Supplementary Information

Preparation of La(tpen)OTf$_3$

In the glove box, a solution of *tpen* in MeCN (72 mg, 0.171 mM, 5 mL) was added to a stirred MeCN suspension of La(OTf)$_3$ (100 mg, 0.171 mM, 6 mL). After stirring at room temperature overnight, the solution was filtered, reduced in volume to 4 mL, and ^{i}Pr$_2$O layered on top. After two weeks, the resultant crystals were isolated by filtration, washed with minimal volumes of MeCN and dried under vacuum suction to yield La(tpen)OTf$_3$ as a colourless microcrystalline solid in 22 % yield, 38 mg.

RMN ^{1}H (CD$_3$CN, 400 MHz, 298 K), δ (ppm) : (assigned by ^{1}H COSY):

8.60 (d, 4h, $^3J_{HH}$ 5.2 Hz, H_6), 7.86 (td, 4H, $^3J_{HH}$ 7.6 Hz, $^4J_{HH}$ 1.6 Hz, H_5), 7.37 (d, 4H, $^3J_{HH}$ 8 Hz, H_3), 7.32 (t, 4H, $^3J_{HH}$ 6.0 Hz, H_4), 4.16 (AB, 8H, $^2J_{HH}$ 16.0 Hz, H_a, H_b), 2.98 (s, 4H, N-CH_2).

Synthesis of {La(tpen)(OH)]$_2$(Otf)}[OTf$_3$ (2

In the glove box under argon, two equivalents of tpen (70 mg, 0.165 mM, 5 mL) was added to a stirred solution of La(OTf)$_3$ in acetonitrile (48 mg, 0.0818 mM, 5 mL). After twelve hours stirring, two equivalents of a 0.5 M solution of H_2O in MeCN (330 µL) were added slowly over 30 minutes by syringe. After twelve hours stirring, another 2 equivalents of H_2O were added. After a further twelve hours stirring, the solution was filtered, reduced in volume to 4 mL, and ^{i}Pr$_2$O added. After several days, the resultant crystals were collected by filtration, washed with minimal volumes of MeCN and dried under suction to yield **2** as single crystals in 61 %, 45 mg.

^{1}H NMR/400 MHz/CD$_3$CN/298 K assigned by COSY δ_H: 8.46 (br, 4H, H_6), 7.67 (t, 4H, $^3J_{HH}$ 7.2 Hz, H_5), 7.14 (br, 8H, H_4, H_3), 3.69 (br, 8H, H_a, H_b), 2.51 (br, 4H, N-CH_2).

Anal. Calcd for [La(*tpen*)(µ-OH)]$_2$[OTf]$_4$; $C_{56}H_{58}O_{14}N_{12}S_4F_{12}La_2$: C 38.23, H 3.32 N 9.56. Found: C 38.08, H, 3.42, N, 9.85