Figure ESI 1. Temperature dependence of the in-phase ($\chi'$) and out-of-phase ($\chi''$) a.c. molar magnetic susceptibility of a 22.7 mM solution of 1 in butyronitrile, in the temperature range 2 to 10 K and for a.c fields oscillating at frequencies in the range 1 to 1500 Hz.

Figure ESI 2. Temperature dependence of the in-phase ($\chi'$) and out-of-phase ($\chi''$) a.c. molar magnetic susceptibility of a 40.8 mM solution of 2 in butyronitrile, in the temperature range 2 to 10 K and for a.c fields oscillating at frequencies in the range 1 to 1500 Hz.
Figure ESI 3. Temperature dependence of the in-phase ($\chi'$) and out-of-phase ($\chi''$) a.c. molar magnetic susceptibility of an 18.8 mM solution of 1 in dry toluene, in the temperature range 2 to 10 K and for a.c fields oscillating at frequencies in the range 1 to 1500 Hz.

Figure ESI 4. Temperature dependence of the in-phase ($\chi'$) and out-of-phase ($\chi''$) a.c. molar magnetic susceptibility of a 12.6 mM solution of 2 in dry toluene, in the temperature range 2 to 10 K and for a.c fields oscillating at frequencies in the range 1 to 1500 Hz.
Figure ESI 5. Temperature dependence of the in-phase ($\chi'$) and out-of-phase ($\chi''$) a.c. molar magnetic susceptibility of a 7.0 mM and a 9.7 mM solutions of 1 in acetonitrile and mesitylene, respectively, in the temperature range 2 to 10 K and for an a.c field oscillating at a frequency of 1500 Hz.

Figure ESI 6. Temperature dependence of the in-phase ($\chi'$) and out-of-phase ($\chi''$) a.c. molar magnetic susceptibility of a 7.6 mM solution of 1 in methanol and of 1 as polycrystalline powder in the temperature range 2 to 10 K and for an a.c field oscillating at a frequency of 1500 Hz.
Figure ESI 7. Relaxation times $\tau$ for a 33.1 mM solution of $[\text{Mn}_3\text{O(Et-sao)}_3(\text{MeOH})_3]\text{(ClO}_4)$ in methanol. The dot line represents the fit of the experimental data to the Arrhenius model of equation (1). This yielded: $\tau_0 = 1.7 \times 10^{-10}$ sec and $U_{\text{eff}} = 50.4$ K.