

Supporting file for paper “Cocrystallization of Coordinative and Inorganic Lanthanide Centers Showing Dual Emission via Linked or Unlinked Antenna”.

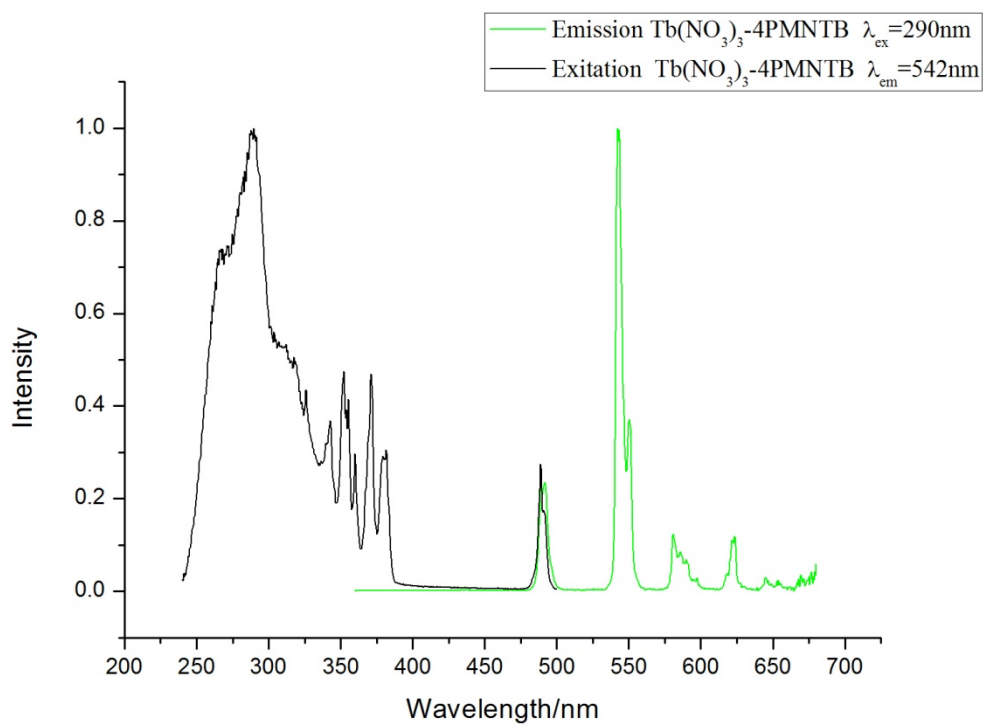


Figure S1. The excitation and emission spectra of Tb cocrystalline complex **6**.

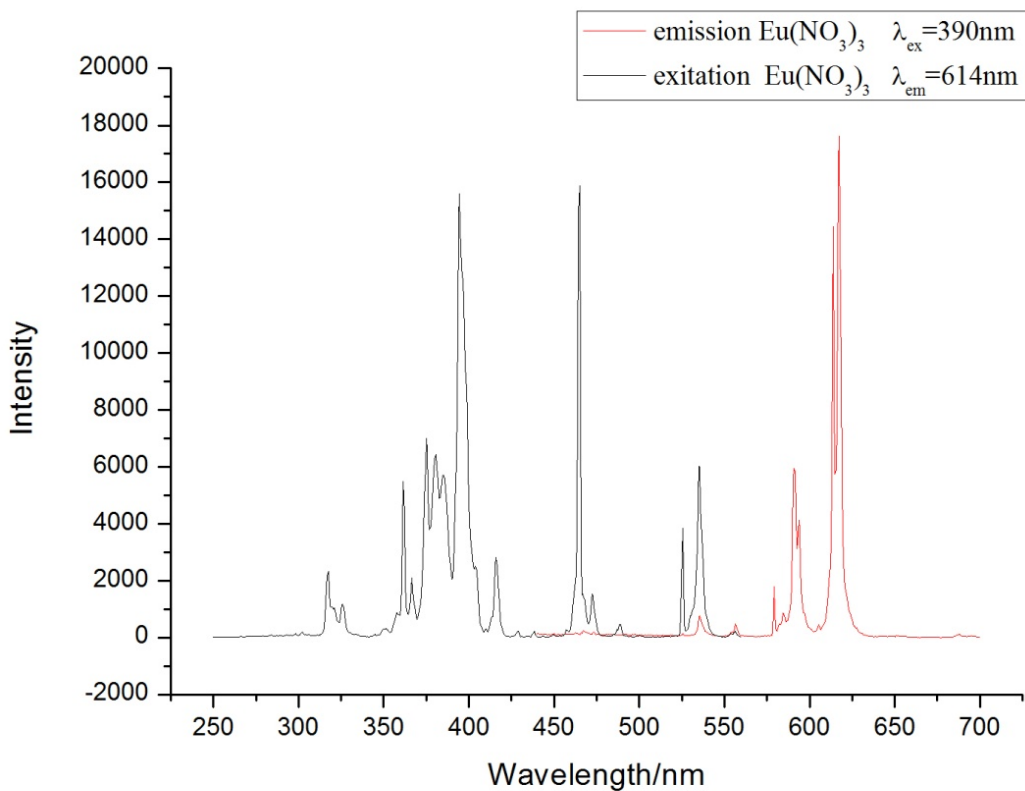


Figure S2. The excitation (a) and emission (b) spectra of pure $\text{Eu}(\text{NO}_3)_3$.

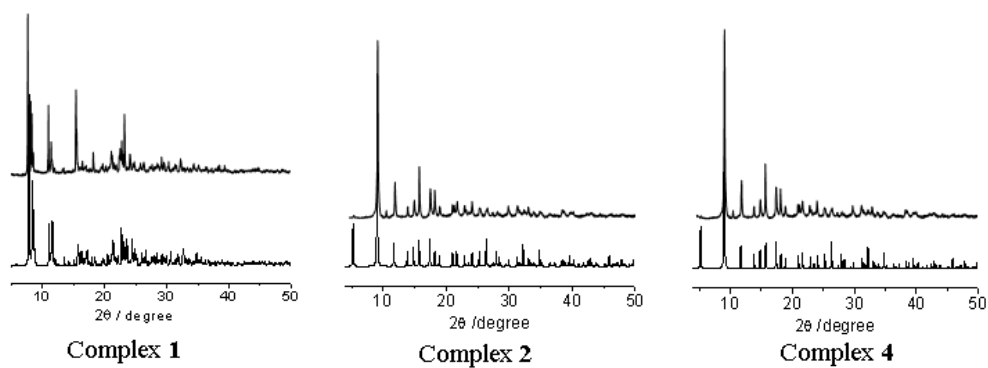


Figure S3 PXRD of the complexes.

Table S1. Details of the lifetimes in the mechanically mixed complex **3**- $\text{Eu}(\text{NO}_3)_3$ system.

	Lifetime/ μs	Rel%
τ_1	167	13
τ_2	358	30
τ_3	1133	57

The mass ratio of complex **3** to $\text{Eu}(\text{NO}_3)_3$ is 5: 3. The emission is excited at 390 nm, and the monitored emission wavelength is 614 nm.

Table S2. Selected bond lengths (\AA) and angles ($^\circ$) for the complexes.

1					
Eu(1)-O(1)	2.256(2)	Eu(1)-O(15)	2.260(2)	Eu(1)-O(8)	2.277(2)
Eu(1)-N(8)	2.494(3)	Eu(1)-N(5)	2.517(3)	Eu(1)-N(2)	2.520(2)
Eu(1)-N(1)	2.714(3)	O(1)-Eu(1)-O(15)	98.43(8)	O(1)-Eu(1)-O(8)	97.55(8)
O(15)-Eu(1)-O(8)	96.87(8)	O(1)-Eu(1)-N(8)	174.89(9)	O(15)-Eu(1)-N(8)	82.86(9)
O(8)-Eu(1)-N(8)	77.37(8)	O(1)-Eu(1)-N(5)	82.48(8)	O(15)-Eu(1)-N(5)	76.99(8)
O(8)-Eu(1)-N(5)	173.77(8)	N(8)-Eu(1)-N(5)	102.63(8)	O(1)-Eu(1)-N(2)	76.46(8)
O(15)-Eu(1)-N(2)	173.99(9)	O(8)-Eu(1)-N(2)	87.02(8)	N(8)-Eu(1)-N(2)	102.51(8)
N(5)-Eu(1)-N(2)	99.01(8)	O(1)-Eu(1)-N(1)	119.74(8)	O(15)-Eu(1)-N(1)	117.78(8)
O(8)-Eu(1)-N(1)	121.47(8)	N(8)-Eu(1)-N(1)	63.41(8)	N(5)-Eu(1)-N(1)	63.26(8)
N(2)-Eu(1)-N(1)	63.29(8)				
2					
Tb(1)-O(1)	2.256(2)	Tb(1)-O(15)	2.260(2)	Tb (1)-O(8)	2.277(2)
Tb (1)-N(8)	2.494(3)	Tb (1)-N(5)	2.517(3)	Tb (1)-N(2)	2.520(2)
Tb (1)-N(1)	2.714(3)	O(1)- Tb (1)-O(15)	98.43(8)	O(1)- Tb (1)-O(8)	97.55(8)
O(15)- Tb (1)-O(8)	96.87(8)	O(1)- Tb (1)-N(8)	174.89(9)	O(15)- Tb (1)-N(8)	82.86(9)
O(8)- Tb (1)-N(8)	77.37(8)	O(1)- Tb (1)-N(5)	82.48(8)	O(15)- Tb (1)-N(5)	76.99(8)
O(8)- Tb (1)-N(5)	173.77(8)	N(8)- Tb (1)-N(5)	102.63(8)	O(1)- Tb (1)-N(2)	76.46(8)
O(15)- Tb (1)-N(2)	173.99(9)	O(8)- Tb (1)-N(2)	87.02(8)	N(8)- Tb (1)-N(2)	102.51(8)
N(5)- Tb (1)-N(2)	99.01(8)	O(1)- Tb (1)-N(1)	119.74(8)	O(15)- Tb (1)-N(1)	117.78(8)
O(8)- Tb (1)-N(1)	121.47(8)	N(8)- Tb (1)-N(1)	63.41(8)	N(5)- Tb (1)-N(1)	63.26(8)
N(2)- Tb (1)-N(1)	63.29(8)				
4					
Tb(1)-O(1)#1	2.480(2)	Tb(1)-O(1)	2.480(2)	Tb(1)-O(1)#2	2.480(2)
Tb(1)-N(2)#1	2.511(6)	Tb(1)-N(2)#2	2.511(6)	Tb(1)-N(2)	2.511(6)
Tb(1)-O(2)#1	2.548(2)	Tb(1)-O(2)	2.548(2)	Tb(1)-O(2)#2	2.548(2)
Tb(1)-N(1)	2.698(12)	Tb(1)-N(5)#1	2.932(2)	Tb(1)-N(5)	2.932(2)

Tb(2)-O(7)#5	2.348(3)	Tb(2)-O(7)	2.3480	Tb(2)-O(7)#4	2.348(3)
Tb(2)-O(4)#4	2.564(4)	Tb(2)-O(5)#4	2.502(3)	Tb(2)-O(5)#5	2.502(3)
O(1)#1-Tb(1)-O(1)#2	70.98(8)	Tb(2)-O(4)#5	2.564(4)	Tb(2)-O(4)	2.563(9)
O(1)-Tb(1)-N(2)#1	116.17(16)	Tb(2)-O(8)	2.643(4)	O(1)#1-Tb(1)-O(1)	70.98(8)
O(1)-Tb(1)-N(2)#2	141.02(16)	O(1)-Tb(1)-O(1)#2	70.98(8)	O(1)#1-Tb(1)-N(2)#1	75.67(16)
O(1)#1-Tb(1)-N(2)	141.02(16)	O(1)#2-Tb(1)-N(2)#1	141.02(16)	O(1)#1-Tb(1)-N(2)#2	116.17(16)
N(2)#1-Tb(1)-N(2)	102.39(18)	O(1)#2-Tb(1)-N(2)#2	75.67(16)	N(2)#1-Tb(1)-N(2)#2	102.39(18)
O(1)-Tb(1)-O(2)#1	118.35(8)	O(1)-Tb(1)-N(2)	75.67(16)	O(1)#2-Tb(1)-N(2)	116.17(16)
N(2)#2-Tb(1)-O(2)#1	68.68(16)	N(2)#2-Tb(1)-N(2)	102.39(18)	N(2)#1-Tb(1)-O(2)#1	70.03(16)
N(2)#2-Tb(1)-O(2)	165.77(15)	O(1)#2-Tb(1)-O(2)#1	73.33(5)	O(1)#1-Tb(1)-O(2)	73.33(5)
O(1)#1-Tb(1)-O(2)#2	118.34(8)	N(2)-Tb(1)-O(2)#1	165.77(15)	N(2)#1-Tb(1)-O(2)	68.68(16)
N(2)#1-Tb(1)-O(2)#2	165.77(15)	O(1)#2-Tb(1)-O(2)	118.34(8)	N(2)-Tb(1)-O(2)#2	68.68(16)
O(1)-Tb(1)-N(1)	137.90(5)	N(2)-Tb(1)-O(2)	70.03(16)	O(1)#1-Tb(1)-N(1)	137.90(5)
N(2)#2-Tb(1)-N(1)	64.14(15)	O(1)-Tb(1)-O(2)#2	73.33(5)	N(2)#1-Tb(1)-N(1)	64.14(15)
O(2)-Tb(1)-N(1)	101.65(4)	N(2)#2-Tb(1)-O(2)#2	70.03(16)	O(2)#1-Tb(1)-N(1)	101.65(4)
O(1)-Tb(1)-N(5)#1	94.03(7)	O(1)#2-Tb(1)-N(1)	137.90(5)	N(2)#1-Tb(1)-N(5)#1	70.94(16)
N(2)#2-Tb(1)-N(5)#1	93.25(15)	N(2)-Tb(1)-N(1)	64.14(15)	O(2)#2-Tb(1)-N(5)#1	120.52(5)
N(1)-Tb(1)-N(5)#1	121.91(4)	O(2)#2-Tb(1)-N(1)	101.65(4)	O(1)#1-Tb(1)-N(5)	70.33(6)
N(2)#1-Tb(1)-N(5)	93.25(15)	O(1)#2-Tb(1)-N(5)#1	70.33(6)	N(2)-Tb(1)-N(5)#1	164.08(16)
N(2)#2-Tb(1)-N(5)	164.08(16)	N(2)-Tb(1)-N(5)	70.94(16)	O(2)#1-Tb(1)-N(5)	120.52(5)
N(1)-Tb(1)-N(5)	121.91(4)	N(5)#1-Tb(1)-N(5)	94.63(5)	O(8)#3-Tb(2)-O(7)	124.33(16)
O(8)#3-Tb(2)-O(7)#4	124.33(19)	O(7)-Tb(2)-O(7)#4	91.31(8)	O(8)#3-Tb(2)-O(7)#5	124.33(7)
O(7)-Tb(2)-O(7)#5	91.31(8)	O(7)-Tb(2)-O(5)#4	141.95(9)	O(7)#4-Tb(2)-O(5)#4	124.68(16)
O(7)#5-Tb(2)-O(5)#4	77.35(9)	O(8)#3-Tb(2)-O(5)#5	47.75(11)	O(7)-Tb(2)-O(5)#5	77.35(6)
O(7)#4-Tb(2)-O(5)#5	141.95(17)	O(7)#5-Tb(2)-O(5)#5	124.68(16)	O(8)#3-Tb(2)-O(5)	47.75(11)
O(7)#4-Tb(2)-O(5)	77.35(6)	O(7)#5-Tb(2)-O(5)	141.95(9)	O(5)#4-Tb(2)-O(5)	79.74(8)
O(5)#5-Tb(2)-O(5)	79.74(7)	O(8)#3-Tb(2)-O(4)#5	78.69(13)	O(7)-Tb(2)-O(4)#5	73.74(7)
O(7)#4-Tb(2)-O(4)#5	156.96(6)	O(7)#5-Tb(2)-O(4)#5	72.04(10)	O(5)#5-Tb(2)-O(4)#5	52.73(7)
O(7)#4-Tb(2)-O(4)	73.74(9)	O(7)#5-Tb(2)-O(4)	156.96(5)	O(5)#4-Tb(2)-O(4)	125.53(6)

O(5)#5-Tb(2)-O(4)	68.21(9)	O(4)#5-Tb(2)-O(4)	116.25(8)	O(8)#3-Tb(2)-O(4)#4	78.69(15)
O(7)#4-Tb(2)-O(4)#4	72.04(11)	O(5)#4-Tb(2)-O(4)#4	52.73(7)	O(5)-Tb(2)-O(4)#4	68.21(7)
O(4)#5-Tb(2)-O(4)#4	116.25(7)	O(4)-Tb(2)-O(4)#4	116.25(9)	O(8)#3-Tb(2)-O(8)	180.0(3)
O(7)#4-Tb(2)-O(8)	55.67(6)	O(7)#5-Tb(2)-O(8)	55.67(5)	O(5)#4-Tb(2)-O(8)	132.25(6)
O(5)#5-Tb(2)-O(8)	132.25(6)				
5					
Eu(1)-O(1)#1	2.498(6)	Eu(1)-O(1)	2.498(6)	Eu(1)-O(1)#2	2.498(6)
Eu(1)-O(2)	2.512(6)	Eu(1)-O(2)#2	2.512(6)	Eu(1)-O(2)#1	2.512(6)
Eu(1)-N(2)#1	2.586(7)	Eu(1)-N(2)	2.586(7)	Eu(1)-N(2)#2	2.586(7)
Eu(1)-N(1)	2.763(11)	Eu(1)-N(5)	2.936(8)	Eu(1)-N(5)#1	2.936(8)
Eu(2)-O(7)	2.343(12)	Eu(2)-O(7)#3	2.343(12)	Eu(2)-O(7)#4	2.343(12)
Eu(2)-O(5)	2.475(8)	Eu(2)-O(5)#4	2.475(8)	Eu(2)-O(5)#3	2.475(8)
Eu(2)-O(4)	2.507(9)	Eu(2)-O(4)#4	2.507(9)	Eu(2)-O(4)#3	2.507(9)
Eu(2)-N(6)	2.882(13)	Eu(2)-N(6)#4	2.882(13)	Eu(2)-N(6)#3	2.882(13)
O(1)#1-Eu(1)-O(1)	70.7(3)	O(1)#1-Eu(1)-O(1)#2	70.7(3)	O(1)-Eu(1)-O(1)#2	70.7(3)
O(1)#1-Eu(1)-O(2)	72.5(2)	O(1)-Eu(1)-O(2)	50.8(2)	O(1)#2-Eu(1)-O(2)	118.2(2)
O(1)#1-Eu(1)-O(2)#2	118.2(2)	O(1)-Eu(1)-O(2)#2	72.5(2)	O(1)#2-Eu(1)-O(2)#2	50.8(2)
O(2)-Eu(1)-O(2)#2	115.85(10)	O(1)#1-Eu(1)-O(2)#1	50.8(2)	O(1)-Eu(1)-O(2)#1	118.2(2)
O(1)#2-Eu(1)-O(2)#1	72.5(2)	O(2)-Eu(1)-O(2)#1	115.85(10)	O(2)#2-Eu(1)-O(2)#1	115.85(10)
O(1)#1-Eu(1)-N(2)#1	142.1(2)	O(1)-Eu(1)-N(2)#1	77.1(2)	O(1)#2-Eu(1)-N(2)#1	116.8(2)
O(2)-Eu(1)-N(2)#1	71.8(2)	O(2)#2-Eu(1)-N(2)#1	68.2(2)	O(2)#1-Eu(1)-N(2)#1	164.7(2)
O(1)#1-Eu(1)-N(2)	116.8(2)	O(1)-Eu(1)-N(2)	142.1(2)	O(1)#2-Eu(1)-N(2)	77.1(2)
O(2)-Eu(1)-N(2)	164.7(2)	O(2)#2-Eu(1)-N(2)	71.8(2)	O(2)#1-Eu(1)-N(2)	68.2(2)
N(2)#1-Eu(1)-N(2)	100.86(19)	O(1)#1-Eu(1)-N(2)#2	77.1(2)	O(1)-Eu(1)-N(2)#2	116.8(2)
O(1)#2-Eu(1)-N(2)#2	142.1(2)	O(2)-Eu(1)-N(2)#2	68.2(2)	O(2)#2-Eu(1)-N(2)#2	164.7(2)
O(2)#1-Eu(1)-N(2)#2	71.8(2)	N(2)#1-Eu(1)-N(2)#2	100.86(19)	N(2)-Eu(1)-N(2)#2	100.86(19)
O(1)#1-Eu(1)-N(1)	138.06(17)	O(1)-Eu(1)-N(1)	138.06(17)	O(1)#2-Eu(1)-N(1)	138.06(17)
O(2)-Eu(1)-N(1)	101.91(15)	O(2)#2-Eu(1)-N(1)	101.91(15)	O(2)#1-Eu(1)-N(1)	101.91(15)
N(2)#1-Eu(1)-N(1)	62.89(15)	N(2)-Eu(1)-N(1)	62.89(15)	N(2)#2-Eu(1)-N(1)	62.89(15)

O(1)#1-Eu(1)-N(5)	69.0(2)	O(1)-Eu(1)-N(5)	25.4(2)	O(1)#2-Eu(1)-N(5)	94.3(3)
O(2)-Eu(1)-N(5)	25.5(3)	O(2)#2-Eu(1)-N(5)	94.5(2)	O(2)#1-Eu(1)-N(5)	119.7(2)
N(2)#1-Eu(1)-N(5)	73.3(2)	N(2)-Eu(1)-N(5)	166.3(3)	N(2)#2-Eu(1)-N(5)	92.4(3)
N(1)-Eu(1)-N(5)	122.13(18)	O(1)#1-Eu(1)-N(5)#1	25.4(2)	O(1)-Eu(1)-N(5)#1	94.3(3)
O(1)#2-Eu(1)-N(5)#1	69.0(2)	O(2)-Eu(1)-N(5)#1	94.5(2)	O(2)#2-Eu(1)-N(5)#1	119.7(2)
O(2)#1-Eu(1)-N(5)#1	25.5(3)	N(2)#1-Eu(1)-N(5)#1	166.3(3)	N(2)-Eu(1)-N(5)#1	92.4(3)
N(2)#2-Eu(1)-N(5)#1	73.3(2)	N(1)-Eu(1)-N(5)#1	122.13(18)	N(5)-Eu(1)-N(5)#1	94.3(2)
O(7)-Eu(2)-O(7)#3	94.1(5)	O(7)-Eu(2)-O(7)#4	94.1(5)	O(7)#3-Eu(2)-O(7)#4	94.1(5)
O(7)-Eu(2)-O(5)	121.2(4)	O(7)#3-Eu(2)-O(5)	82.4(4)	O(7)#4-Eu(2)-O(5)	144.7(4)
O(7)-Eu(2)-O(5)#4	82.4(4)	O(7)#3-Eu(2)-O(5)#4	144.7(4)	O(7)#4-Eu(2)-O(5)#4	121.2(4)
O(5)-Eu(2)-O(5)#4	70.1(3)	O(7)-Eu(2)-O(5)#3	144.7(4)	O(7)#3-Eu(2)-O(5)#3	121.2(4)
O(7)#4-Eu(2)-O(5)#3	82.4(4)	O(5)-Eu(2)-O(5)#3	70.1(3)	O(5)#4-Eu(2)-O(5)#3	70.1(3)
O(7)-Eu(2)-O(4)	71.0(4)	O(7)#3-Eu(2)-O(4)	73.9(4)	O(7)#4-Eu(2)-O(4)	159.6(5)
O(5)-Eu(2)-O(4)	51.5(3)	O(5)#4-Eu(2)-O(4)	71.7(3)	O(5)#3-Eu(2)-O(4)	117.8(3)
O(7)-Eu(2)-O(4)#4	73.9(4)	O(7)#3-Eu(2)-O(4)#4	159.6(5)	O(7)#4-Eu(2)-O(4)#4	71.0(4)
O(5)-Eu(2)-O(4)#4	117.8(3)	O(5)#4-Eu(2)-O(4)#4	51.5(3)	O(5)#3-Eu(2)-O(4)#4	71.7(3)
O(4)-Eu(2)-O(4)#4	115.76(15)	O(7)-Eu(2)-O(4)#3	159.6(5)	O(7)#3-Eu(2)-O(4)#3	71.0(4)
O(7)#4-Eu(2)-O(4)#3	73.9(4)	O(5)-Eu(2)-O(4)#3	71.7(3)	O(5)#4-Eu(2)-O(4)#3	117.8(3)
O(5)#3-Eu(2)-O(4)#3	51.5(3)	O(4)-Eu(2)-O(4)#3	115.76(15)	O(4)#4-Eu(2)-O(4)#3	115.76(15)
O(7)-Eu(2)-N(6)	95.1(4)	O(7)#3-Eu(2)-N(6)	77.9(4)	O(7)#4-Eu(2)-N(6)	168.3(4)
O(5)-Eu(2)-N(6)	26.6(3)	O(5)#4-Eu(2)-N(6)	67.5(3)	O(5)#3-Eu(2)-N(6)	94.3(3)
O(4)-Eu(2)-N(6)	25.0(3)	O(4)#4-Eu(2)-N(6)	118.7(3)	O(4)#3-Eu(2)-N(6)	95.2(3)
O(7)-Eu(2)-N(6)#4	77.9(4)	O(7)#3-Eu(2)-N(6)#4	168.3(4)	O(7)#4-Eu(2)-N(6)#4	95.1(4)
O(5)-Eu(2)-N(6)#4	94.3(3)	O(5)#4-Eu(2)-N(6)#4	26.6(3)	O(5)#3-Eu(2)-N(6)#4	67.5(3)
O(4)-Eu(2)-N(6)#4	95.2(3)	O(4)#4-Eu(2)-N(6)#4	25.0(3)	O(4)#3-Eu(2)-N(6)#4	118.7(3)
N(6)-Eu(2)-N(6)#4	94.0(3)	O(7)-Eu(2)-N(6)#3	168.3(4)	O(7)#3-Eu(2)-N(6)#3	95.1(4)
O(7)#4-Eu(2)-N(6)#3	77.9(4)	O(5)-Eu(2)-N(6)#3	67.5(3)	O(5)#4-Eu(2)-N(6)#3	94.3(3)
O(5)#3-Eu(2)-N(6)#3	26.6(3)	O(4)-Eu(2)-N(6)#3	118.7(3)	O(4)#4-Eu(2)-N(6)#3	95.2(3)
O(4)#3-Eu(2)-N(6)#3	25.0(3)	N(6)-Eu(2)-N(6)#3	94.0(3)	N(6)#4-Eu(2)-N(6)#3	94.0(3)

6					
Tb(1)-O(2)#1	2.467(6)	Tb(1)-O(2)#2	2.467(6)	Tb(1)-O(2)	2.467(6)
Tb(1)-O(1)	2.501(6)	Tb(1)-O(1)#1	2.501(6)	Tb(1)-O(1)#2	2.501(6)
Tb(1)-N(2)	2.567(6)	Tb(1)-N(2)#1	2.567(6)	Tb(1)-N(2)#2	2.567(6)
Tb(1)-N(1)	2.739(11)	Tb(1)-N(5)#1	2.903(8)	Tb(1)-N(5)#2	2.903(8)
Tb(2)-O(1W)	2.321(11)	Tb(2)-O(1W)#3	2.321(11)	Tb(2)-O(1W)#4	2.321(11)
Tb(2)-O(4)#4	2.454(7)	Tb(2)-O(4)	2.455(7)	Tb(2)-O(4)#3	2.454(7)
Tb(2)-O(5)	2.488(9)	Tb(2)-O(5)#4	2.488(9)	Tb(2)-O(5)#3	2.488(9)
Tb(2)-N(6)	2.828(11)	Tb(2)-N(6)#4	2.828(11)	Tb(2)-N(6)#3	2.828(11)
O(2)#1-Tb(1)-O(2)#2	70.3(2)	O(2)#1-Tb(1)-O(2)	70.3(2)	O(2)#2-Tb(1)-O(2)	70.3(2)
O(2)#1-Tb(1)-O(1)	72.6(2)	O(2)#2-Tb(1)-O(1)	118.6(2)	O(2)-Tb(1)-O(1)	51.7(2)
O(2)#1-Tb(1)-O(1)#1	51.7(2)	O(2)#2-Tb(1)-O(1)#1	72.6(2)	O(2)-Tb(1)-O(1)#1	118.6(2)
O(1)-Tb(1)-O(1)#1	116.21(9)	O(2)#1-Tb(1)-O(1)#2	118.6(2)	O(2)#2-Tb(1)-O(1)#2	51.7(2)
O(2)-Tb(1)-O(1)#2	72.6(2)	O(1)-Tb(1)-O(1)#2	116.21(9)	O(1)#1-Tb(1)-O(1)#2	116.21(9)
O(2)#1-Tb(1)-N(2)	141.6(2)	O(2)#2-Tb(1)-N(2)	116.6(2)	O(2)-Tb(1)-N(2)	76.8(2)
O(1)-Tb(1)-N(2)	71.6(2)	O(1)#1-Tb(1)-N(2)	164.6(2)	O(1)#2-Tb(1)-N(2)	67.4(2)
O(2)#1-Tb(1)-N(2)#1	76.8(2)	O(2)#2-Tb(1)-N(2)#1	141.6(2)	O(2)-Tb(1)-N(2)#1	116.6(2)
O(1)-Tb(1)-N(2)#1	67.4(2)	O(1)#1-Tb(1)-N(2)#1	71.6(2)	O(1)#2-Tb(1)-N(2)#1	164.6(2)
N(2)-Tb(1)-N(2)#1	101.51(18)	O(2)#1-Tb(1)-N(2)#2	116.6(2)	O(2)#2-Tb(1)-N(2)#2	76.8(2)
O(2)-Tb(1)-N(2)#2	141.6(2)	O(1)-Tb(1)-N(2)#2	164.6(2)	O(1)#1-Tb(1)-N(2)#2	67.4(2)
O(1)#2-Tb(1)-N(2)#2	71.6(2)	N(2)-Tb(1)-N(2)#2	101.51(18)	N(2)#1-Tb(1)-N(2)#2	101.51(18)
O(2)#1-Tb(1)-N(1)	138.30(15)	O(2)#2-Tb(1)-N(1)	138.30(15)	O(2)-Tb(1)-N(1)	138.30(15)
O(1)-Tb(1)-N(1)	101.37(14)	O(1)#1-Tb(1)-N(1)	101.37(14)	O(1)#2-Tb(1)-N(1)	101.37(14)
N(2)-Tb(1)-N(1)	63.41(15)	N(2)#1-Tb(1)-N(1)	63.41(15)	N(2)#2-Tb(1)-N(1)	63.41(15)
O(2)#1-Tb(1)-N(5)#1	25.4(2)	O(2)#2-Tb(1)-N(5)#1	69.1(2)	O(2)-Tb(1)-N(5)#1	94.1(2)
O(1)-Tb(1)-N(5)#1	94.2(2)	O(1)#1-Tb(1)-N(5)#1	26.3(2)	O(1)#2-Tb(1)-N(5)#1	120.6(2)
N(2)-Tb(1)-N(5)#1	165.8(2)	N(2)#1-Tb(1)-N(5)#1	72.6(2)	N(2)#2-Tb(1)-N(5)#1	92.4(2)
N(1)-Tb(1)-N(5)#1	122.04(16)	O(2)#1-Tb(1)-N(5)#2	94.1(2)	O(2)#2-Tb(1)-N(5)#2	25.4(2)
O(2)-Tb(1)-N(5)#2	69.1(2)	O(1)-Tb(1)-N(5)#2	120.6(2)	O(1)#1-Tb(1)-N(5)#2	94.2(2)

O(1)#2-Tb(1)-N(5)#2	26.3(2)	N(2)-Tb(1)-N(5)#2	92.4(2)	N(2)#1-Tb(1)-N(5)#2	165.8(2)
N(2)#2-Tb(1)-N(5)#2	72.6(2)	N(1)-Tb(1)-N(5)#2	122.04(16)	N(5)#1-Tb(1)-N(5)#2	94.5(2)
O(1W)-Tb(2)-O(1W)#3	91.4(6)	O(1W)-Tb(2)-O(1W)#4	91.4(6)	O(1W)#3-Tb(2)-O(1W)#4	91.4(6)
O(1W)-Tb(2)-O(4)#4	83.4(4)	O(1W)#3-Tb(2)-O(4)#4	145.3(4)	O(1W)#4-Tb(2)-O(4)#4	122.9(4)
O(1W)-Tb(2)-O(4)	122.9(4)	O(1W)#3-Tb(2)-O(4)	83.4(4)	O(1W)-Tb(2)-O(4)#3	145.3(4)
O(1W)#4-Tb(2)-O(4)	145.3(4)	O(4)#4-Tb(2)-O(4)	71.2(3)	O(1W)#3-Tb(2)-O(4)#3	122.9(4)
O(1W)#4-Tb(2)-O(4)#3	83.4(4)	O(4)#4-Tb(2)-O(4)#3	71.2(3)	O(4)-Tb(2)-O(4)#3	71.2(3)
O(1W)-Tb(2)-O(5)	72.1(4)	O(1W)#3-Tb(2)-O(5)	74.1(4)	O(1W)#4-Tb(2)-O(5)	157.4(4)
O(4)#4-Tb(2)-O(5)	71.7(3)	O(4)-Tb(2)-O(5)	51.7(3)	O(4)#3-Tb(2)-O(5)	119.0(3)
O(1W)-Tb(2)-O(5)#4	74.1(4)	O(1W)#3-Tb(2)-O(5)#4	157.4(5)	O(1W)#4-Tb(2)-O(5)#4	72.1(4)
O(4)#4-Tb(2)-O(5)#4	51.7(3)	O(4)-Tb(2)-O(5)#4	119.0(3)	O(4)#3-Tb(2)-O(5)#4	71.7(3)
O(5)-Tb(2)-O(5)#4	116.00(13)	O(1W)-Tb(2)-O(5)#3	157.4(4)	O(1W)#3-Tb(2)-O(5)#3	72.1(4)
O(1W)#4-Tb(2)-O(5)#3	74.1(4)	O(4)#4-Tb(2)-O(5)#3	119.0(3)	O(4)-Tb(2)-O(5)#3	71.7(3)
O(4)#3-Tb(2)-O(5)#3	51.7(3)	O(5)-Tb(2)-O(5)#3	116.00(13)	O(5)#4-Tb(2)-O(5)#3	116.00(13)
O(1W)-Tb(2)-N(6)	97.0(4)	O(1W)#3-Tb(2)-N(6)	78.6(4)	O(1W)#4-Tb(2)-N(6)	167.0(4)
O(4)#4-Tb(2)-N(6)	68.2(3)	O(4)-Tb(2)-N(6)	26.2(3)	O(4)#3-Tb(2)-N(6)	95.1(3)
O(5)-Tb(2)-N(6)	25.6(3)	O(5)#4-Tb(2)-N(6)	119.7(3)	O(5)#3-Tb(2)-N(6)	94.8(3)
O(1W)-Tb(2)-N(6)#4	78.6(4)	O(1W)#3-Tb(2)-N(6)#4	167.0(4)	O(1W)#4-Tb(2)-N(6)#4	97.0(4)
O(4)#4-Tb(2)-N(6)#4	26.2(3)	O(4)-Tb(2)-N(6)#4	95.1(3)	O(4)#3-Tb(2)-N(6)#4	68.2(3)
O(5)-Tb(2)-N(6)#4	94.8(3)	O(5)#4-Tb(2)-N(6)#4	25.6(3)	O(5)#3-Tb(2)-N(6)#4	119.7(3)
N(6)-Tb(2)-N(6)#4	94.3(3)	O(1W)-Tb(2)-N(6)#3	167.0(4)	O(1W)#3-Tb(2)-N(6)#3	97.0(4)
O(1W)#4-Tb(2)-N(6)#3	78.6(4)	O(4)#4-Tb(2)-N(6)#3	95.1(3)	O(4)-Tb(2)-N(6)#3	68.2(3)
O(4)#3-Tb(2)-N(6)#3	26.2(3)	O(5)-Tb(2)-N(6)#3	119.7(3)	O(5)#4-Tb(2)-N(6)#3	94.8(3)
O(5)#3-Tb(2)-N(6)#3	25.6(3)	N(6)-Tb(2)-N(6)#3	94.3(3)	N(6)#4-Tb(2)-N(6)#3	94.3(3)

^a Symmetry code for: **4**: #1 -y+1,x-y,z, #2 -x+y+1,-x+1,z, #3 y,x,z-1/2, #4 -x+y,-x,z, #5 -y,x-y,z; **5**: #1 -y+2,x-y+1,z, #2 -x+y+1,-x+2,z, #3 -y+2,x-y,z, #4 -x+y+2,-x+2,z; **6**: #1 -y,x-y,z, #2 -x+y,-x,z, #3 -y+1,x-y+1,z, #4 -x+y,-x+1,z