Supporting information for

Lithium Salt of 2,5-Bis(trimethylsilyl)Stannolyl Anion: Synthesis, Structure, and Nonaromatic Character

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1. Packing structure of **2**

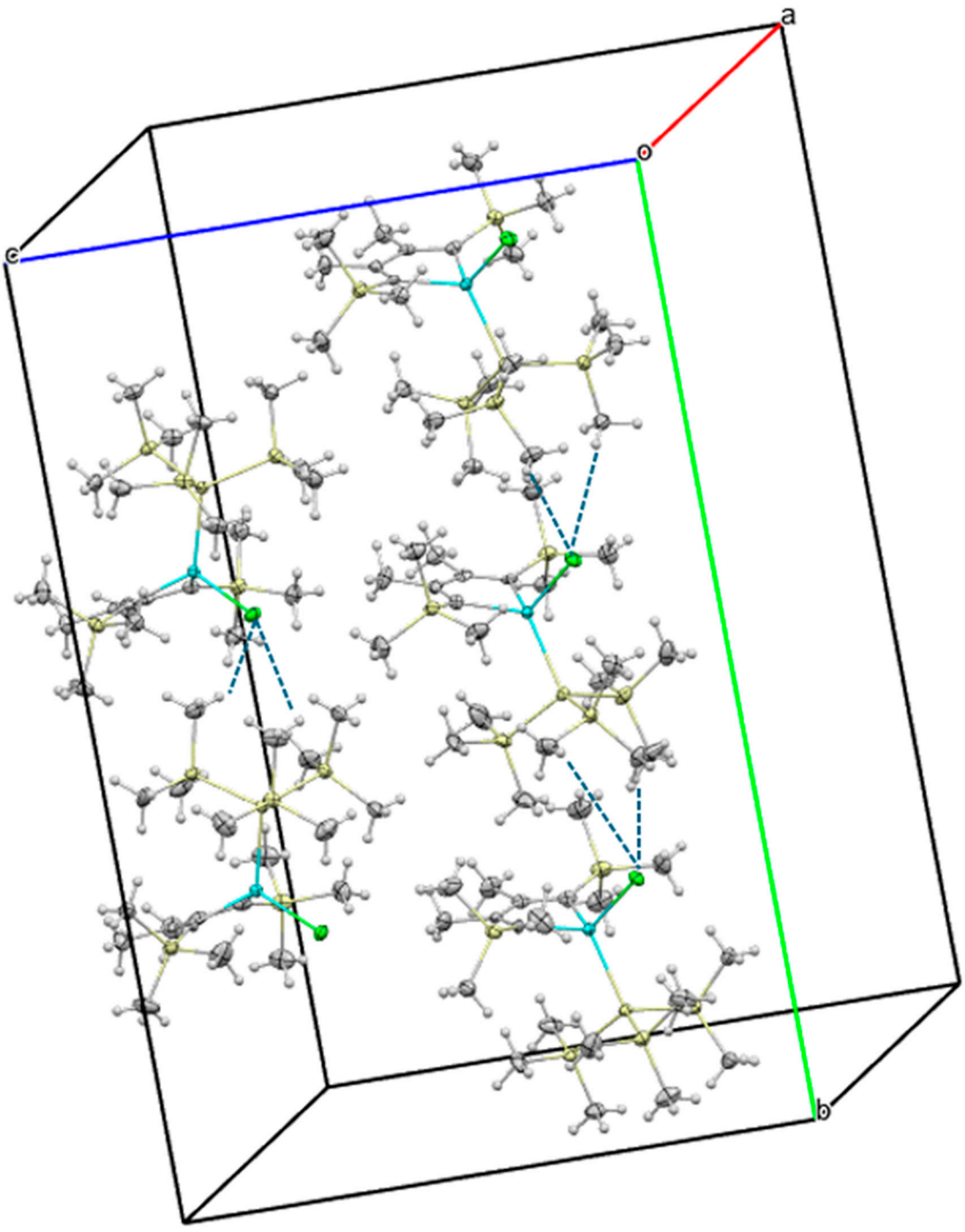

Figure S1. Packing structure of **2**. CH···Cl bonds are shown by blue broken lines.

2. X-ray crystallographic data for **2** and **3·(thf)$_3$**

Table S1. Crystallographic data for **2** and **3·(thf)$_3$.**

	2	**3·(thf)$_3$**
CCDC	2337714	2337715
formula	$C_{21}H_{51}ClSi_6Sn$	$C_{33}H_{75}Li\ O_3Si_6Sn$
Mw	626.29	814.10
crystal dimension	0.25 × 0.15 × 0.15	0.14 × 0.13 × 0.10
crystal system	monoclinic	monoclinic
space group	$P2_1/c$	$P2_1/n$
a [Å]	18.826(2)	13.3363(11)
b [Å]	28.856(3)	19.6417(18)
c [Å]	18.810(2)	17.7954(16)
α [deg]	90	90
β [deg]	97.7770(10)	91.4530(10)
γ [deg]	90	90
V [Å^3]	10124.5(19)	4660.0(7)
Z	12	4
ρ_{calcd} [g cm^{-3}]	1.233	1.16
F(000)	3936	1736
μ [cm^{-1}]	10.57	7.29
transmission factors range	0.947 – 0.9694	0.8623 – 1
index range	-24 ≤ h ≤ 24	-17 ≤ h ≤ 13
	-35 ≤ k ≤ 37	-24 ≤ k ≤ 25
	-24 ≤ l ≤ 19	-23 ≤ l ≤ 23
no. reflections	82916	37674
unique (R_{int})	23037 (0.0729)	10667 (0.0437)
$I > 2\sigma$(I)	18698	8924
no. parameters	1243	452
R_1 ($I > 2\sigma$(I))[a]	0.0619	0.0437
wR_2 (all data)[b]	0.1272	0.0952
GOF [c]	1.121	1.103
max diff peak / hole [e Å^{-3}]	1.073/−1.01	1.155/−0.849

[a] $R1 = \Sigma||F_o| - |F_c||/\Sigma|F_o|$. [b] $wR2 = [\Sigma\{w(F_o^2 - F_c^2)^2\}/\Sigma w(F_o^2)^2]^{1/2}$, w = 1/[$^2F_o^2 + (aP)^2 + bP$] (a and b are constants suggested by the refinement program; P = [max(F_o^2,0) + 2F_c^2]/3). [c] GOF = $[\Sigma w(F_o^2 - F_c^2)^2/(N_{obs} - N_{params})]^{1/2}$.

3. NMR spectra of **1**, **2**, and **3·(thf)**

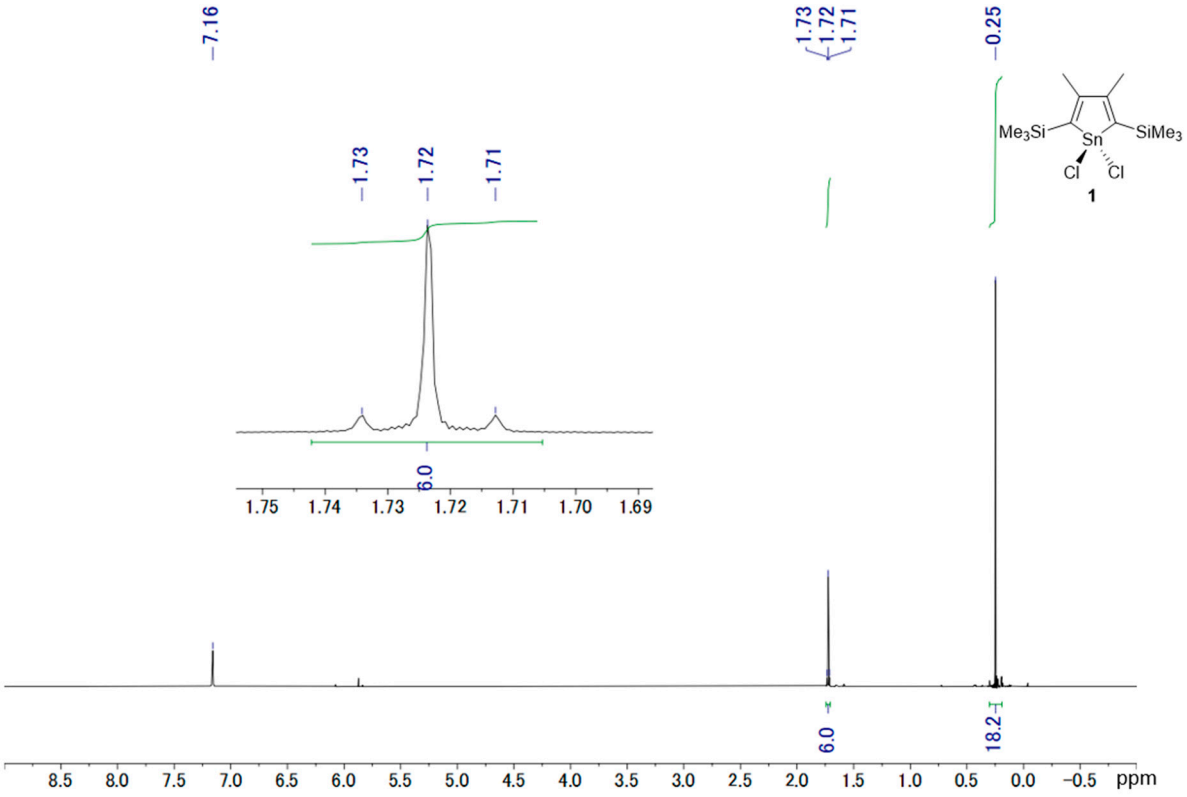

Figure S2. ^{1}H NMR spectrum of **1** (500 MHz, C_6D_6).

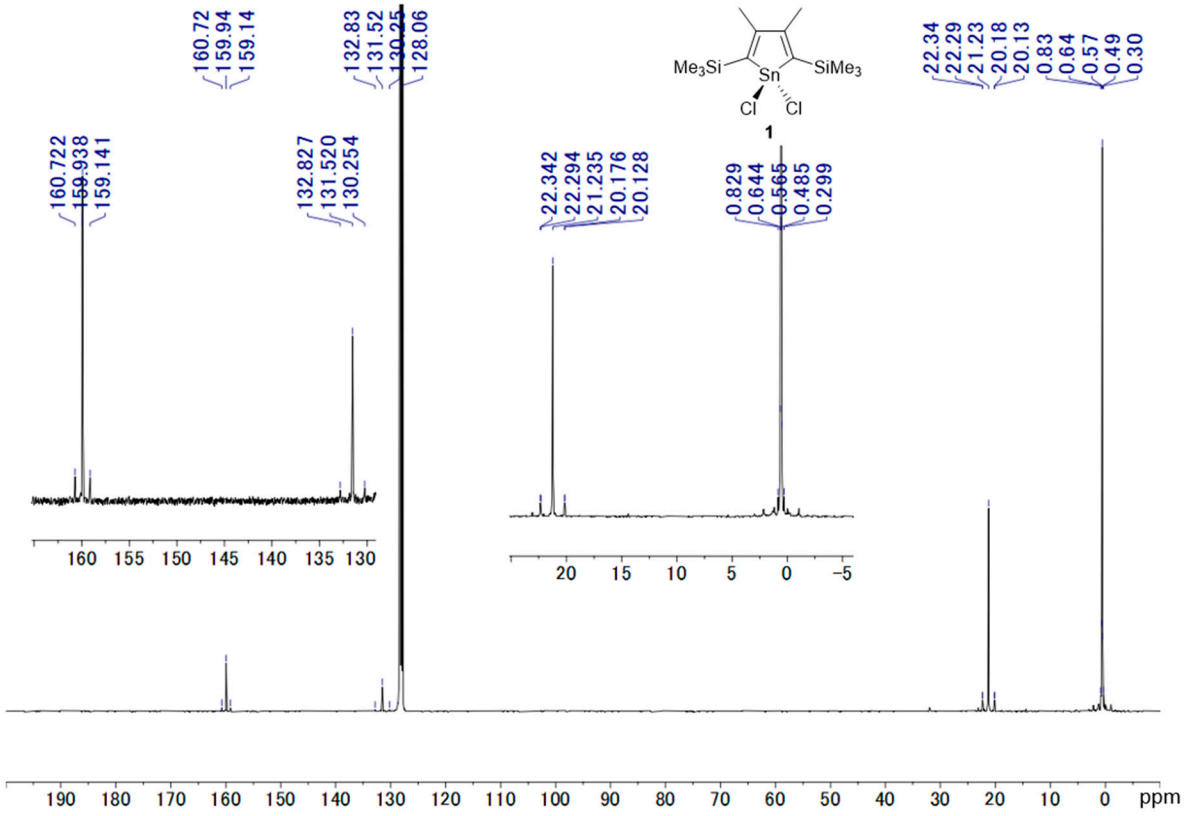

Figure S3. ^{13}C{^{1}H} NMR spectrum of **1** (100 MHz, C_6D_6).

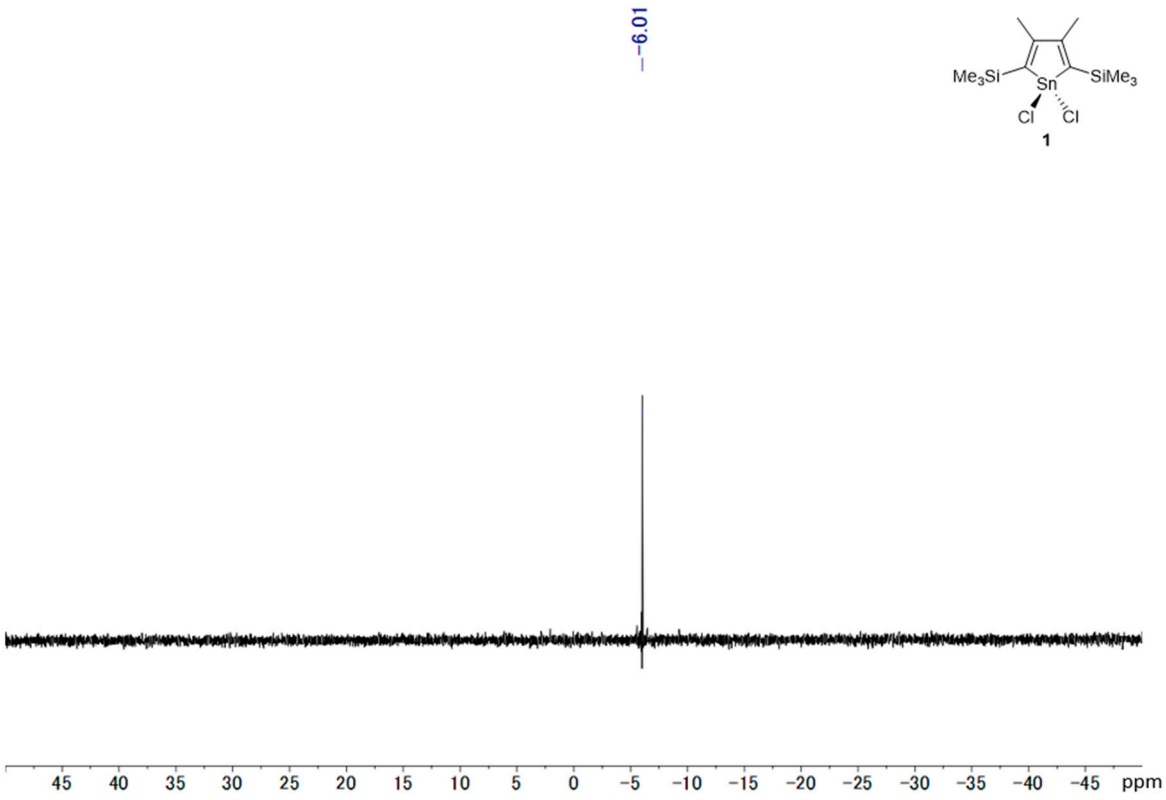

Figure S4. $^{29}Si\{^{1}H\}$ NMR spectrum of **1** (99 MHz, $CDCl_3$).

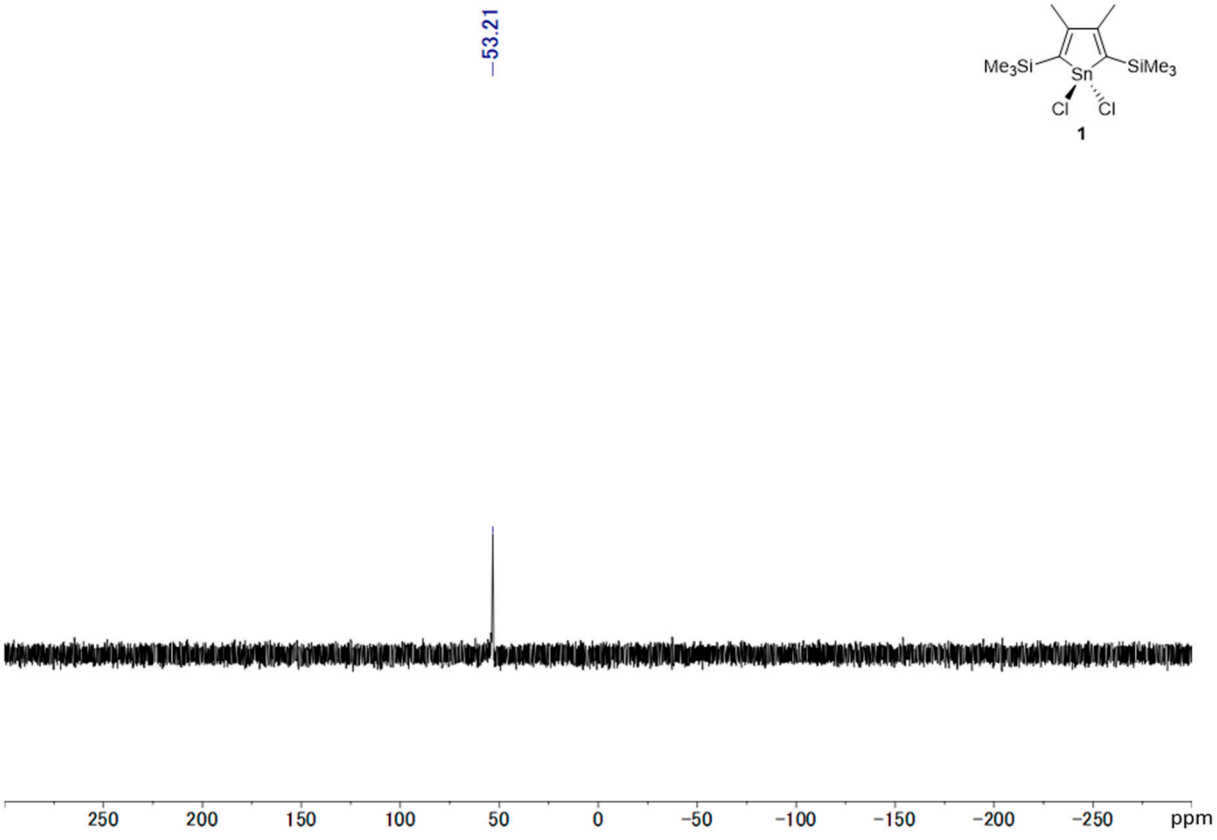

Figure S5. $^{119}Sn\{^{1}H\}$ NMR spectrum of **1** (186 MHz, C_6D_6).

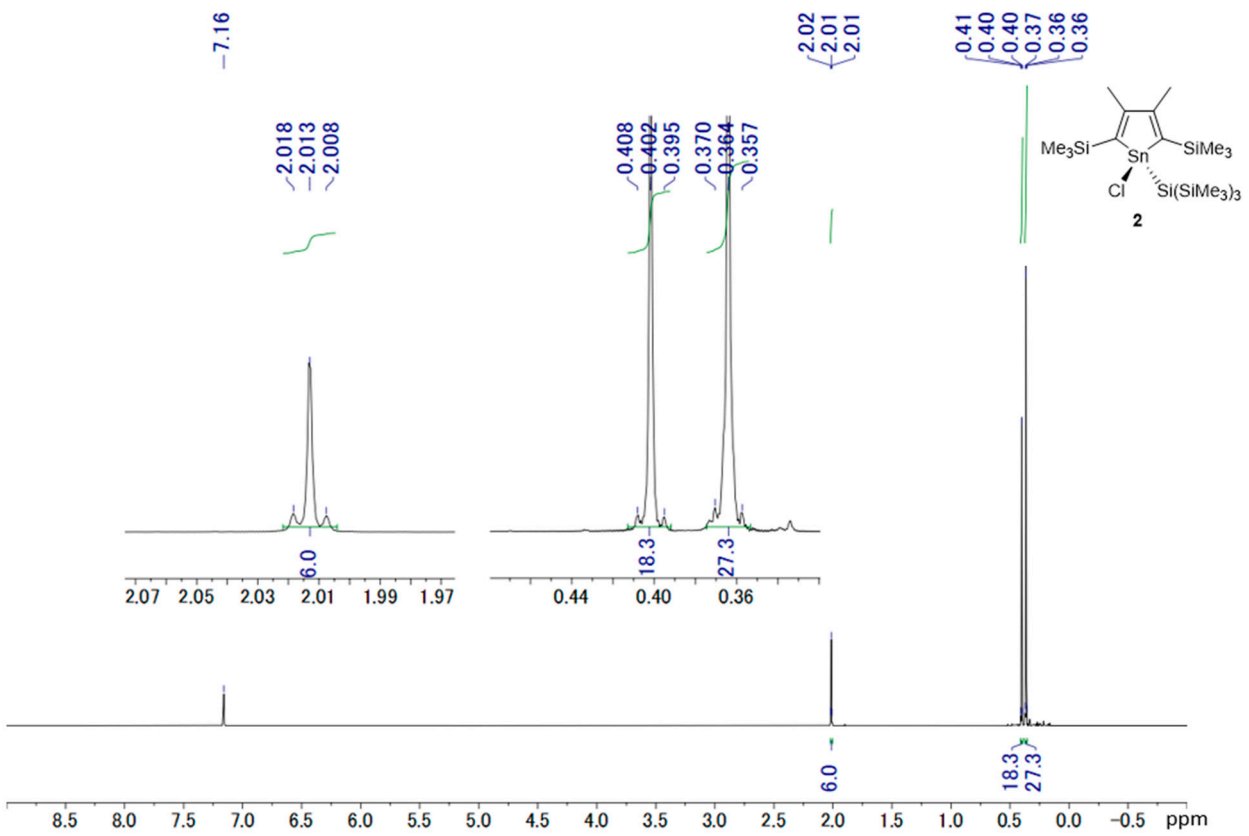

Figure S6. ^{1}H NMR spectrum of **2** (500 MHz, C_6D_6).

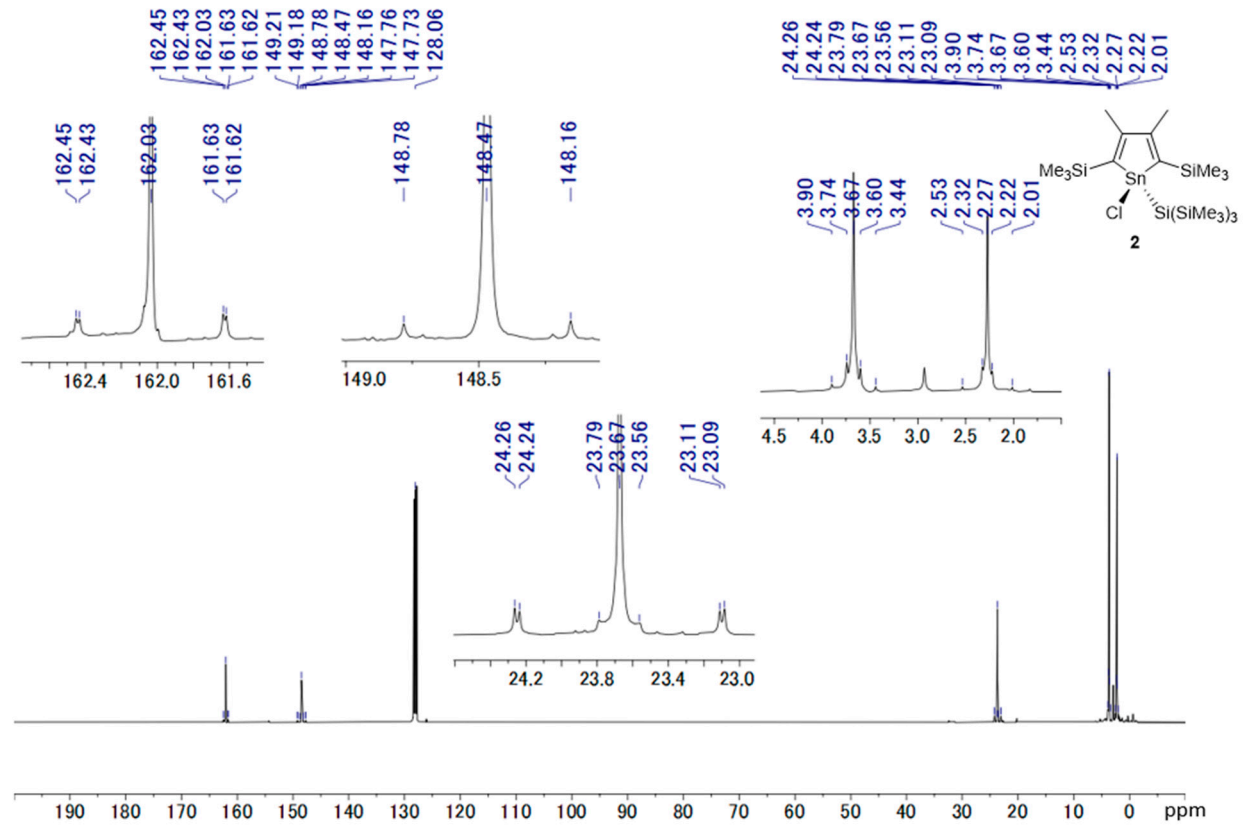

Figure S7. $^{13}C\{^{1}H\}$ NMR spectrum of **2** (100 MHz, C_6D_6).

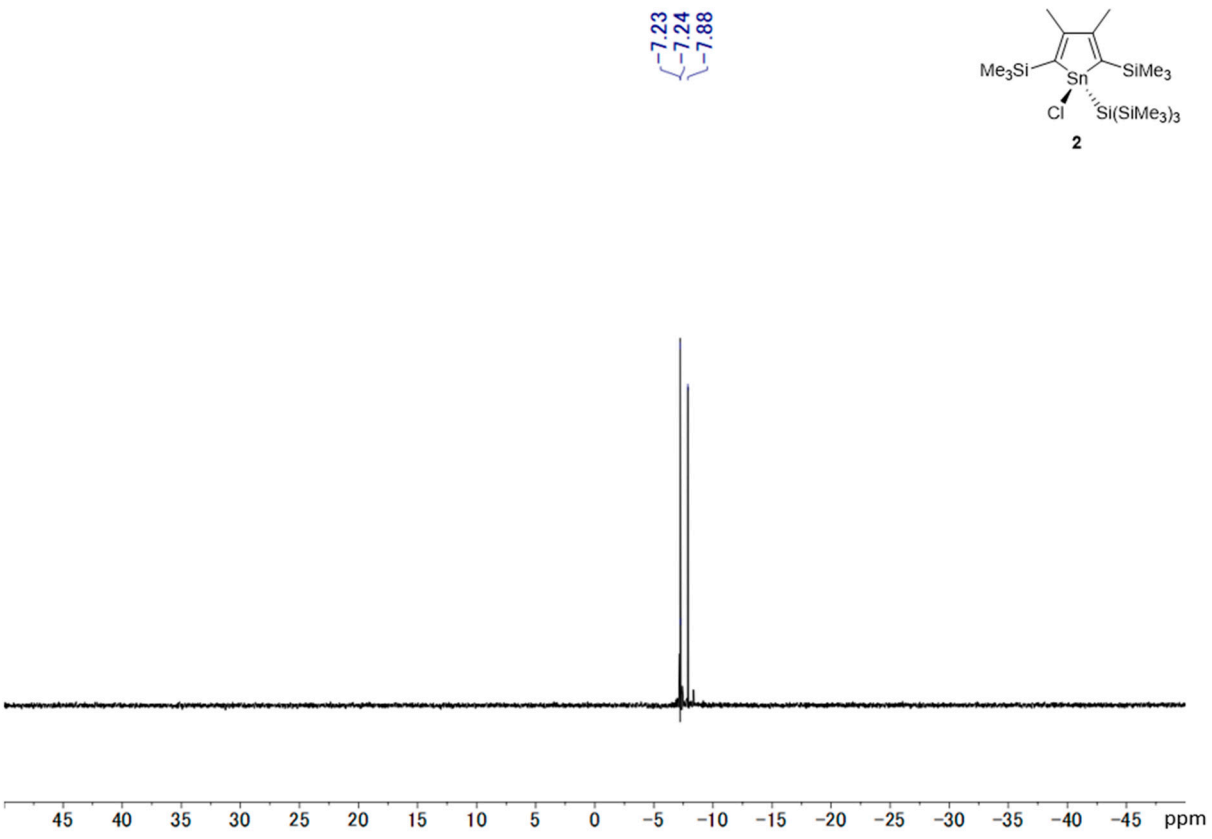

Figure S8. $^{29}Si\{^{1}H\}$ NMR spectrum of **2** (99 MHz, $CDCl_3$).

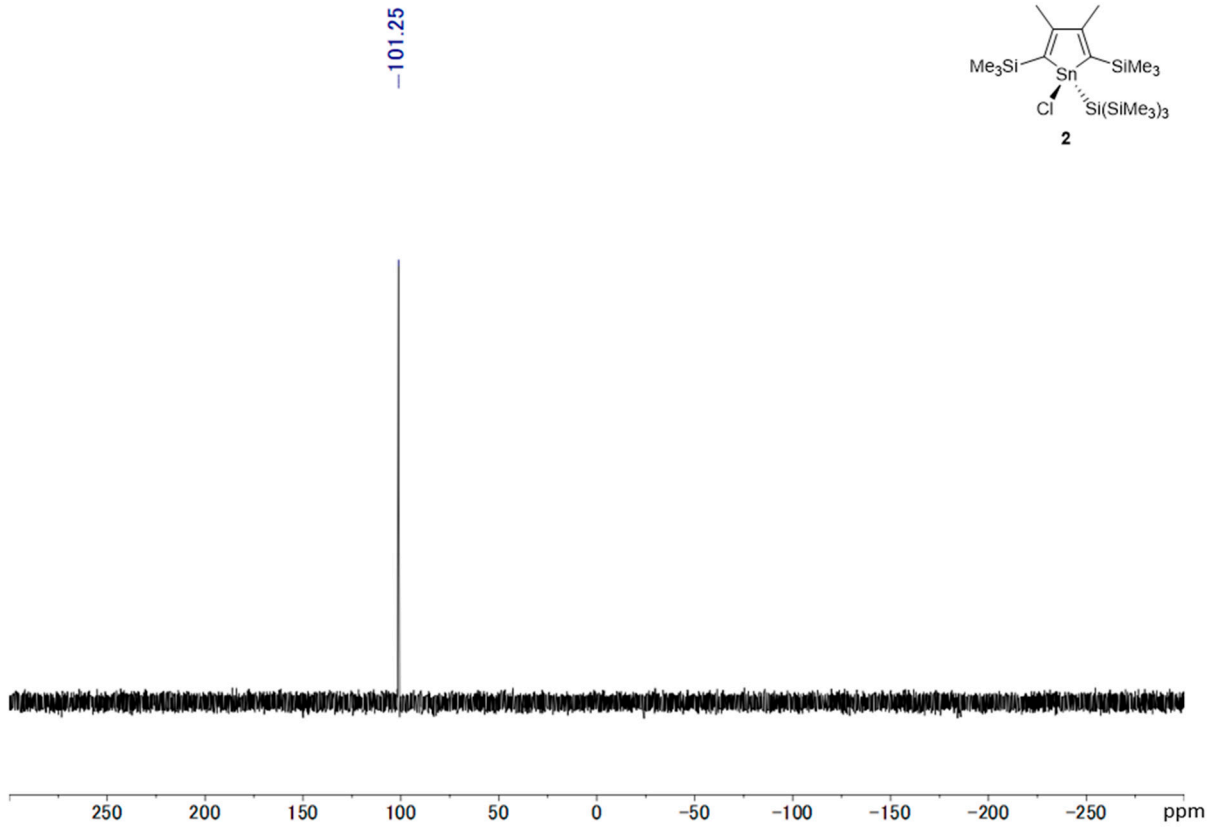

Figure S9. $^{119}Sn\{^{1}H\}$ NMR spectrum of **2** (186 MHz, C_6D_6).

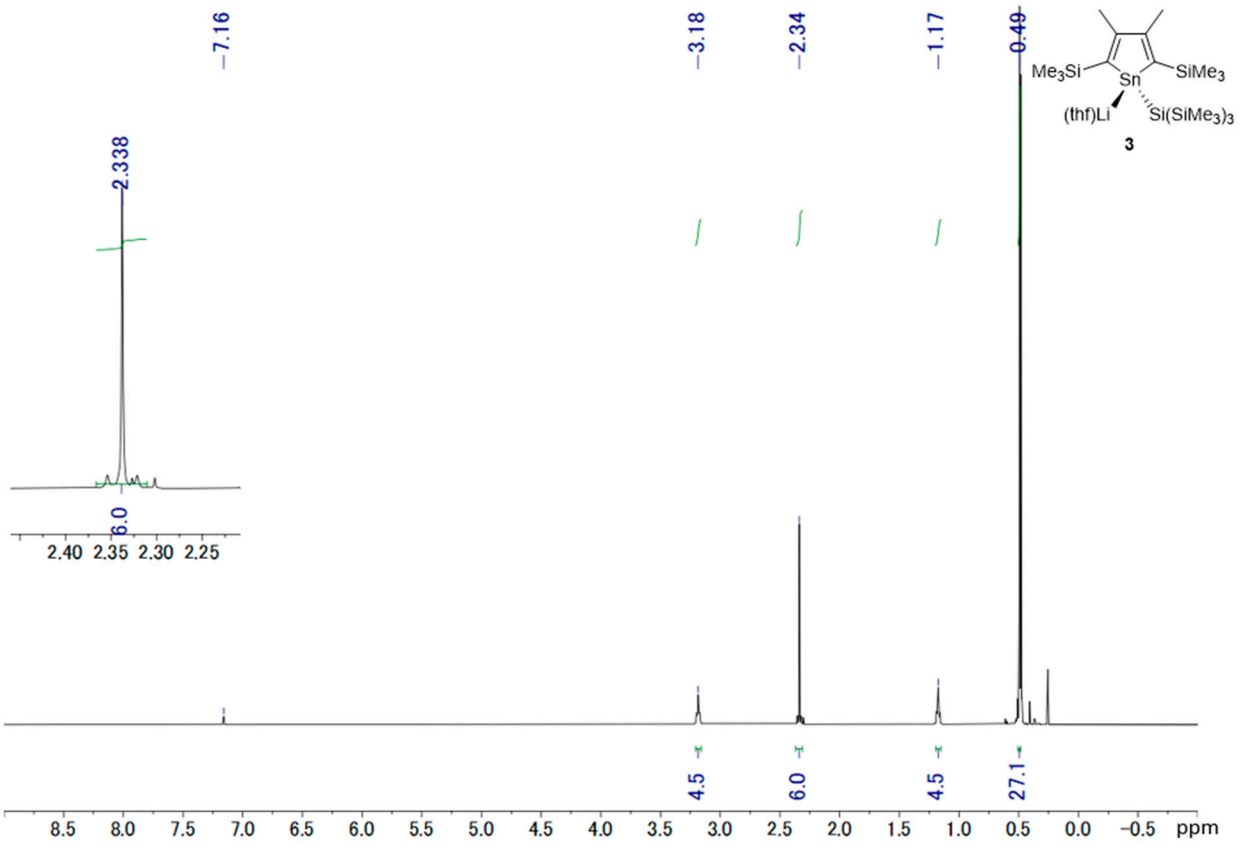

Figure S10. ^{1}H NMR spectrum of **3·thf** (500 MHz, C_6D_6).

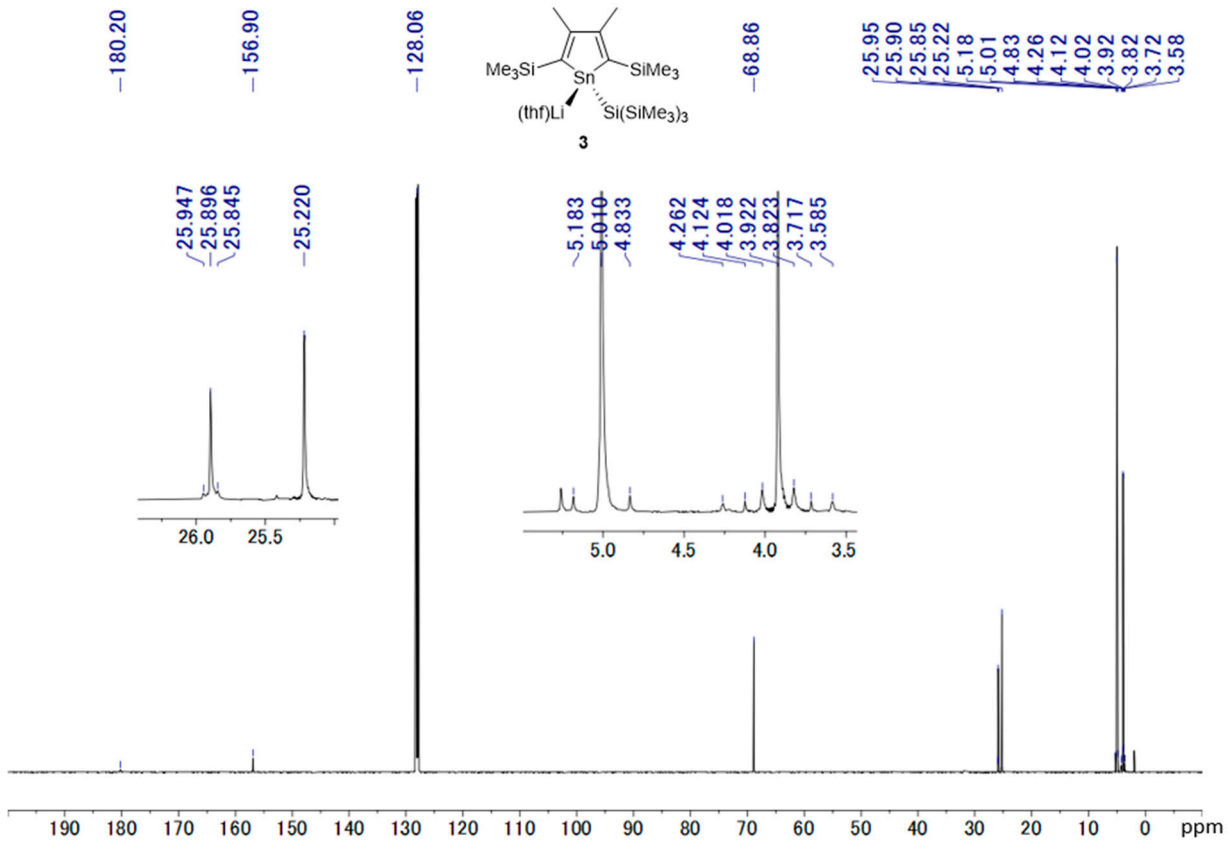

Figure S11. ^{13}C{^{1}H} NMR spectrum of **3·thf** (125 MHz, C_6D_6).

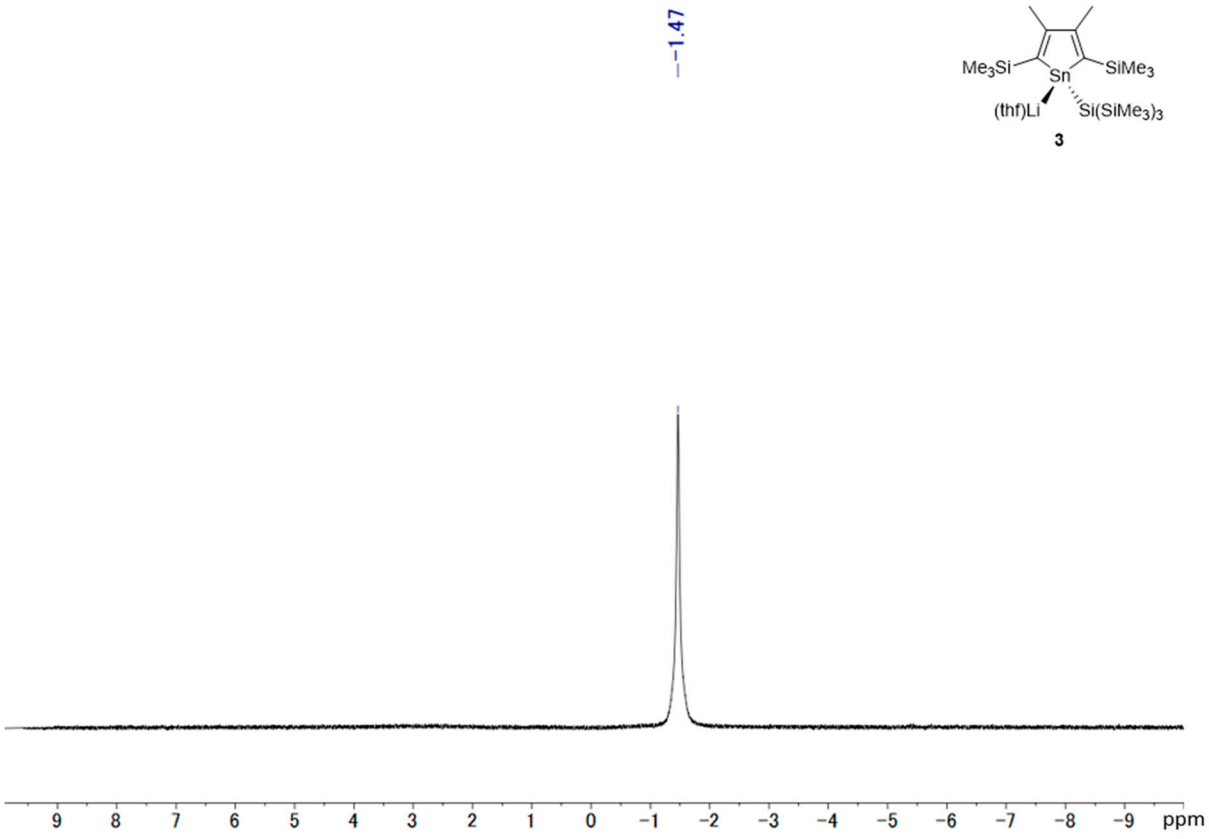

Figure S12. $^{7}Li\{^{1}H\}$ NMR spectrum of **3·thf** (194 MHz, C_6D_6).

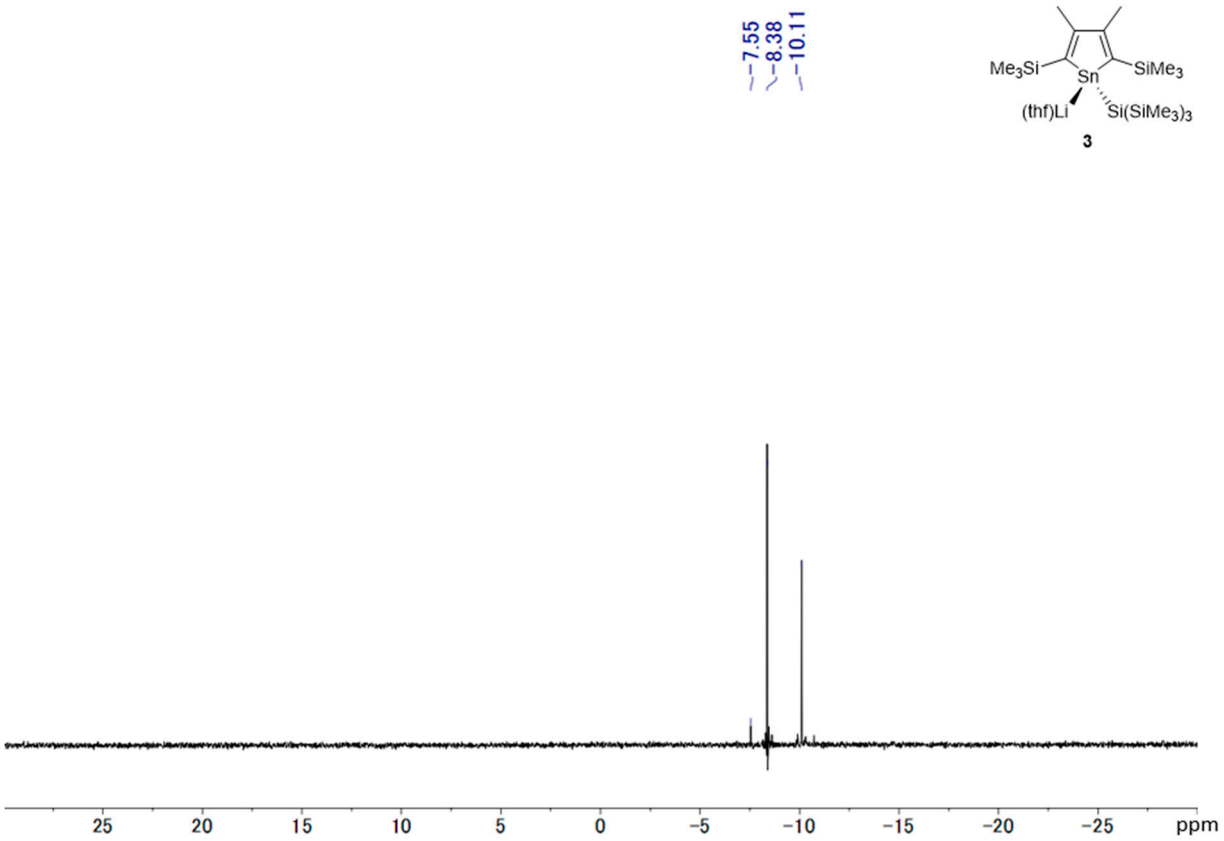

Figure S13. $^{29}Si\{^{1}H\}$ NMR spectrum of **3·thf** (99 MHz, C_6D_6).

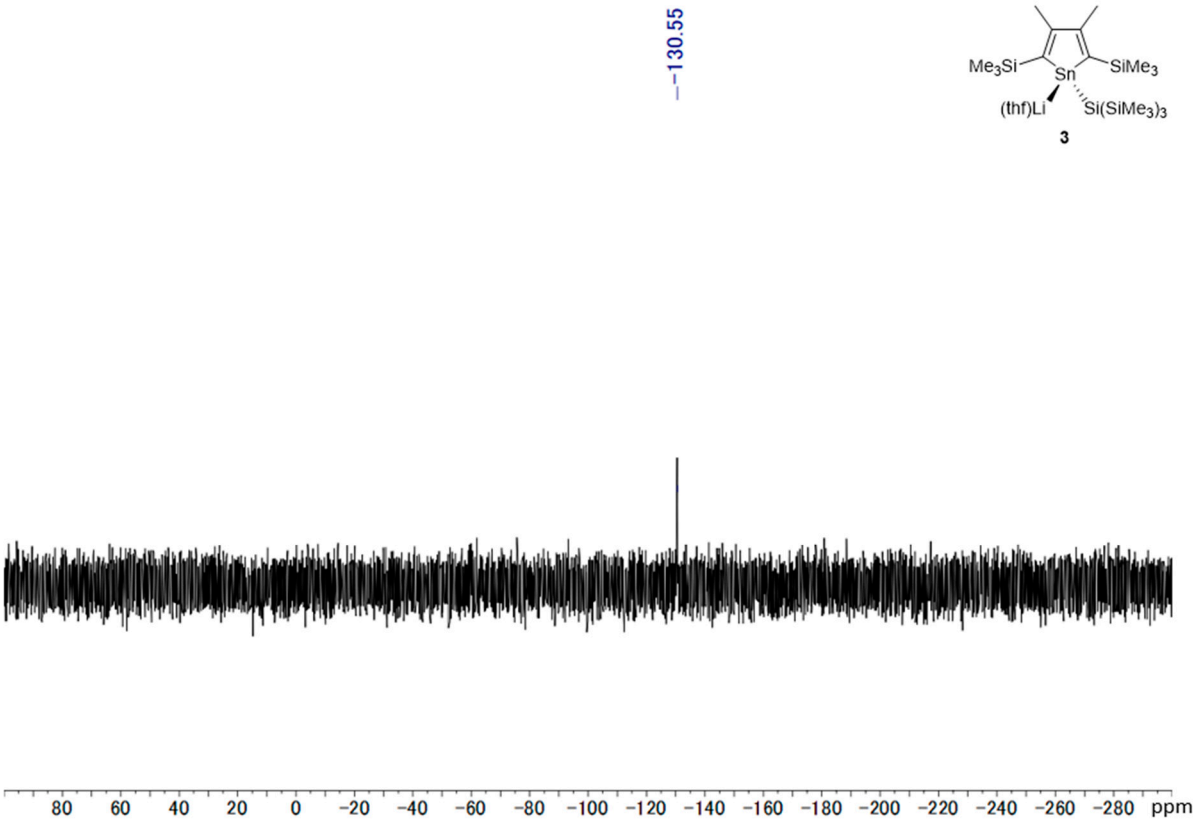

Figure S14. $^{119}Sn\{^{1}H\}$ NMR spectrum of **3·thf** (186 MHz, C_6D_6).