

**Table S1.** Crystal Data and Structure Refinement for compounds **1a** and **3dH<sub>2</sub>**.

Compound	<b>1a</b>	<b>3dH<sub>2</sub></b>
Empirical formula	C <sub>31</sub> H <sub>42</sub> Br N <sub>4</sub> Nb	C <sub>20</sub> H <sub>36</sub> N <sub>6</sub>
Temperature (K)	260(2)	300(2)
Wavelength (Å)	0.71073	0.71073
Cryst. Syst.	Monoclinic	Monoclinic
Space group	<i>P</i> 2 <sub>1</sub> / <i>c</i>	<i>P</i> 2 <sub>1</sub> / <i>c</i>
<i>a</i> (Å)	11.992(1)	9.648(1)
<i>b</i> (Å)	18.927(2)	16.467(1)
<i>c</i> (Å)	15.034(2)	8.442(1)
$\alpha$ (deg)	90	90
$\beta$ (deg)	112.579(1)	98.015(5)
$\gamma$ (deg)	90	90
Volume (Å <sup>3</sup> )	3150.7(7)	1328.0(2)
<i>Z</i>	4	2
Density (calcd) (g/cm <sup>3</sup> )	1.357	0.902
Abs. coeff (mm <sup>-1</sup> )	1.675	0.056
<i>F</i> (000)	1328	396
Crystal size (mm <sup>3</sup> )	0.35 x 0.17 x 0.14	0.17 x 0.14 x 0.10
Index ranges	-13 ≤ <i>h</i> ≤ 14 -22 ≤ <i>k</i> ≤ 22 -17 ≤ <i>l</i> ≤ 12	-11 ≤ <i>h</i> ≤ 11 -19 ≤ <i>k</i> ≤ 18 -10 ≤ <i>l</i> ≤ 10
Reflections collected	20346	11614
Independent reflections	5509 [ <i>R</i> (int) = 0.0913]	2354 [ <i>R</i> (int) = 0.0651]
Observed reflections	3840	1244
Data/restraints/params.	5509 / 0 / 345	2354 / 1 / 126
Goodness-of-fit on <i>F</i> <sup>2</sup>	0.873	0.921
Extinction coef		0.054(9)
Final <i>R</i> indices	<i>R</i> 1 = 0.0348 w <i>R</i> 2 = 0.0672	<i>R</i> 1 = 0.0678 w <i>R</i> 2 = 0.1809
Largest diff peak hole (eÅ <sup>-3</sup> )	0.332 and -0.529	0.176 and -0.213