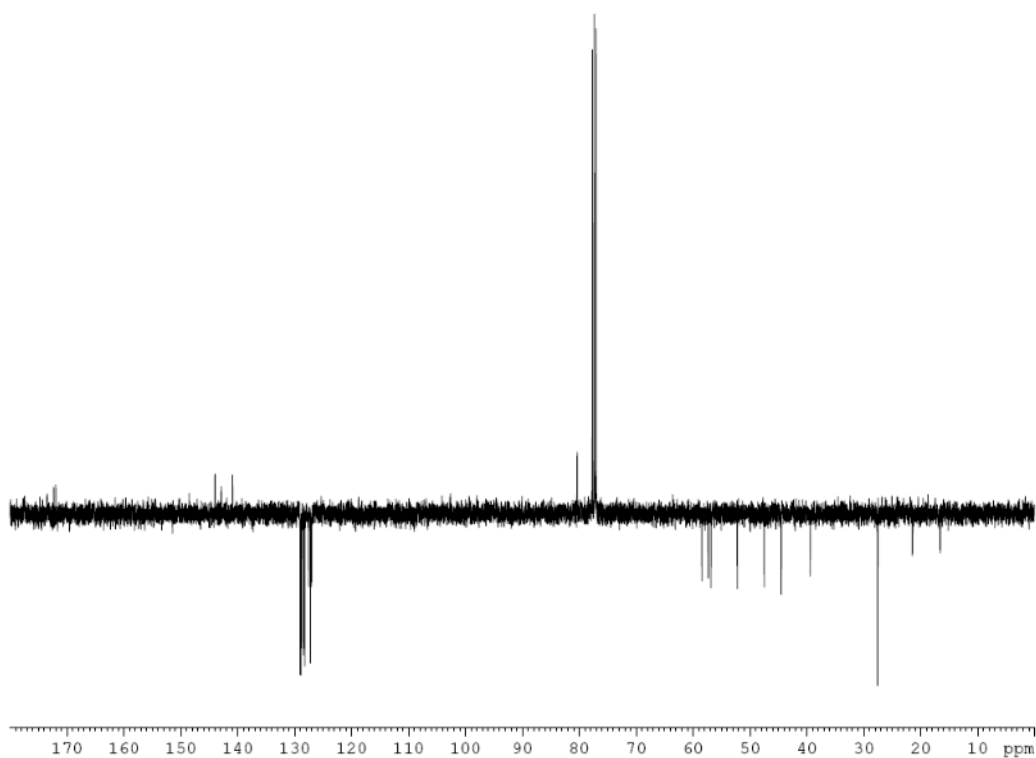
Supporting Figure 4: ^1H - ^1H COSY spectrum of aminocyclohexane 2.



Supporting Figure 5: ^1H - ^1H NOESY spectrum used in aiding determination of the relative stereochemistry of the cyclohexyl ring substituents of aminocyclohexane **2**



Supporting Figure 6: $^1\text{H-NMR}$ spectrum of mono-*tert*-butyl ester **5**.



Supporting Figure 7: ^{13}C -NMR spectrum of mono-*tert*-butyl ester **5**.