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Supporting Information

for

Straightforward synthesis of gold nanoparticles by adding water to an engineered small dendrimer

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Additional HRTEM images and NMR data

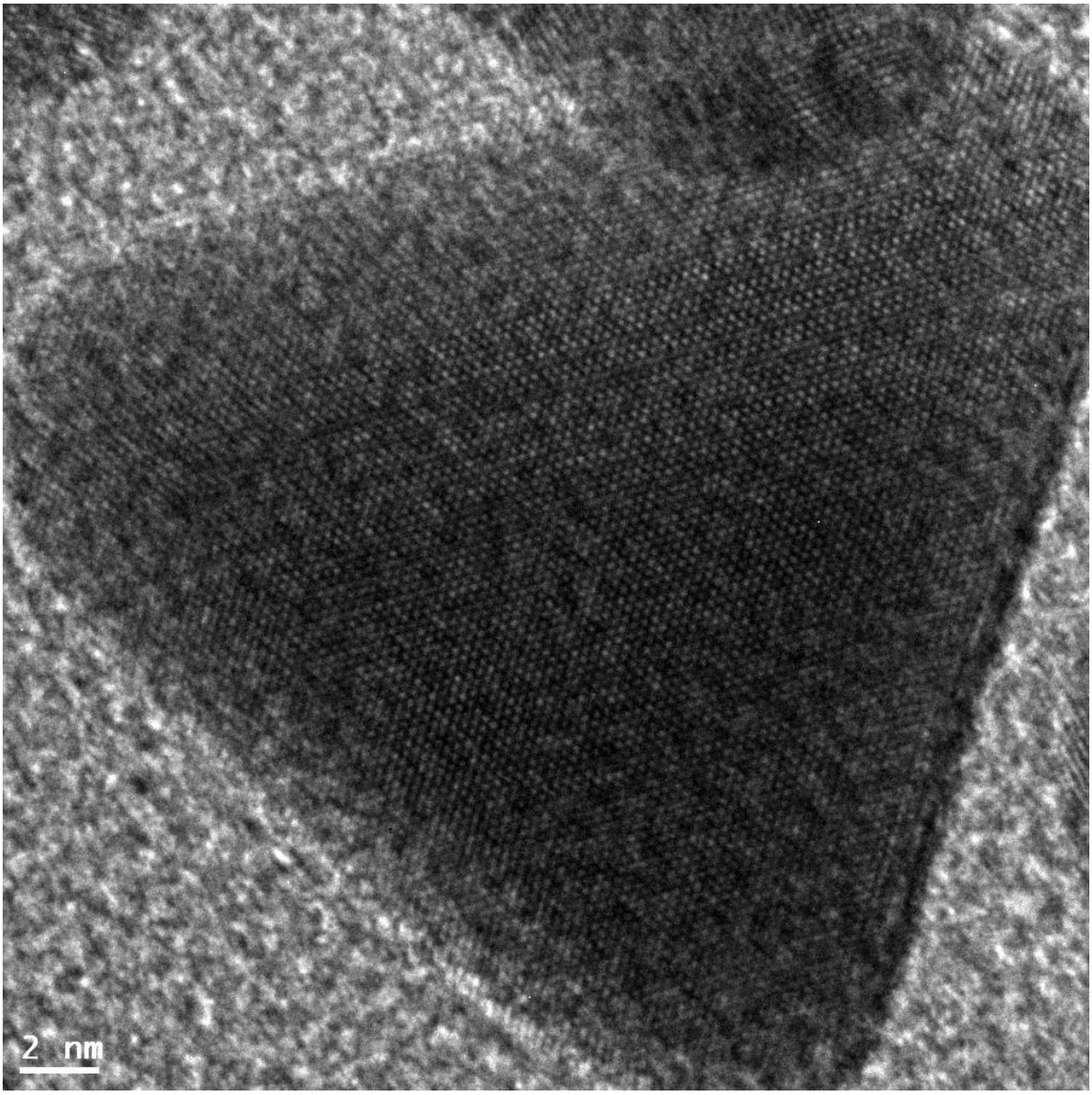

Figure S1: HRTEM image of a gold nanoparticle, showing the atomic planes of gold.

NMR spectra

The ^{31}P, ^{1}H, and ^{13}C NMR spectra of all compounds are given in the following Figures. As usual for dendrimer, all compounds contain traces of solvents, which are detected on the ^{1}H and ^{13}C NMR spectra.

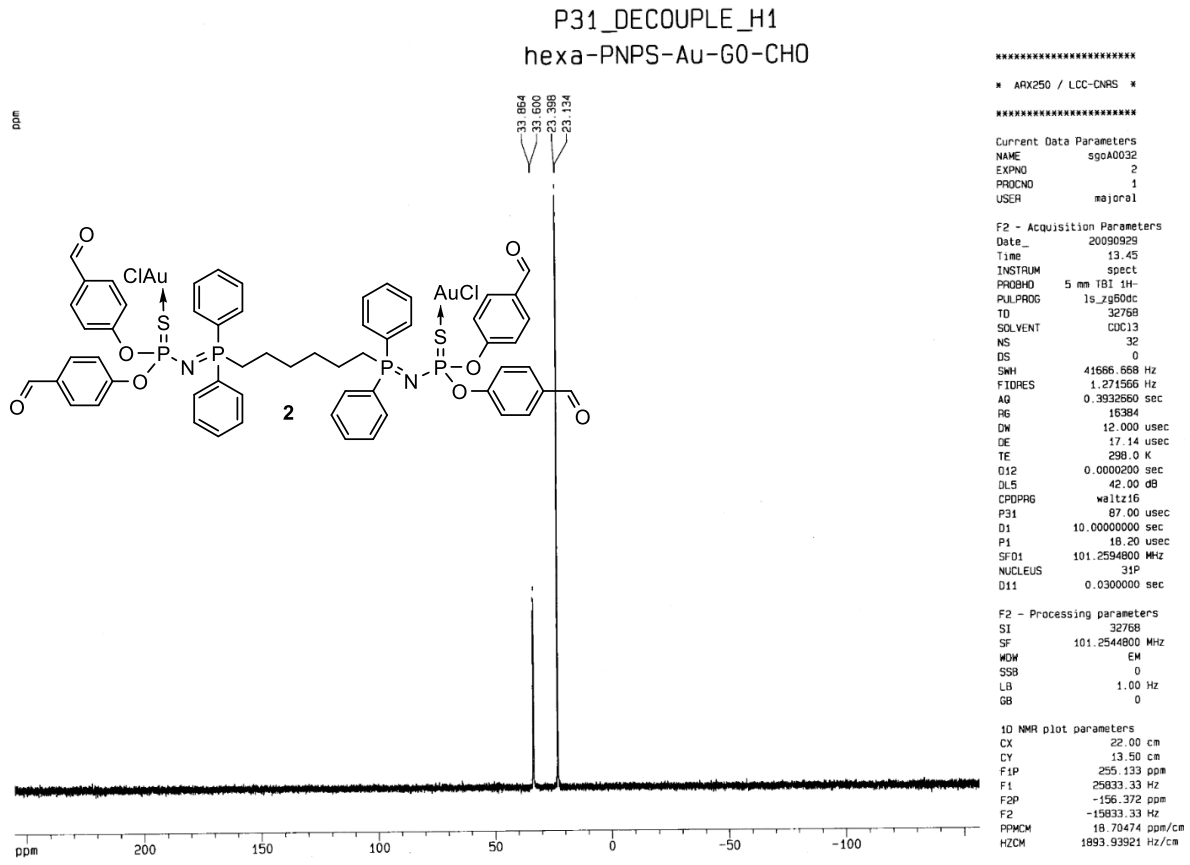

Figure S2: ^{31}P $\{^{1}H\}$ NMR spectrum of compound **2**.

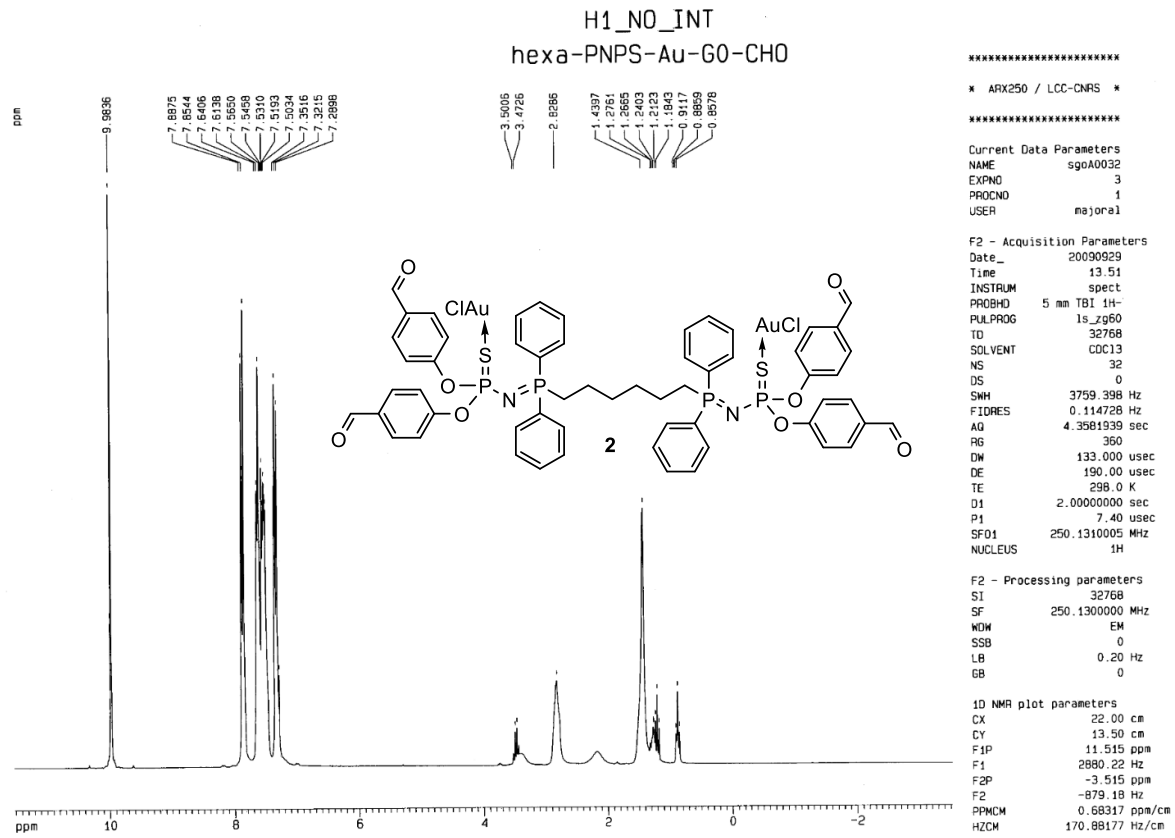

Figure S3: ^{1}H NMR spectrum of compound **2**.

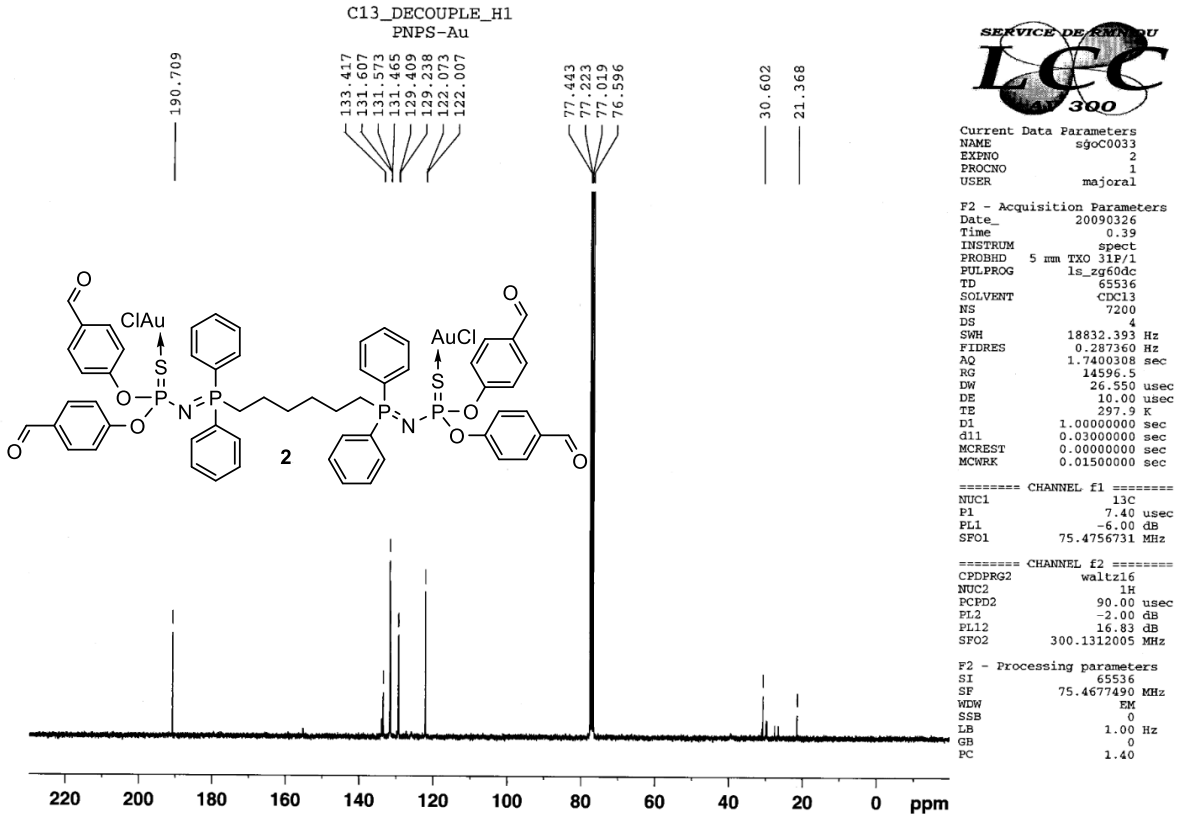

Figure S4: ^{13}C {^{1}H} NMR spectrum of compound **2**.

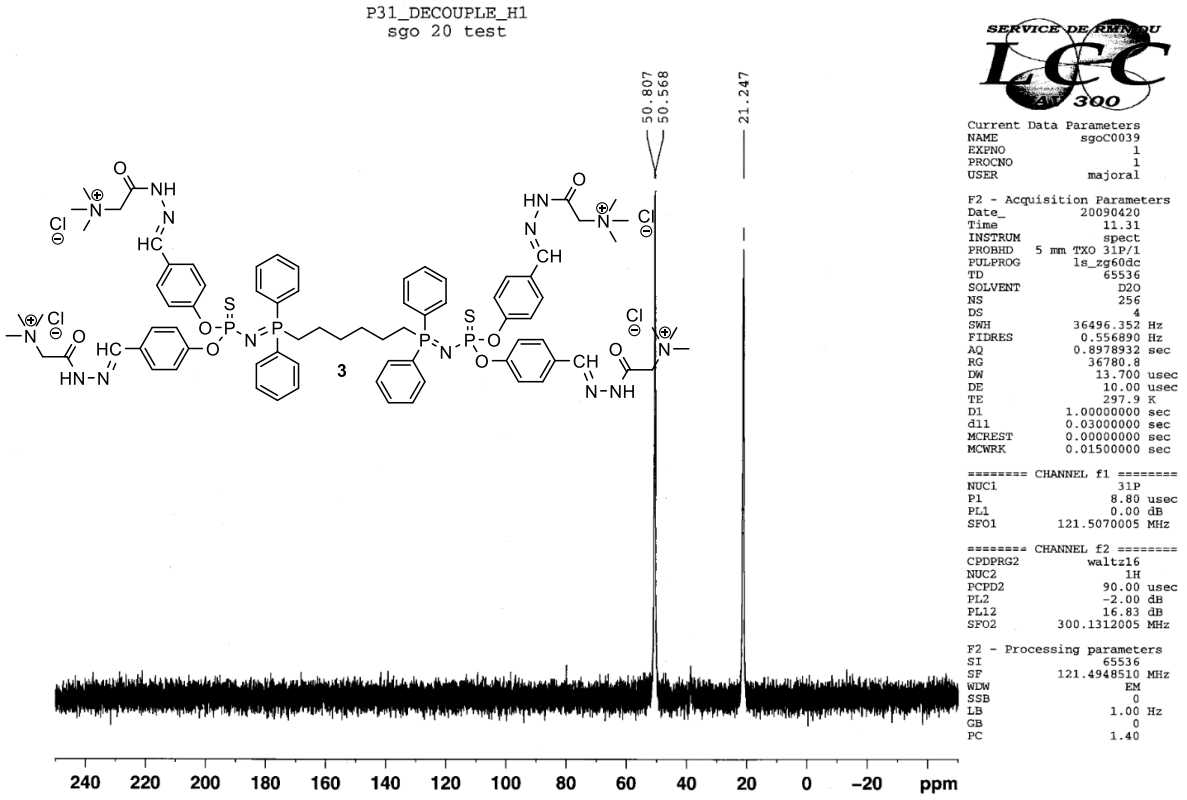

Figure S5: ^{31}P $\{^{1}H\}$ NMR spectrum of compound **3**.

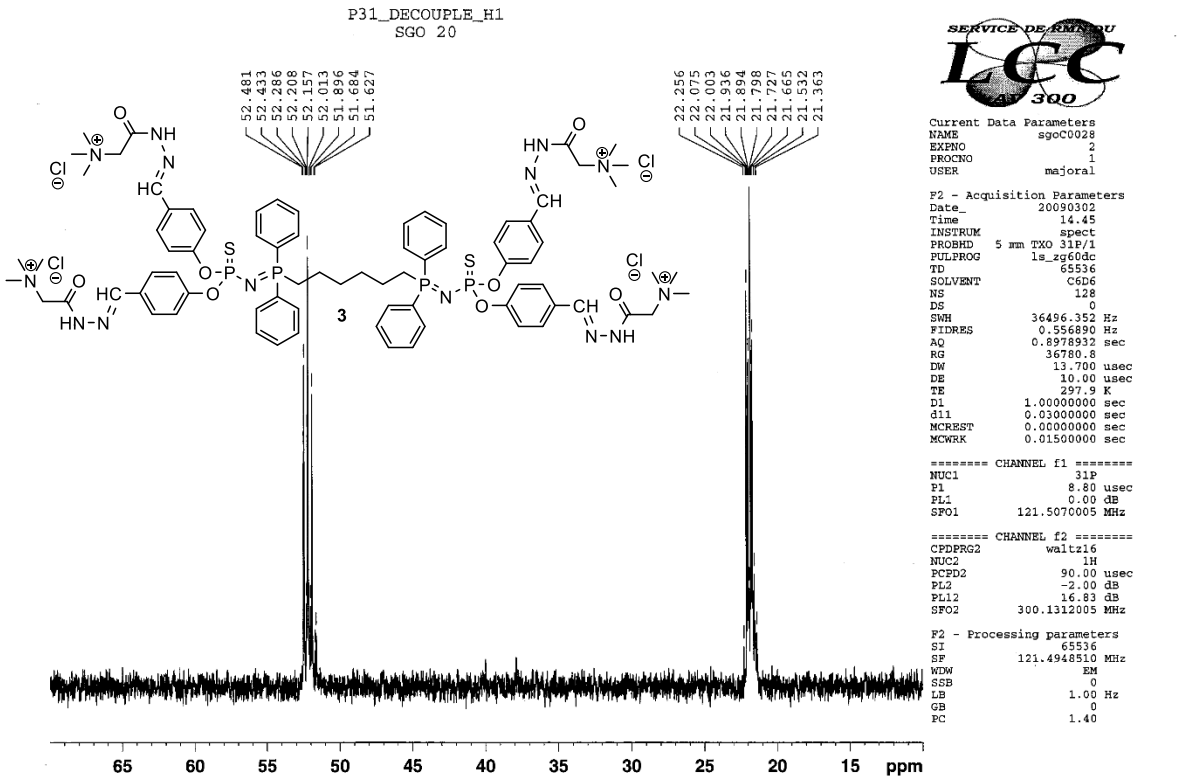

Figure S6: ^{31}P $\{^{1}H\}$ NMR spectrum of compound **3** in DMSO.

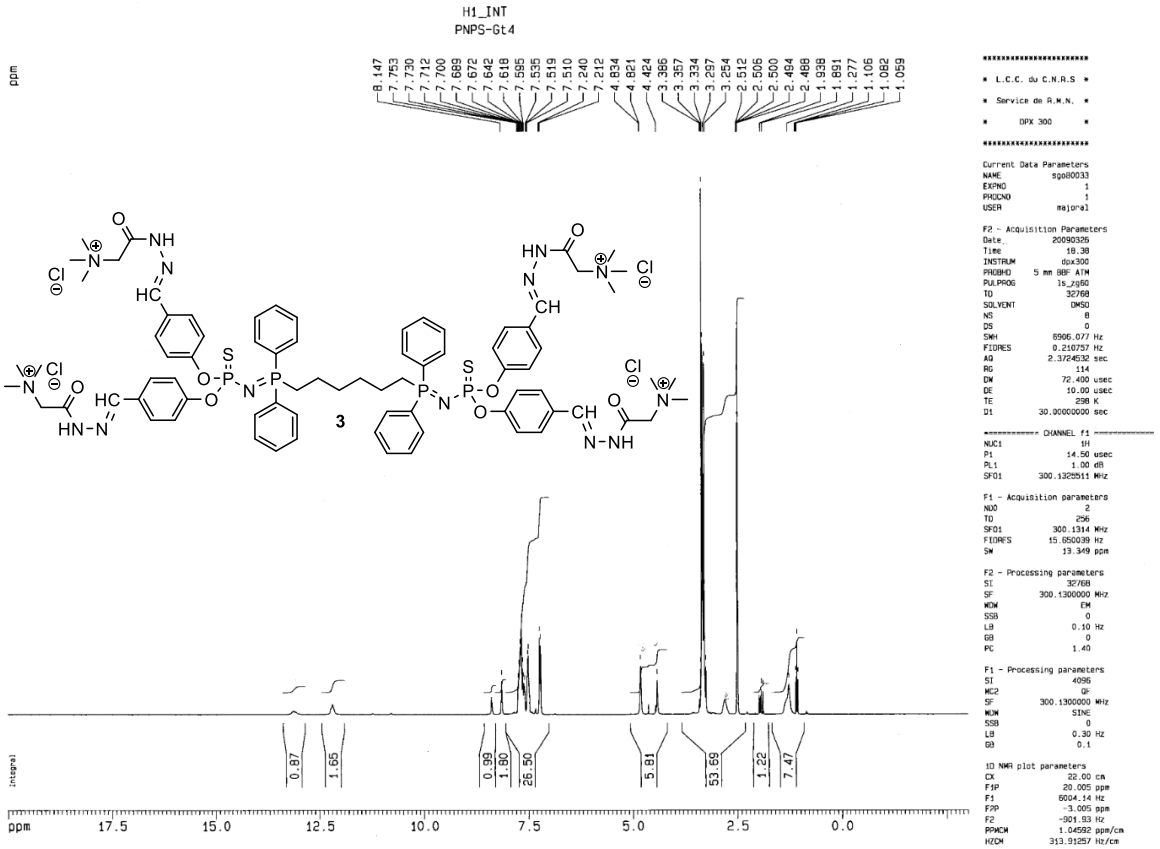

Figure S7: ^{1}H NMR spectrum of compound **3**.

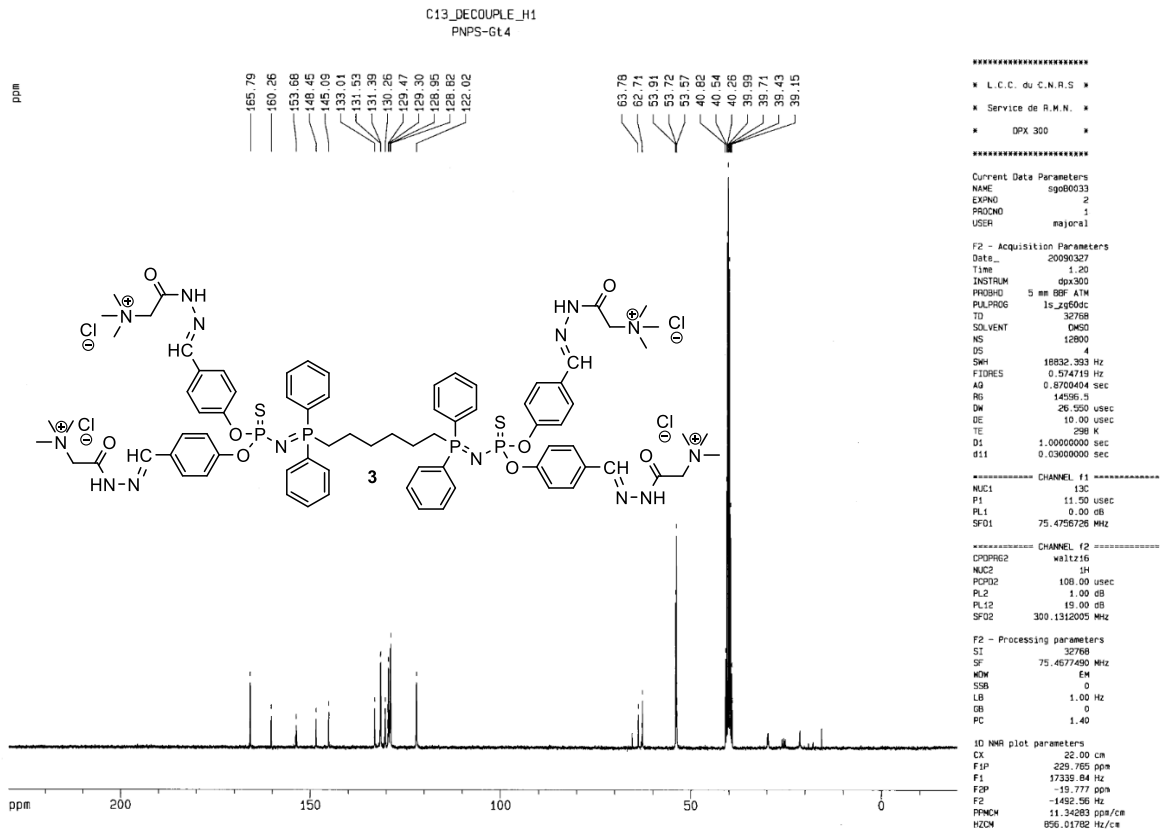

Figure S8: ^{13}C {^{1}H} NMR spectrum of compound **3**.

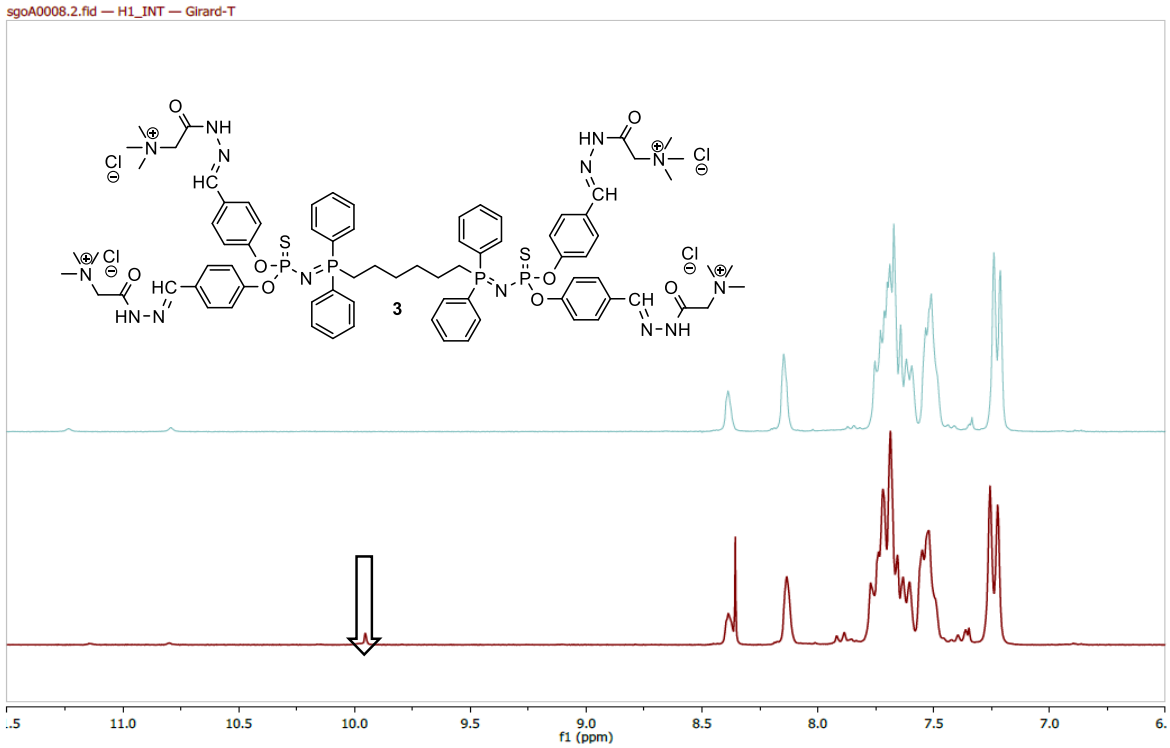

Figure S9: Comparison of an enlargement of ^{1}H NMR spectra of compound **3** pure (green) and slightly hydrolyzed (red) in DMSO and DMSO containing water, showing in particular the re-appearance of the aldehyde signal (arrow).

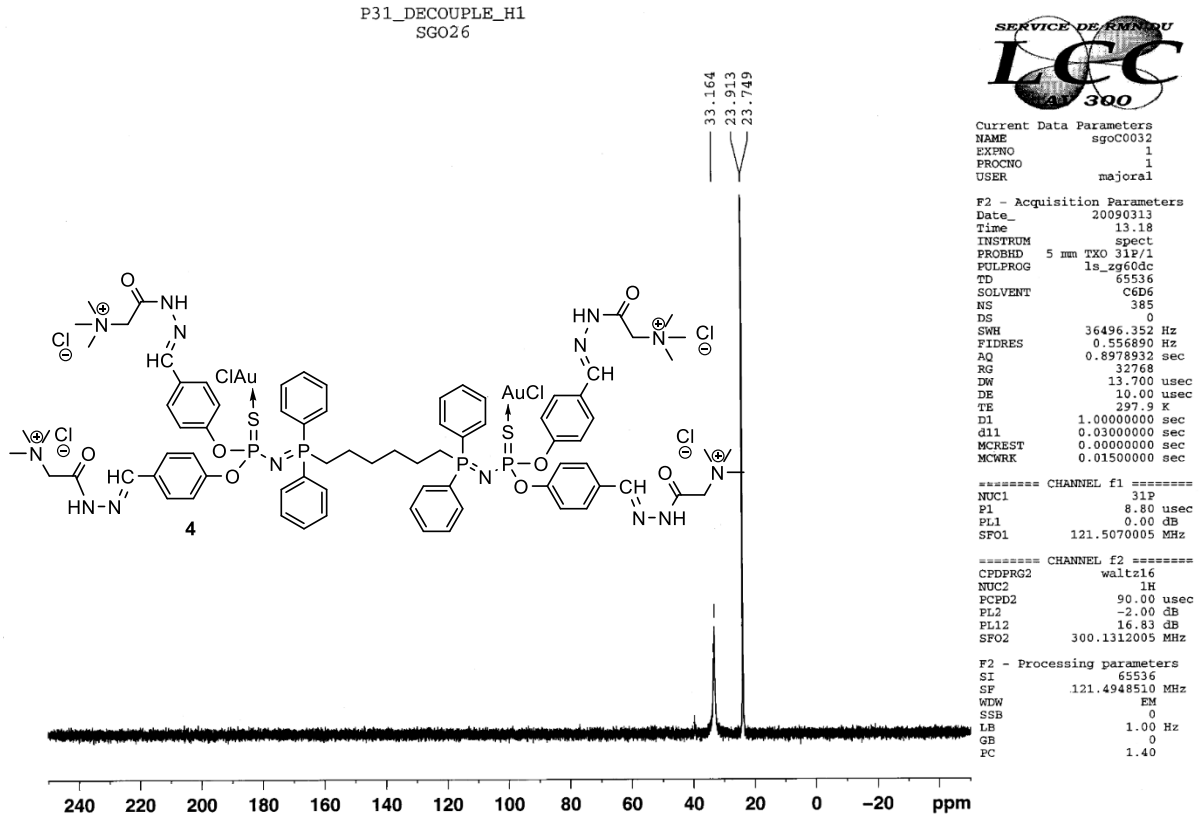

Figure S10: ^{31}P {^{1}H} NMR spectrum of compound **4**.

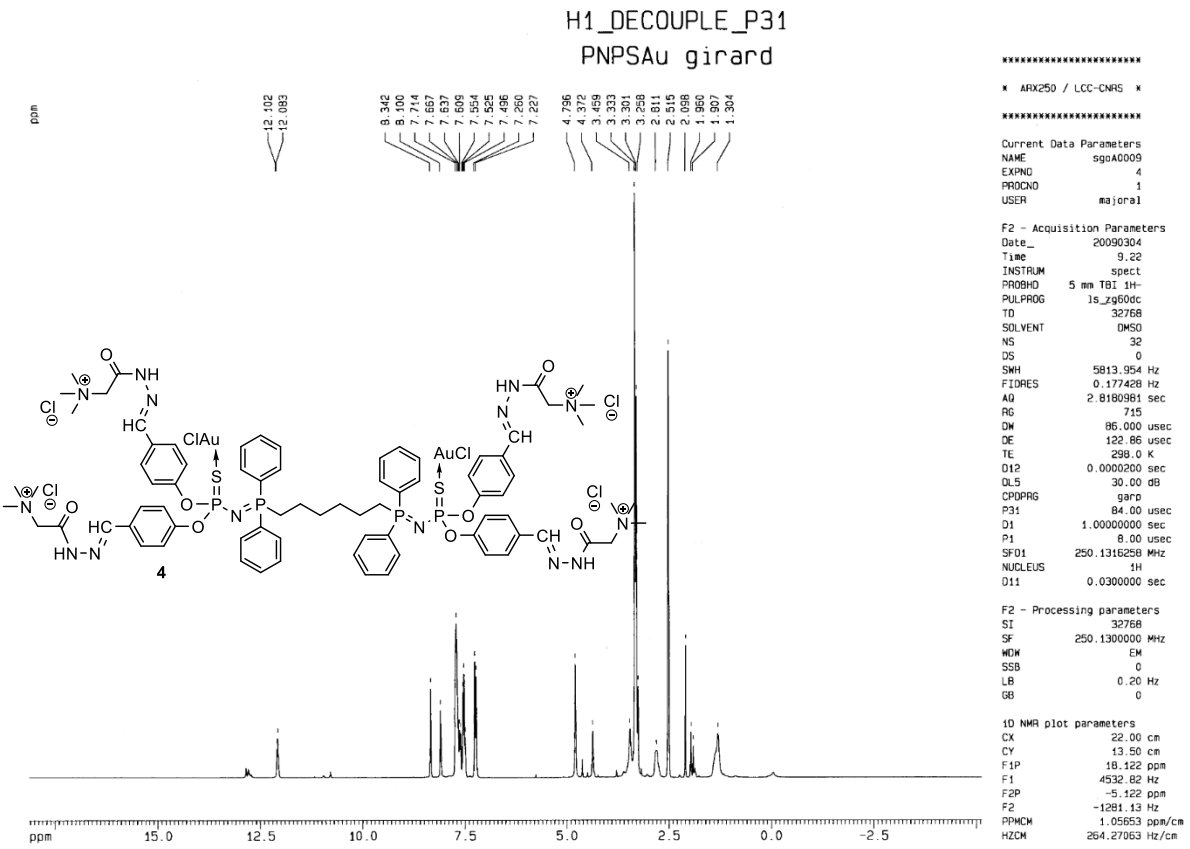

Figure S11: ^{1}H NMR spectrum of compound **4**.

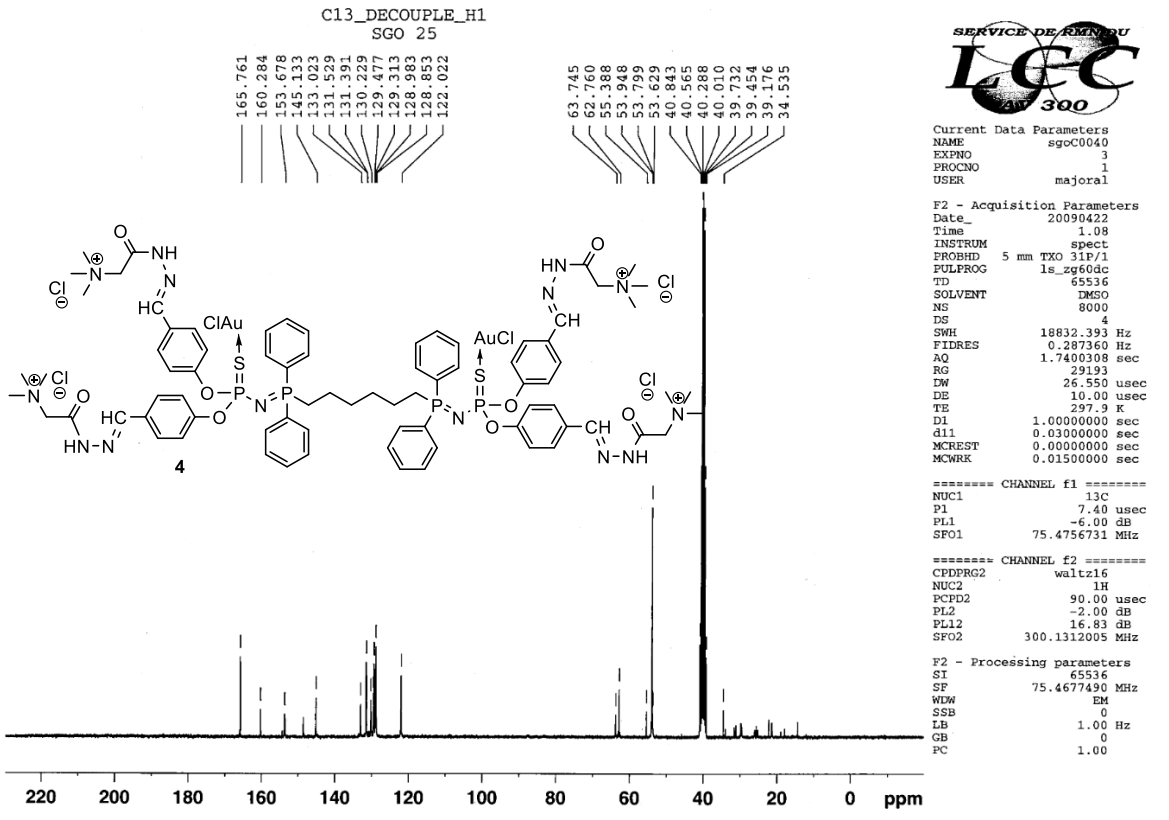

Figure S12: ^{13}C {^{1}H} NMR spectrum of compound **4**.