

Supplementary Material

Reactivity of β -diketiminato magnesium alkyl complexes: heterocumulenes and phosphanes

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Figure S1. ^1H NMR spectrum of $[(\text{BDI})\text{Mg}(\text{MeC}\{\text{NCy}\}_2)]$ (**3**)

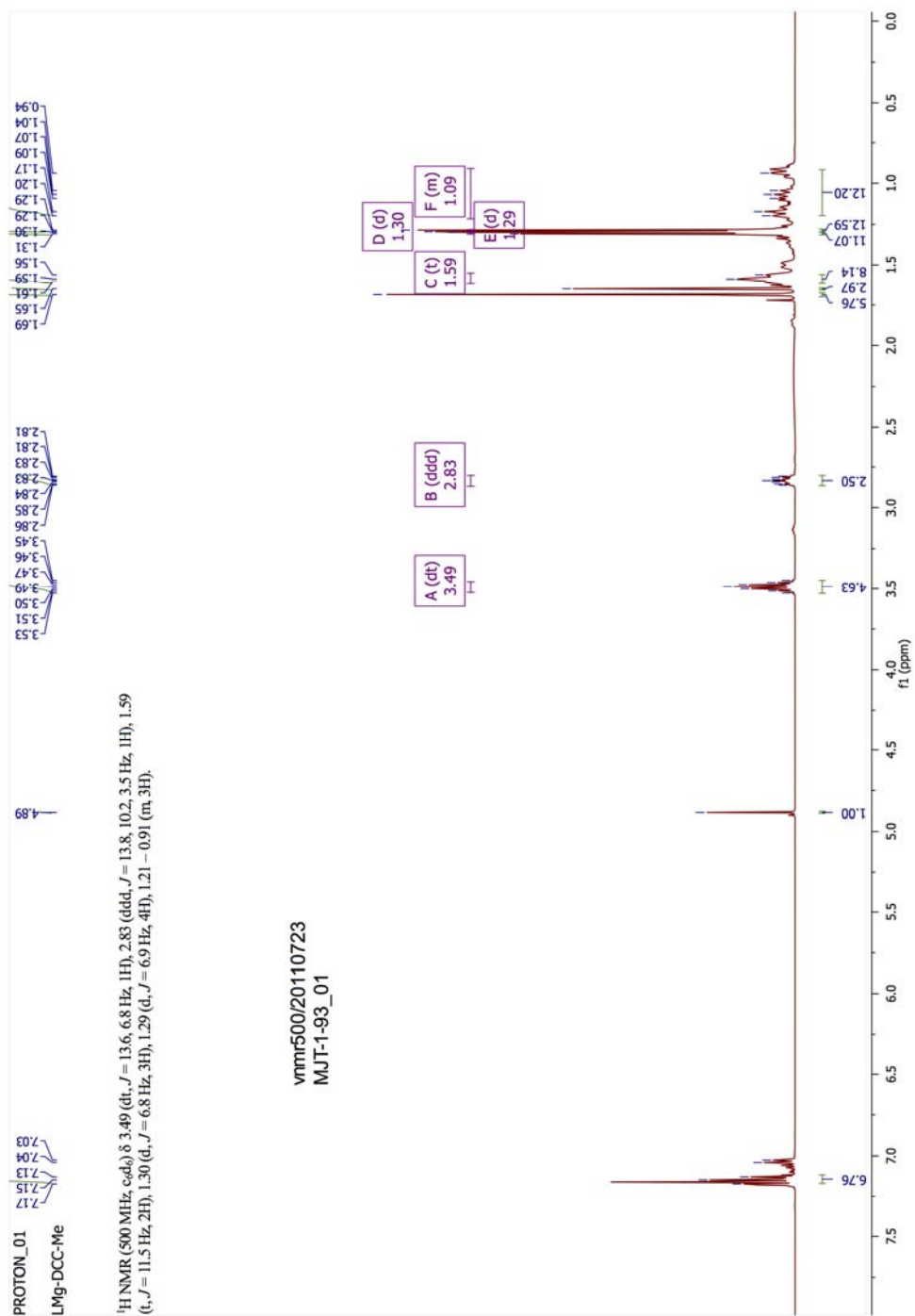


Figure S2. ^{13}C NMR spectrum of $[(\text{BDI})\text{Mg}(\text{MeC}\{\text{NCy}\}_2)]$ (**3**).

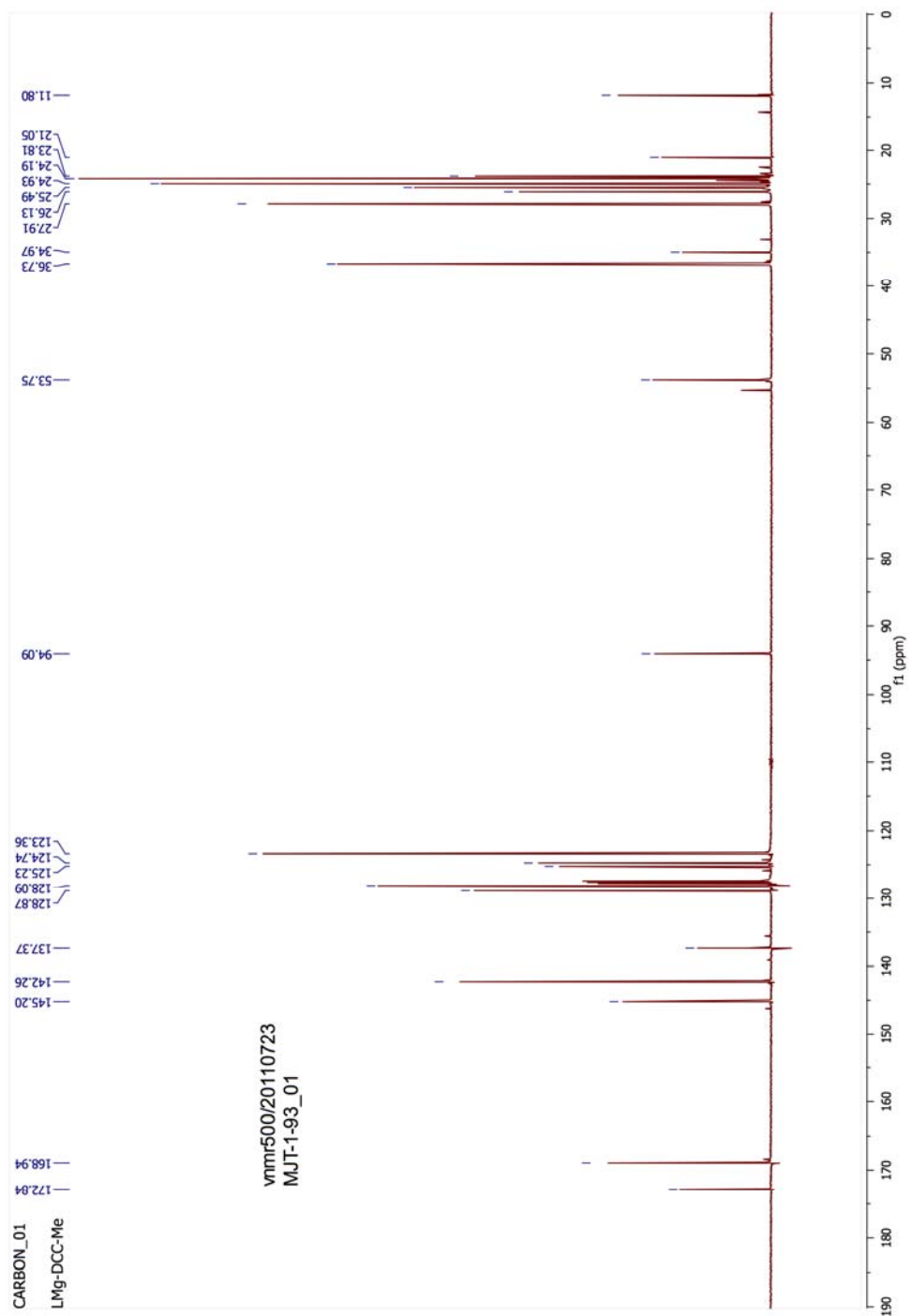


Figure S3. Thermal ellipsoid plot of [(BDI)Mg(MeC{NCy}₂)] (3).

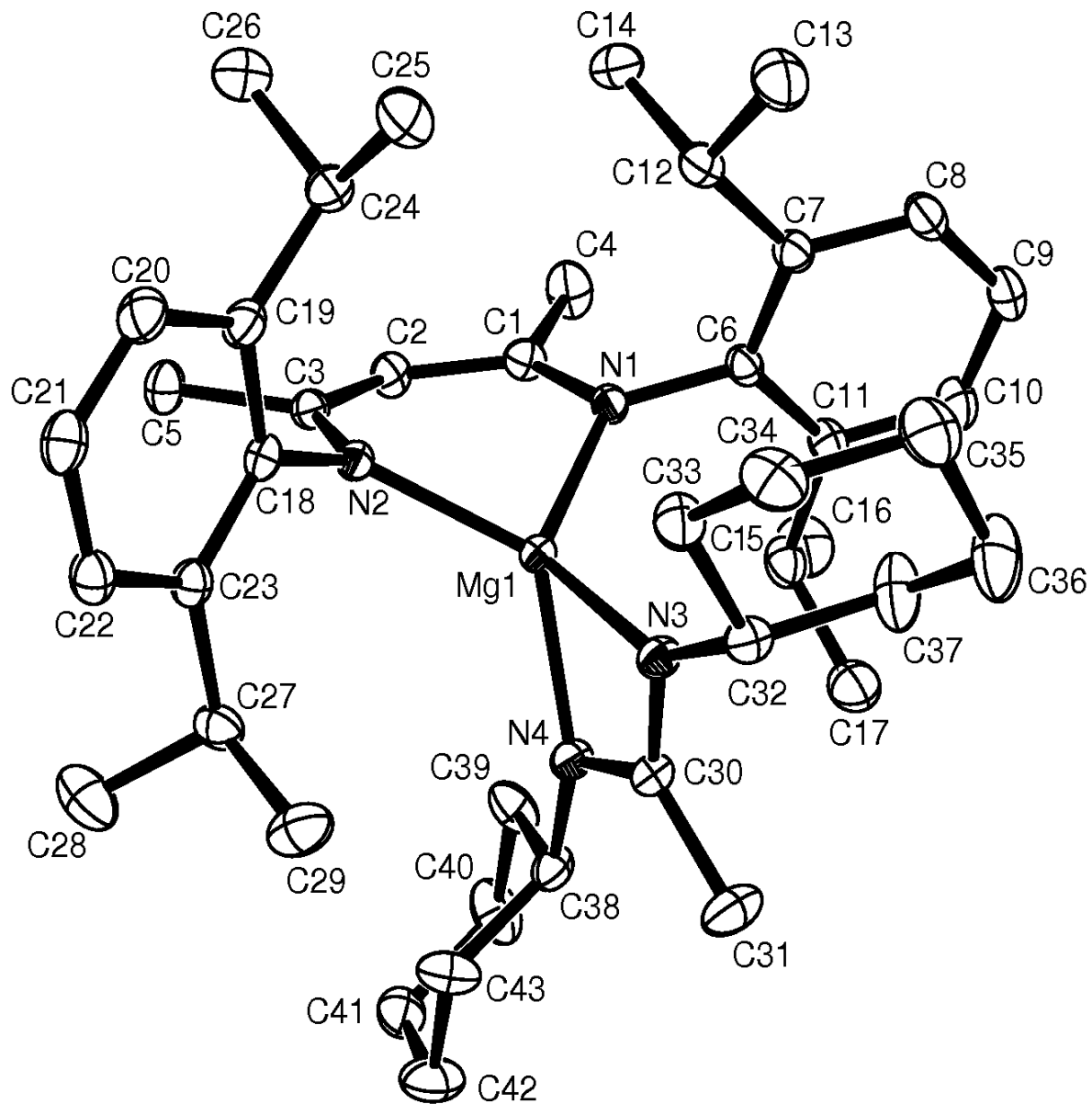


Figure S4. ^1H NMR spectrum of $[(\text{BDI})\text{Mg}(\text{BnC}\{\text{NCy}\}_2)]$ (**4**).

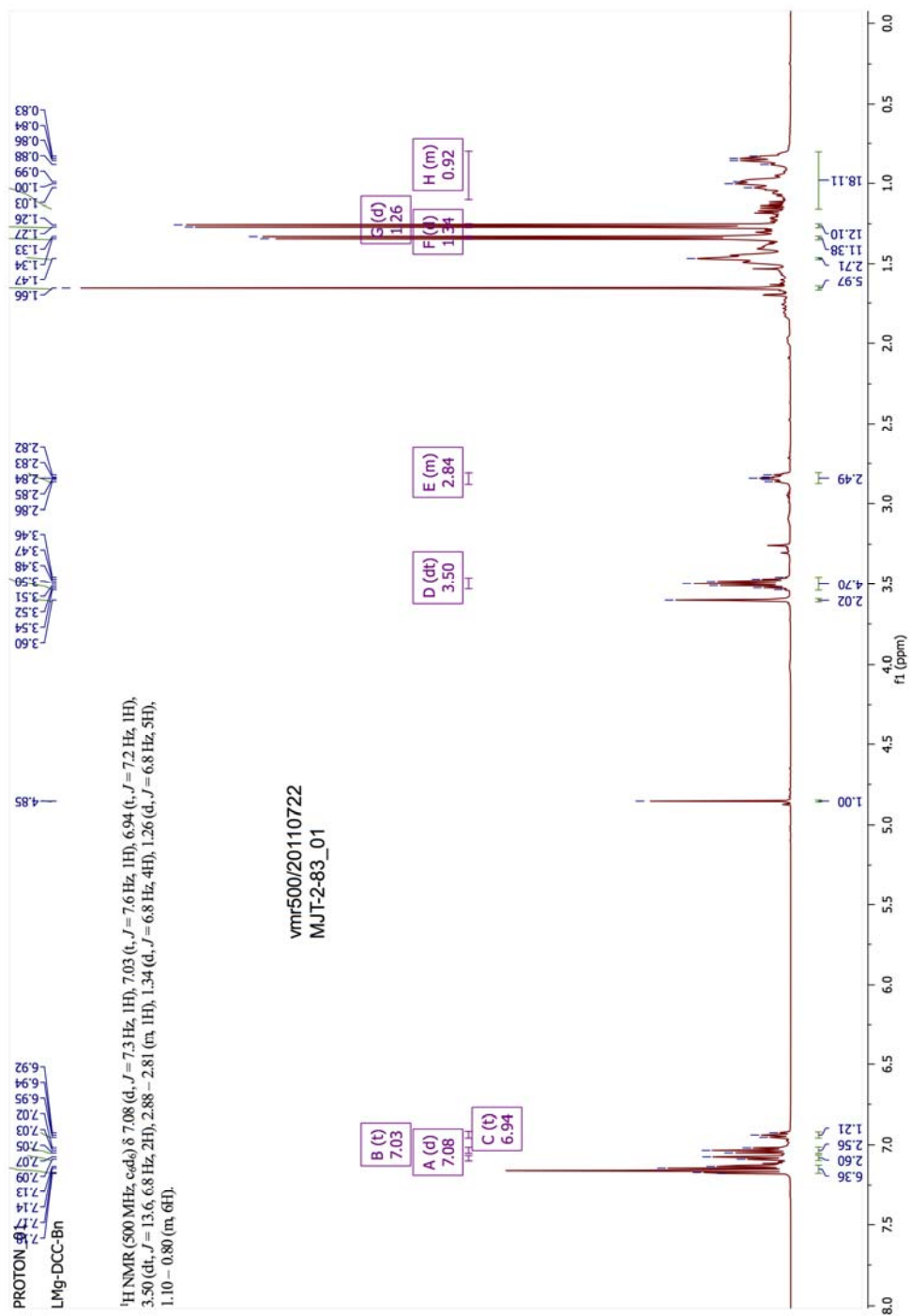


Figure S5. ^{13}C NMR spectrum of $[(\text{BDI})\text{Mg}(\text{BnC}\{\text{NCy}\}_2)]$ (**4**).

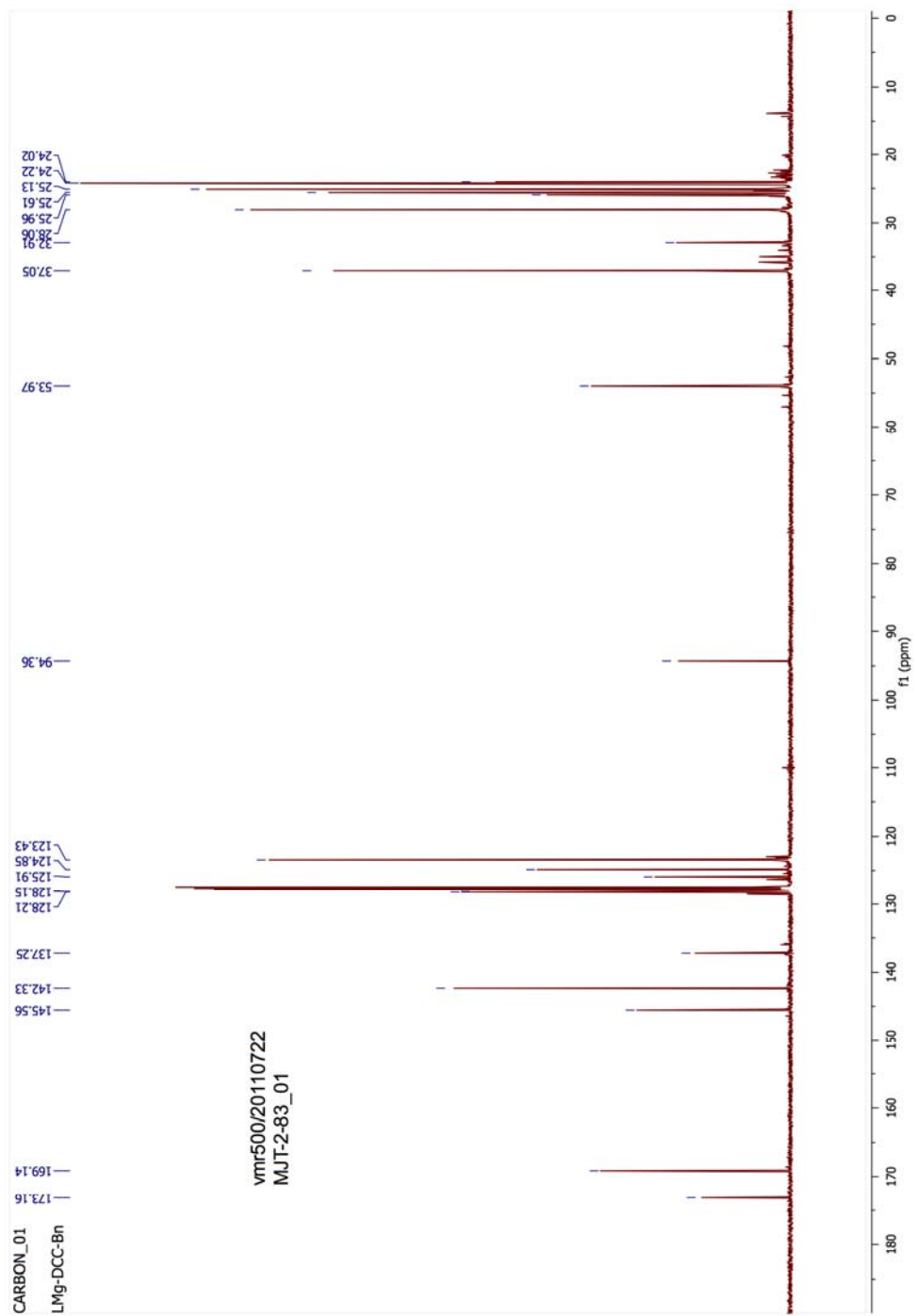


Figure S6. ^1H NMR spectrum of $[(\text{BDI})\text{Mg}(\text{PPh}_2)(\text{THF})]$ (**5**).

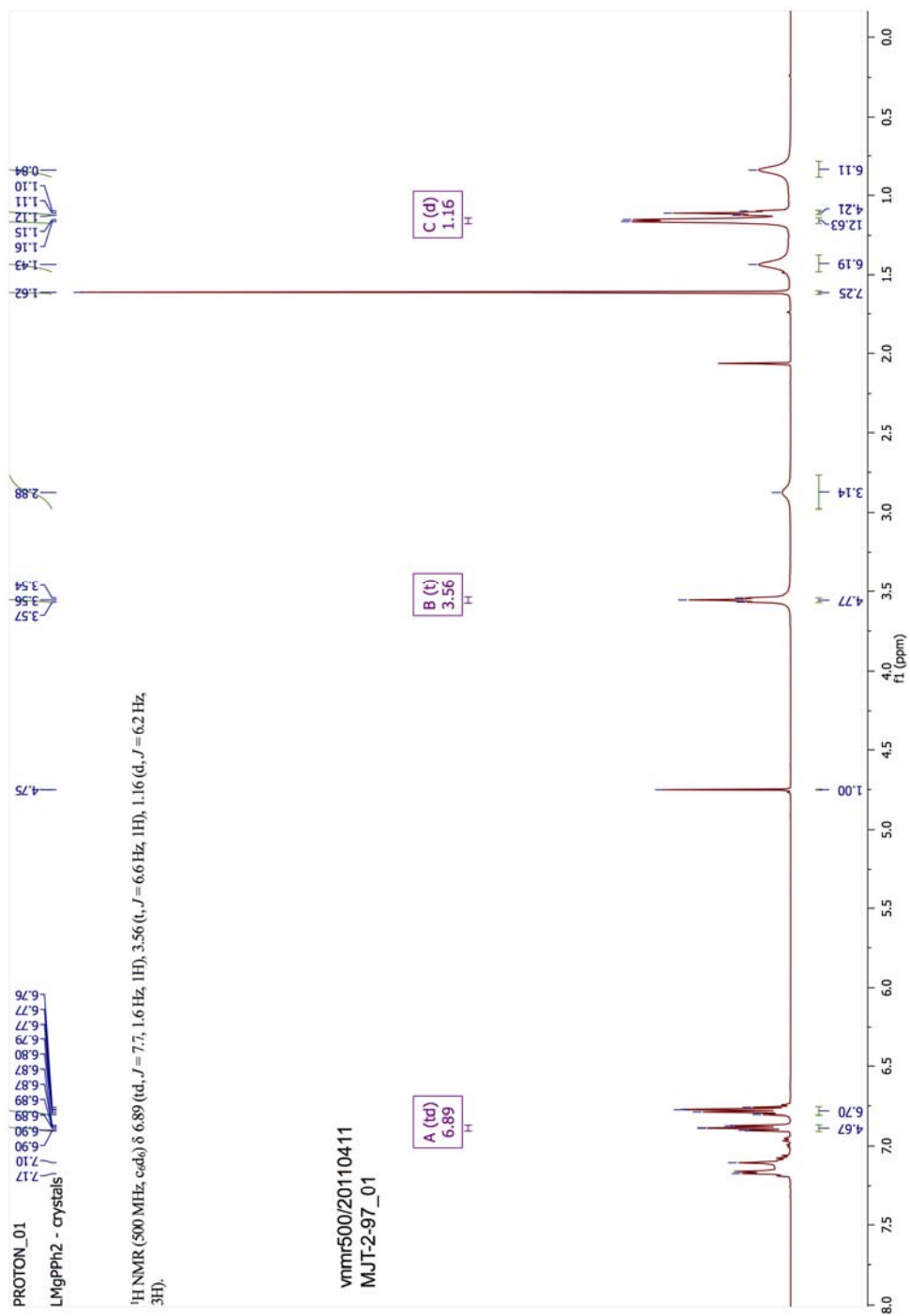


Figure S7. ^{13}C NMR spectrum of $[(\text{BDI})\text{Mg}(\text{PPh}_2)(\text{THF})]$ (**5**).

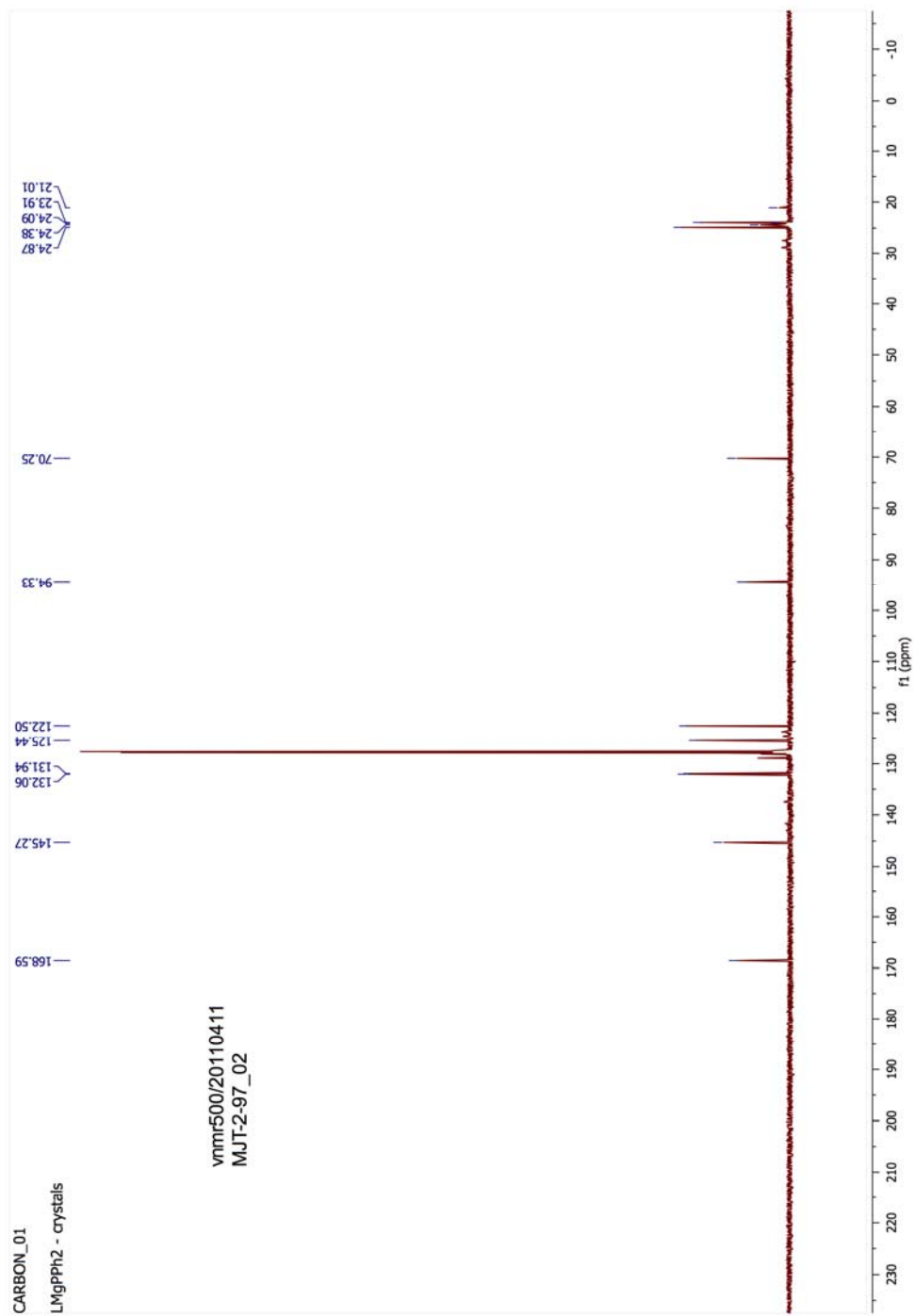


Figure S8. Thermal ellipsoid plot of [(BDI)Mg(PPh₂)(THF)] (**5**).

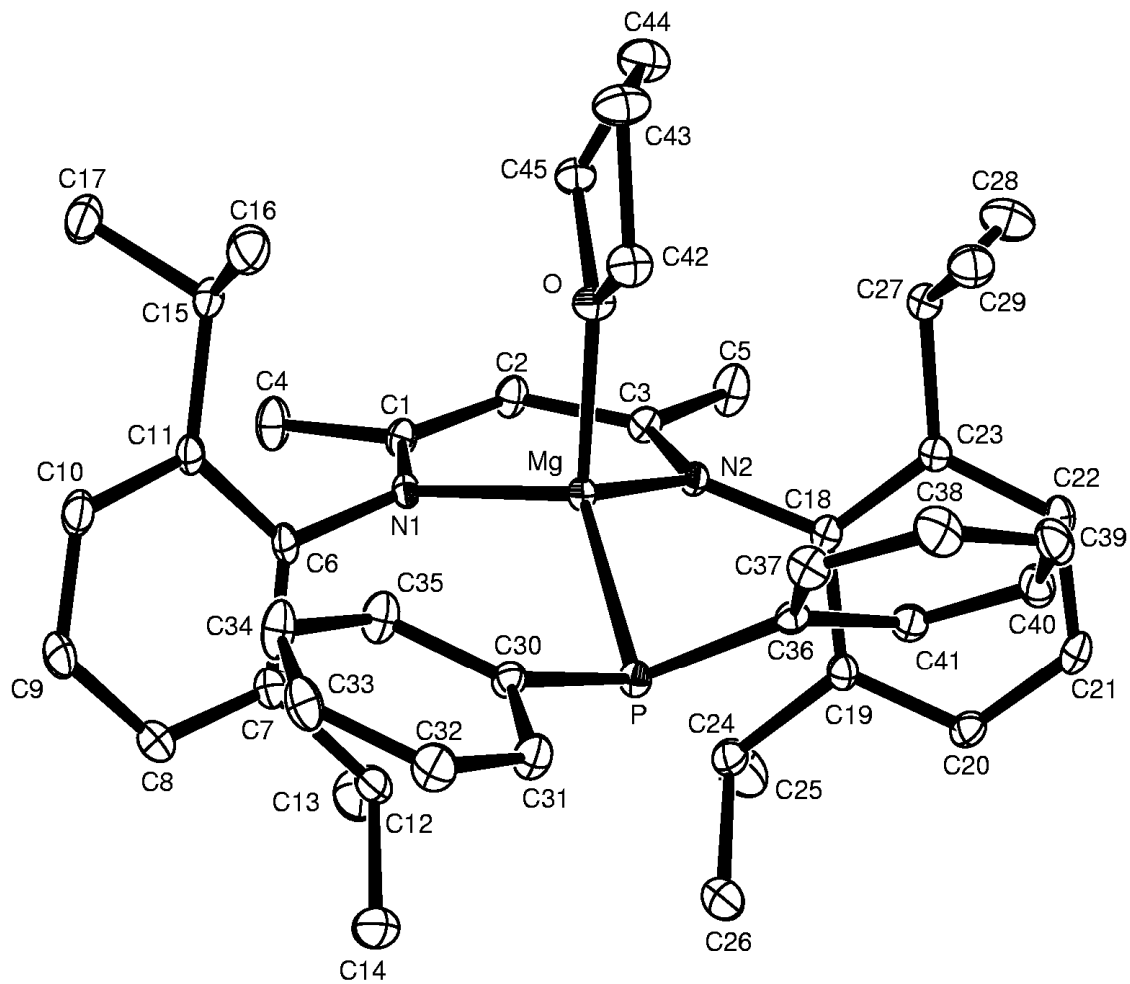


Figure S9. ^1H NMR spectrum of $[(\text{BDI})\text{Mg}(\text{PCy}_2)(\text{THF})]$ (**6**).

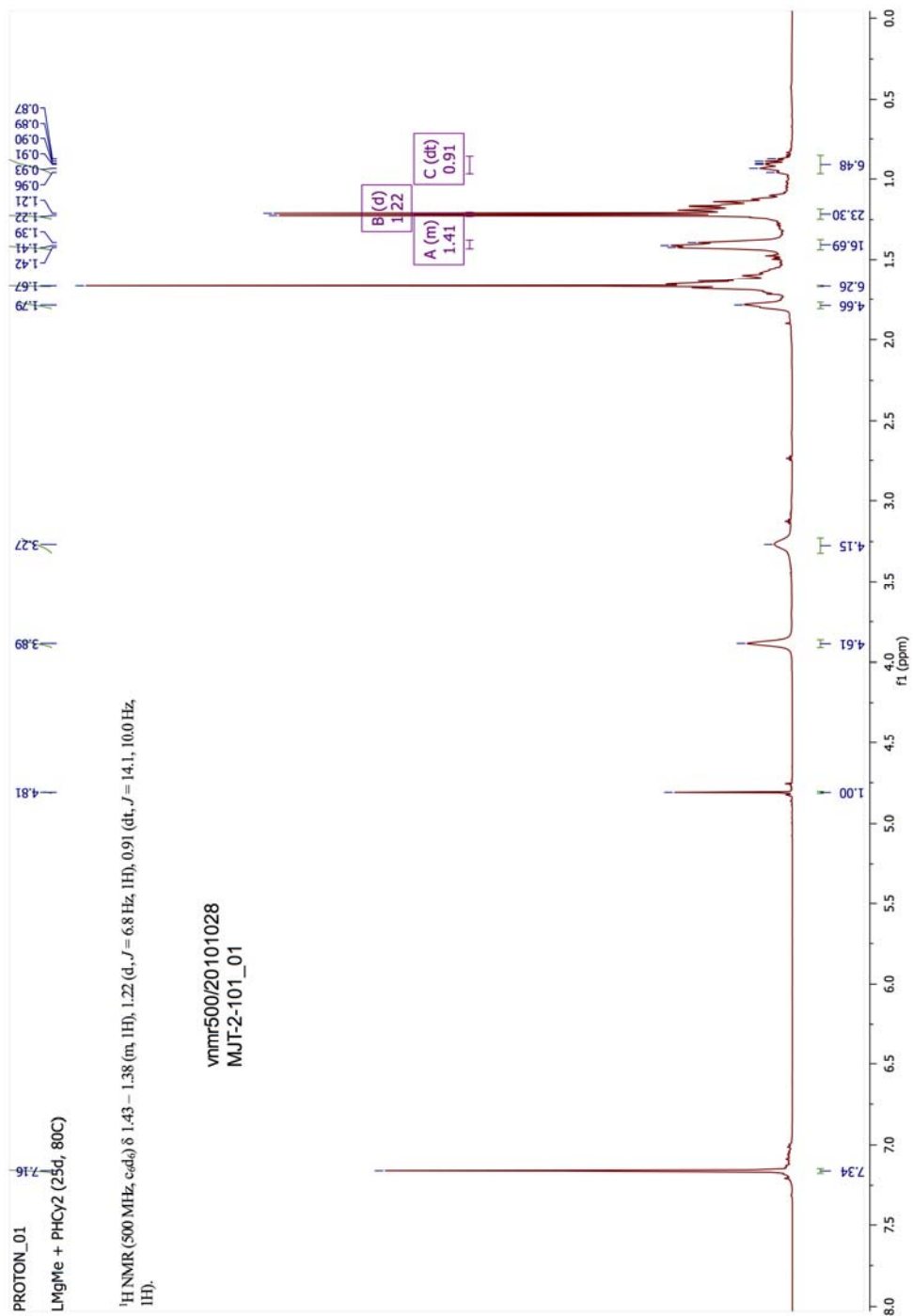


Figure S10. ^{13}C NMR spectrum of $[(\text{BDI})\text{Mg}(\text{PCy}_2)(\text{THF})]$ (**6**).

