Supporting Information

## Total Synthesis and Pharmacological Investigation of Cordyheptapeptide A

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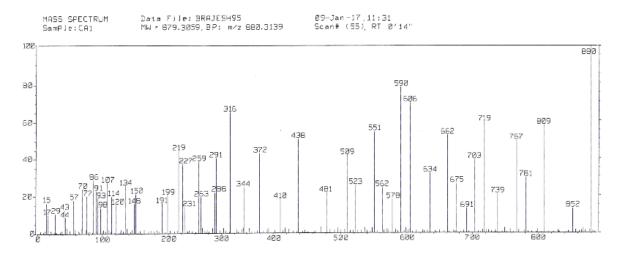


Figure S1. Mass spectrum for the *N*-methylated cyclic heptapeptide, cordyheptapeptide A (8)

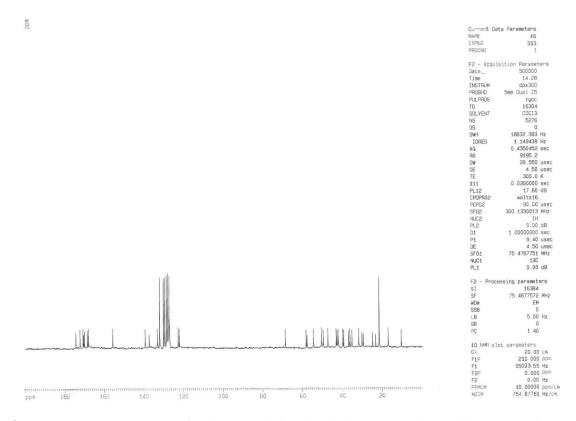


Figure S2. <sup>13</sup>C NMR spectrum for the *N*-methylated cyclic heptapeptide, cordyheptapeptide A (8)

Parameter	*Calculated value for	
Parameter	Compound 7	Compound 8
Molar Refractivity (MR <sup>20</sup> )	$275.41 \pm 0.3 \text{ cm}^3$	$244.28 \pm 0.4 \text{ cm}^3$
Molar Volume (MV <sup>20</sup> )	$847.8 \pm 3.0 \text{ cm}^3$	$697.3 \pm 5.0 \text{ cm}^3$
Parachor (P <sub>r</sub> )	$2271.7 \pm 6.0 \text{ cm}^3$	$1959.7 \pm 6.0 \text{ cm}^3$
Refractive Index (n <sup>20</sup> )	$1.563 \pm 0.02$	$1.617 \pm 0.03$
Surface Tension ( $\gamma^{20}$ )	51.5 ± 3.0 dyne/cm	62.3 ± 5.0 dyne/cm
Density (d <sup>20</sup> )	$1.193 \pm 0.06 \text{ g cm}^{-3}$	$1.26 \pm 0.1 \text{ g cm}^{-3}$
Polarizability ( $\alpha$ )	$109.18 \pm 0.5 \ 10^{-24}  \text{cm}^3$	$96.84 \pm 0.5 \ 10^{-24}  cm^3$
log P (n-Octanol/water)	$8.30 \pm 0.89$	$5.43 \pm 0.90$

**Table S1.** Various steric and lipophilicity parameters for the *N*-methylated linear and cyclicheptapeptide (7, 8)

\*Values were calculated using the ACD/ChemSketch 2.0 software