Electronic Supplementary Information for Dalton Transactions

Metalloligands for designing Single-Molecule and Single-Chain Magnets

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Supplementary Material

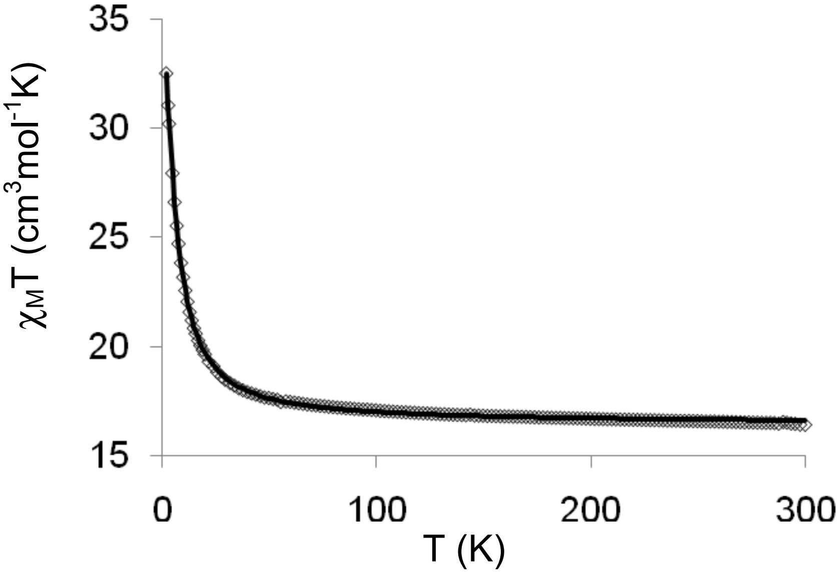

Figure S1. Experimental $\chi_M T$ vs. T for $[L^1CuGd(thd)_2]_2$ **1**.

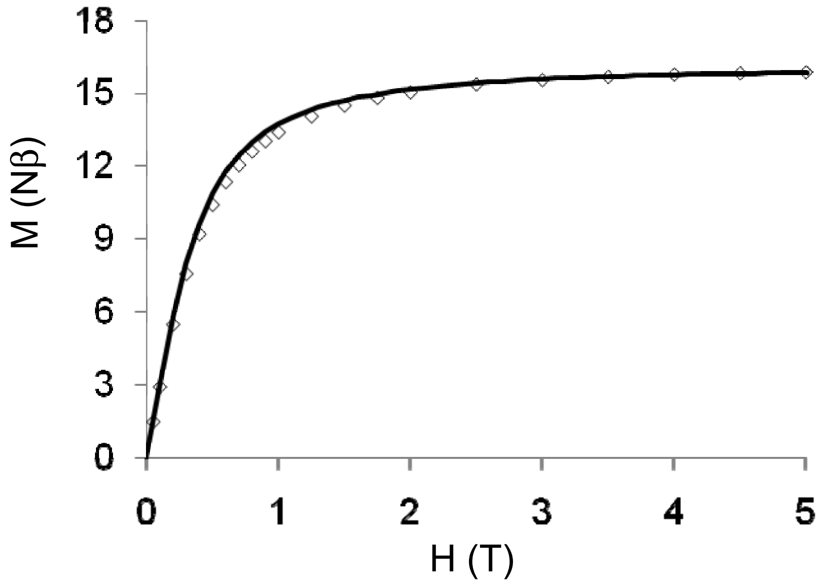

Figure S2. Field dependence of the magnetization for $[L^2CuGd(thd)_2]_2$ **1** at 2 K. The solid line corresponds to the best fit described in the text.

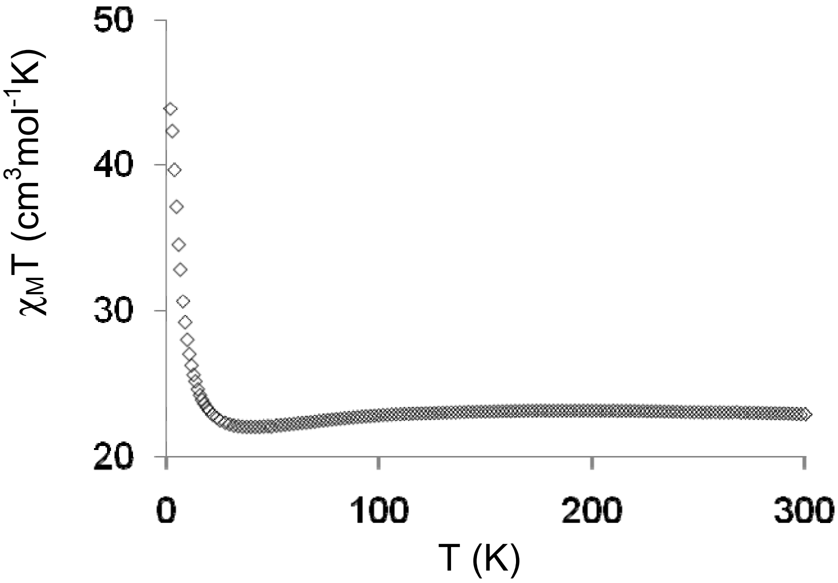

Figure S3. Experimental $\chi_M T$ vs. T for $[L^1CuTb(thd)_2]_2$ **2**.

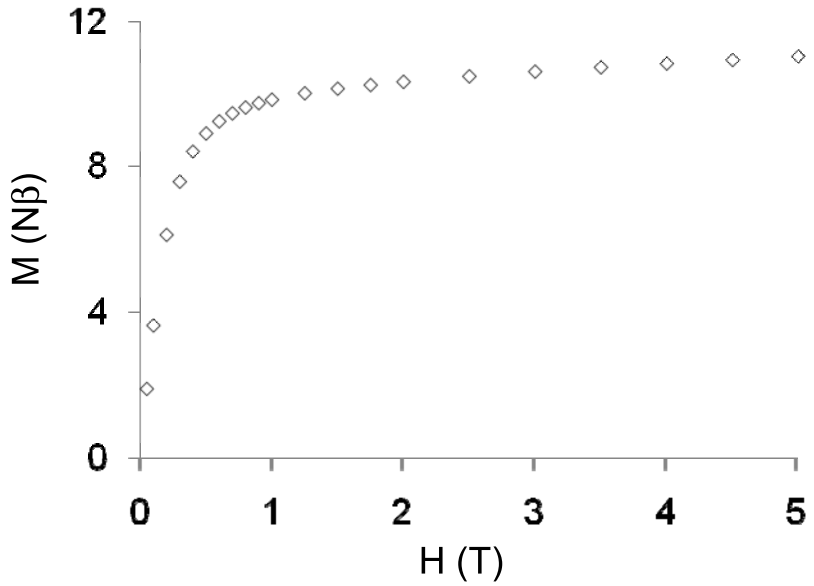

Figure S4. Field dependence of the magnetization for $[L^2CuTb(thd)_2]_2$ **4** at 2 K.

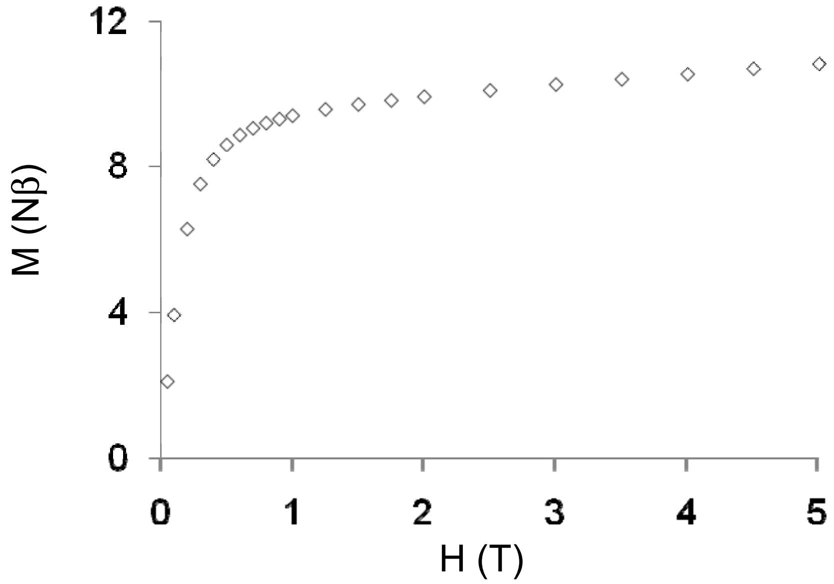

Figure S5. Field dependence of the magnetization for $[L^1CuTb(thd)_2]_2$ **2** at 2 K.

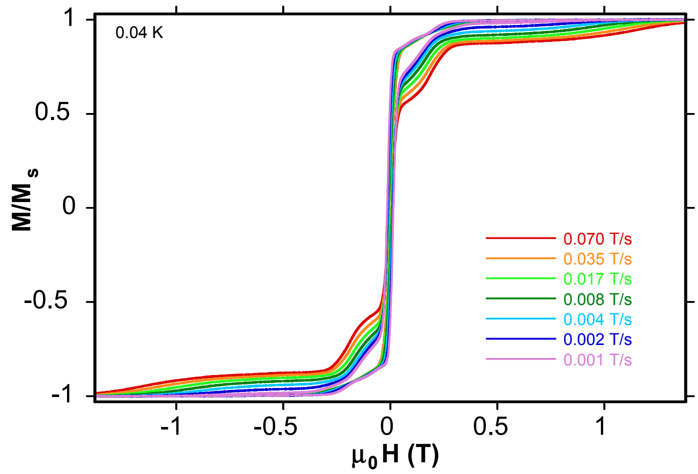

Figure S6. Magnetization (M) vs. magnetic field (H) hysteresis loops for **4** at different field sweep rates. M is normalized to its saturation value at 1.4 T.

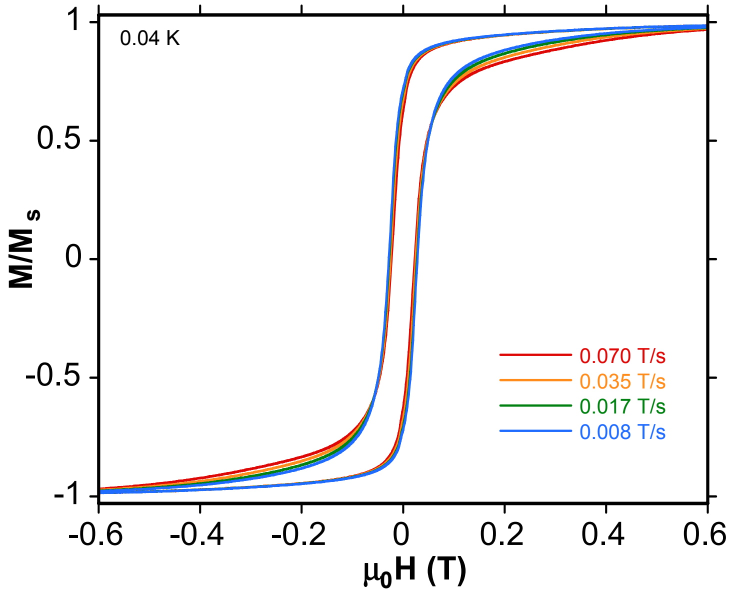

Figure S7. Magnetization (M) vs. magnetic field (H) hysteresis loops for **2** at different field sweep rates. M is normalized to its saturation value at 1.4 T.

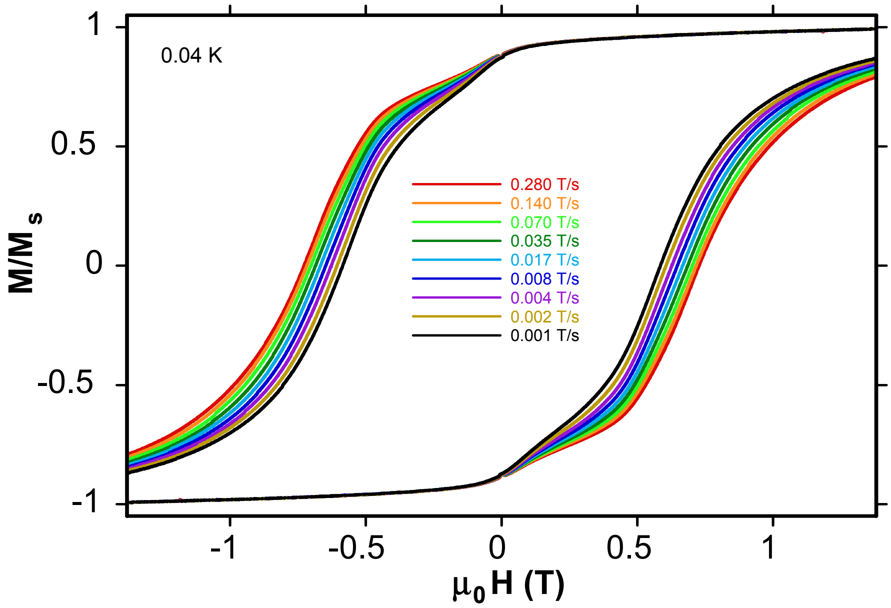

Figure S8. Magnetization (M) vs. magnetic field (H) hysteresis loops for $[(L^1Cu)_2Tb(NO_3)(H_2O)]_n$ at different field sweep rates. M is normalized to its saturation value at 1.4 T.

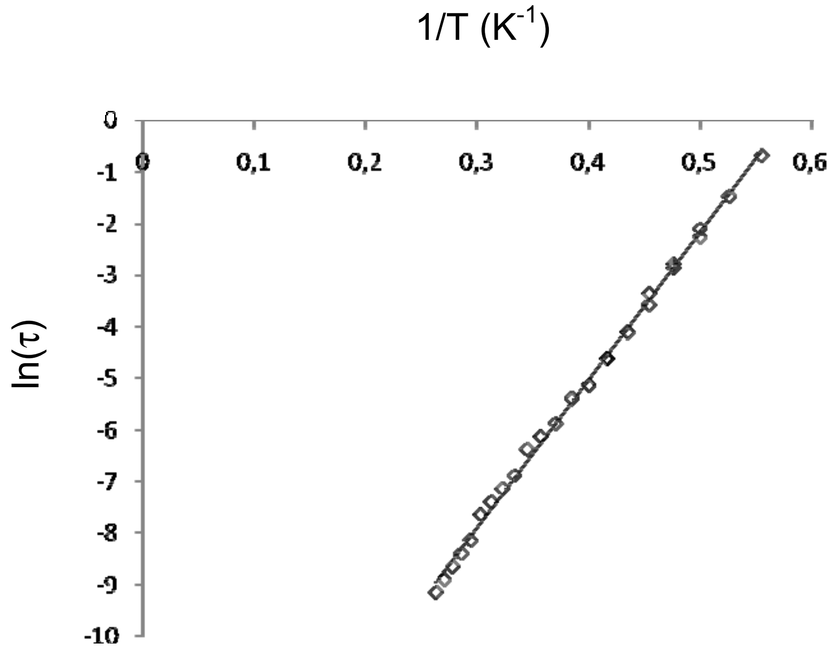

Figure S9. Arrhenius plot using ac data for $[(L^1Cu)_2Tb(NO_3)(H_2O)]_n$.

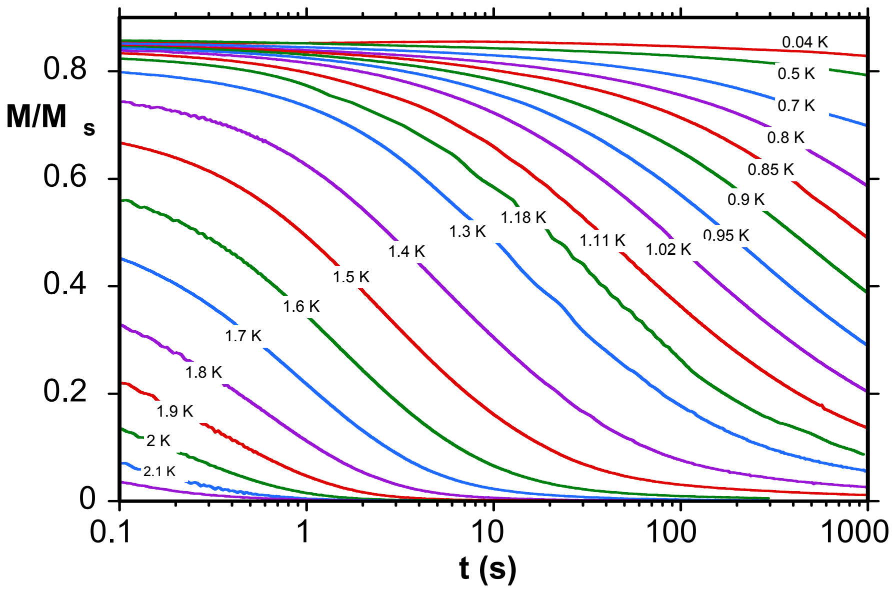

Figure S10. Dc magnetization decay data for $[(L^1Cu)_2Tb(NO_3)(H_2O)]_n$.

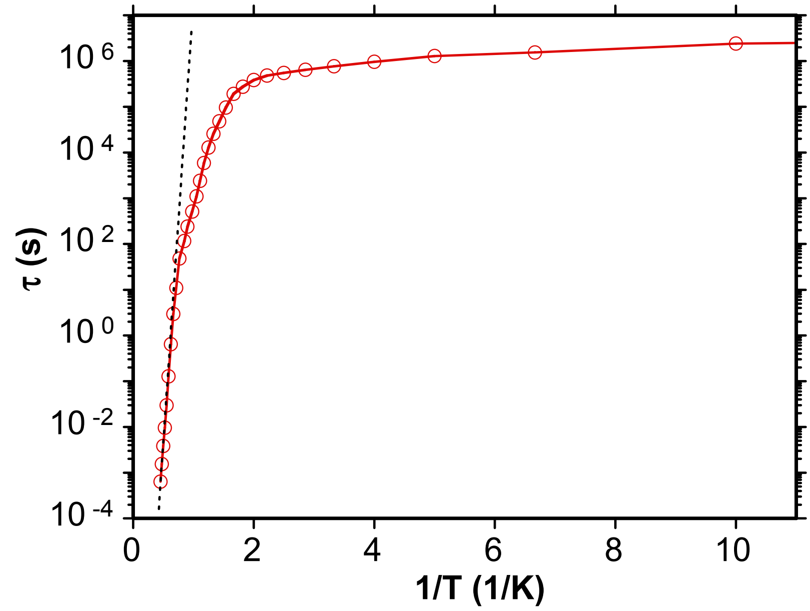

Figure S11. Arrhenius plot using dc data for $[(L^1Cu)_2Tb(NO_3)(H_2O)]_n$.