Electronic supplementary information (ESI)

Mn(II) complexes of different nuclearity: synthesis, characterization and catecholase-like activity

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Fig. S1 IR spectrum of complex 1.

Fig. S2 IR spectrum of complex 2.
Fig. S3 IR spectrum of complex 3.

Fig. S4 Electronic spectrum of complex 1.
Fig. S5 Electronic spectrum of complex 2.

Fig. S6 Electronic spectrum of complex 3.
Fig. S7 Dependence of rate of reaction on substrate concentration for complex 1 (100 μM) at 25°C in DMSO for oxidation of Catechol.

Fig. S8 Dependence of rate of reaction on substrate concentration for complex 2 (100 μM) at 25°C in DMSO for oxidation of Catechol.
**Fig. S9** Dependence of rate of reaction on substrate concentration for complex 3 (100 μM) at 25°C in DMSO for oxidation of Catechol.

**Table S1.** $k_{cat}$ Value for Complexes 1,2,3 for oxidation of 3,5 DTBC in DMSO.

<table>
<thead>
<tr>
<th>Complex</th>
<th>Wavelength (nm)</th>
<th>$V_{max}$ (M s$^{-1}$)</th>
<th>$K_M$ (M)</th>
<th>$k_{cat}$ (h$^{-1}$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>405</td>
<td>1.6863510$^{-5}$</td>
<td>0.0405</td>
<td>607.08</td>
</tr>
<tr>
<td>2</td>
<td>400</td>
<td>2.3705210$^{-5}$</td>
<td>0.0271</td>
<td>853.38</td>
</tr>
<tr>
<td>3</td>
<td>400</td>
<td>7.0910$^{-6}$</td>
<td>0.0171</td>
<td>255.19</td>
</tr>
</tbody>
</table>
Fig. S10 Cyclic voltammogram of complex 1, in DMSO, at the GC electrode at 100 mV s⁻¹ scan rate as representative.

Fig. S11 Cyclic voltammogram of complex 2, in DMSO, at the GC electrode at 100 mV s⁻¹ scan rate as representative.

Fig. S12 Cyclic voltammogram of complex 3, in DMSO, at the GC electrode at 100 mV s⁻¹ scan rate as representative.
Fig. S13 Cyclic voltammogram (anodic peak potentials) of complex 2, in DMSO, at the GC electrode at 100 mV s$^{-1}$ scan rate as representative.

Fig. S14 Cyclic voltammogram (anodic peak potentials) of complex 3, in DMSO, at the GC electrode at 100 mV s$^{-1}$ scan rate as representative.

Fig. S15 Cyclic voltammogram of complex 1 after addition of DTBC at the GC electrode in DMSO medium at 100 mV s$^{-1}$ scan rate as representative.
Fig. S16 Differential Pulse Voltammogram of complex 1 after addition of DTBC at the GC electrode in DMSO medium at 100 mV s$^{-1}$ scan rate as representative.