Supporting Information

Ligand field-tuned single-molecule magnet behaviour of 2p-4f complexes
Xue-Lan Mei, Yue Ma, Li-Cun Li*, Dai-Zheng Liao

Department of Chemistry and Key Laboratory of Advanced Energy Materials Chemistry, Nankai University, Tianjin 300071, PR China

*Author to whom correspondence should be addressed. Email: llicun@nankai.edu.cn
Scheme S1

(a) SAPR-8  (b) DD-8  (c) TPRS-8

Scheme S2

[Dy(acac)$_3$(NIT-2Py)]  [Dy(tfa)$_3$(NIT-2Py)]  [Dy(hfa)$_3$(NIT-2Py)]
Fig. S1. The molecular structure of 1. Uncoordinated NIT-2Py radical and hydrogen atoms are not shown for the sake of clarity.

Fig. S2. Packing diagram of complex 2. Hydrogen atoms are not shown for the sake of clarity.
Fig. S3. Packing diagram of complex 3. Hydrogen atoms are not shown for the sake of clarity.

Fig. S4. $M$ versus $H$ plot at 2K for 2.