

## **Supplementary Materials**

### **Mn(II) complexes of enlarged scorpionand-type azamacrocycles as mimetics of MnSOD enzyme**

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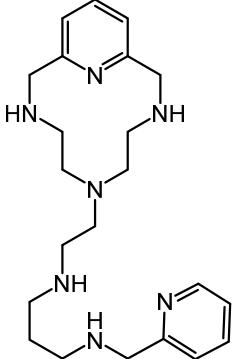
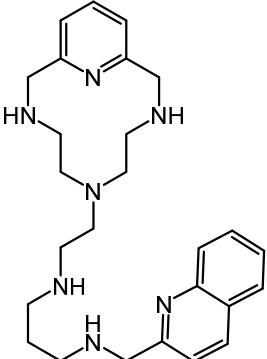
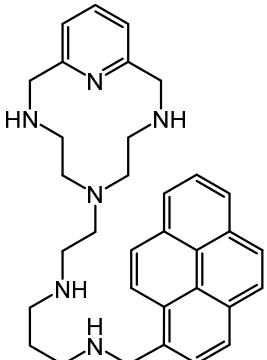
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**Table S1.** Characterization data (<sup>1</sup>H and <sup>13</sup>C NMR and Elemental Analysis) of L1-3

Compound	Characterization data
 <b>L1</b>	<p><sup>1</sup>H NMR (D<sub>2</sub>O, 300 MHz): δ<sub>H</sub> 8.83 (d, J=6 Hz, 1H), 8.51 (t, J=8 Hz, 1H), 8.03 (d, J=8 Hz, 1H), 8.00 (m, 2H), 7.49 (d, J=8 Hz, 2H), 4.69 (s, 2H), 4.68 (s, 4H), 3.34 (m, 10H), 3.10 (t, J=8 Hz, 2H), 2.98 (m, 4H), 2.28 (m, 2H).</p> <p><sup>13</sup>C NMR (D<sub>2</sub>O, 75.43 MHz): δ<sub>C</sub> 149.2, 146.4, 145.5, 140.1, 127.5, 127.4, 122.6, 51.3, 50.8, 49.9, 48.9, 46.3, 45.3, 45.2, 44.0, 23.1.</p> <p><b>Anal. Calc.</b> for C<sub>22</sub>H<sub>35</sub>N<sub>7</sub>·5HCl·2H<sub>2</sub>O: C, 42.9; H, 7.2; N, 15.9. <b>Exp.:</b> C, 42.4; H, 7.5; N, 15.4.</p>
 <b>L2</b>	<p><sup>1</sup>H NMR (D<sub>2</sub>O, 300 MHz): δ<sub>H</sub> 8.41 (d, J = 8Hz, 1H), 7.97 (d, J = 9 Hz, 1H), 7.92 (d, J = 9 Hz, 1H), 7.82 (t, J = 8, 1H), 7.77 (t, J = 8, 1H), 7.59 (t, J = 8, 1H), 7.50 (d, J = 8, 1H), 7.32 (d, J = 8 Hz, 2H), 4.52 (s, 2H), 4.49 (s, 4H), 3.16 (m, 10H), 2.93 (t, J = 8 Hz, 2H), 2.78 (m, 4H), 2.12 (m, 2H).</p> <p><sup>13</sup>C NMR (D<sub>2</sub>O, 75.43 MHz): δ<sub>C</sub> 149.13, 148.85, 143.36, 142.84, 139.76, 133.39, 129.14, 128.71, 128.33, 124.41, 122.16, 121.03, 66.55, 50.86, 50.43, 49.66, 49.49, 45.87, 44.95, 43.55, 22.75.</p> <p><b>Anal. Calc.</b> for C<sub>26</sub>H<sub>37</sub>N<sub>7</sub>·5HCl: C, 49.7; H, 6.7; N, 15.6. <b>Exp.:</b> C, 51.3; H, 7.5; N, 15.3.</p>
 <b>L3</b>	<p><sup>1</sup>H NMR (D<sub>2</sub>O, 300 MHz): δ<sub>H</sub> 7.98 (t, J = 8 Hz, 2H), 7.80 (m, 5H), 7.61 (m, J = 9 Hz, 3H), 7.31 (d, J = 8 Hz, 2H), 4.49 (s, 2H), 4.45 (s, 4H), 3.05 (m, 10H), 2.85 (m, 2H), 2.61 (t, J = 5 Hz, 4H), 1.97 (m, 2H).</p> <p><sup>13</sup>C NMR (D<sub>2</sub>O, 75.43 MHz): δ<sub>C</sub> 149.1, 140.1, 131.8, 130.8, 130.1, 128.8, 128.7, 128.6, 128.4, 127.3, 126.7, 126.2, 126.1, 125.0, 123.6, 123.3, 122.4, 121.48, 51.0, 50.5, 49.8, 46.1, 44.4, 43.5, 23.0.</p> <p><b>Anal. Calc.</b> for C<sub>33</sub>H<sub>40</sub>N<sub>6</sub>·4HCl·3H<sub>2</sub>O: C, 55.0; H, 7.0; N, 11.7. <b>Exp.:</b> C, 54.9; H, 6.9; N, 11.8.</p>

**Figure S1.** Molar distribution diagrams of the different protonated species.

