Electronic Supplementary Information

Cationic lipophosphoramidates with two disulfide motifs: synthesis, behavior in reductive media and gene transfection activity.

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Summary

S1 Kinetic of destabilization of compound 5b-based lipoplexes in presence of DTT.

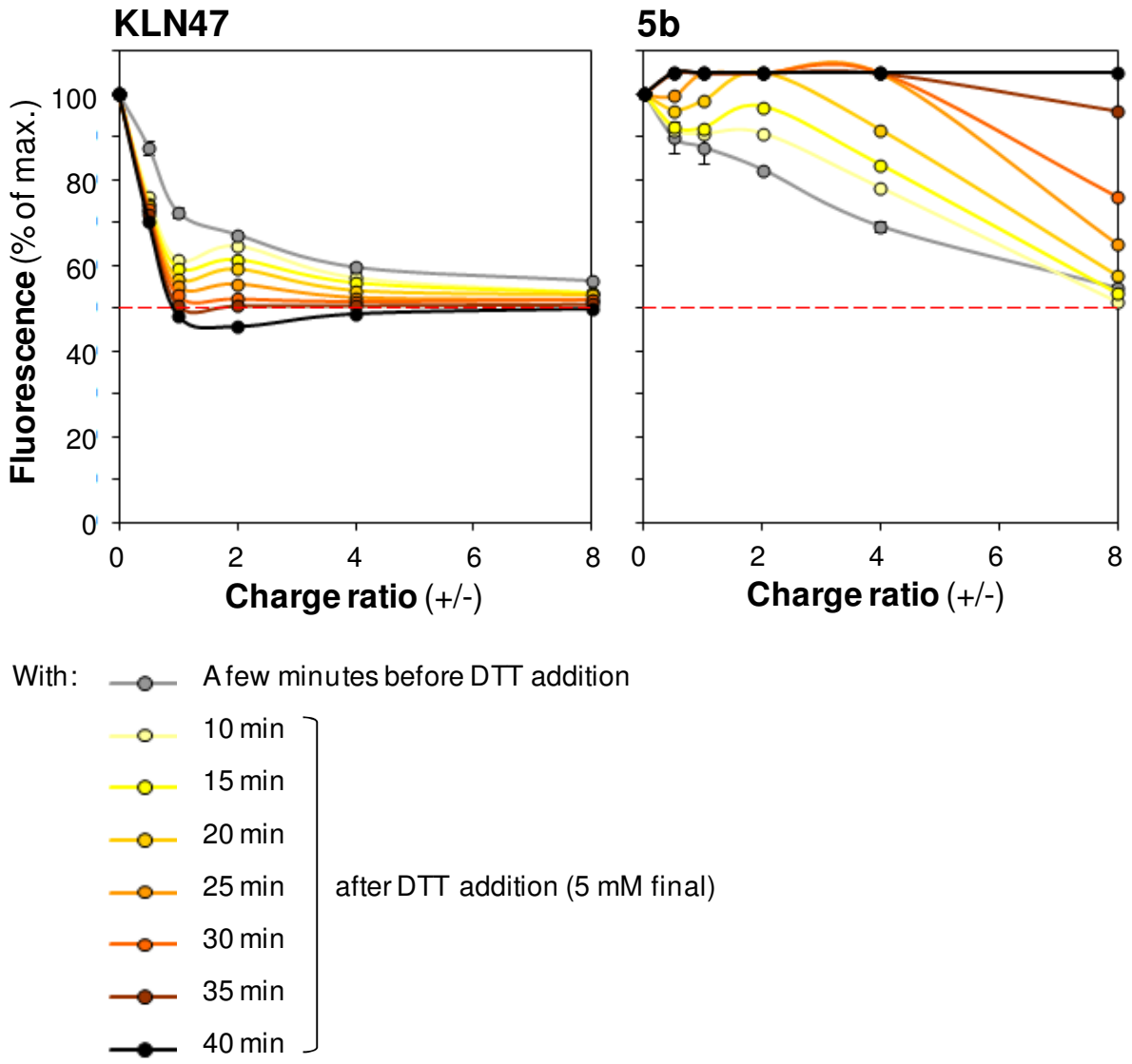

Figure S1-1: Kinetic of pDNA relaxation from compound **5b**-based lipoplexes formed at different charge ratios and following incubation with DTT (5 mM final). The non-red/ox sensitive cationic lipid **KLN47** was used to form control lipoplexes. For both compounds, complexes were formed at charge ratios ranging from 0.5 to 8 (mean with n=2).

S2 NMR data for compound 5a (BSV42)

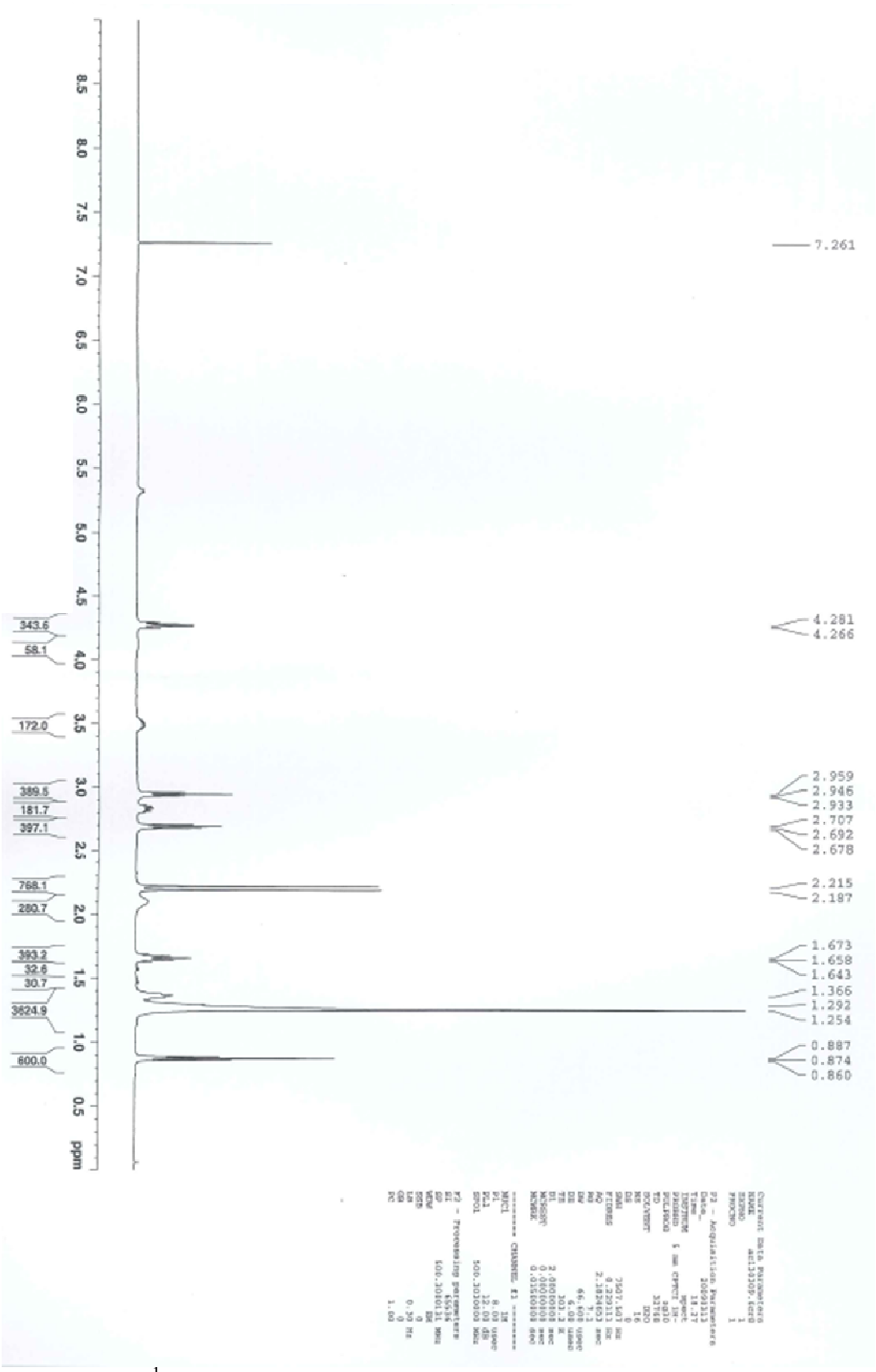

Figure S2-1 : ^{1}H NMR spectra ($CDCl_3$) of compound **5a** (BSV42)

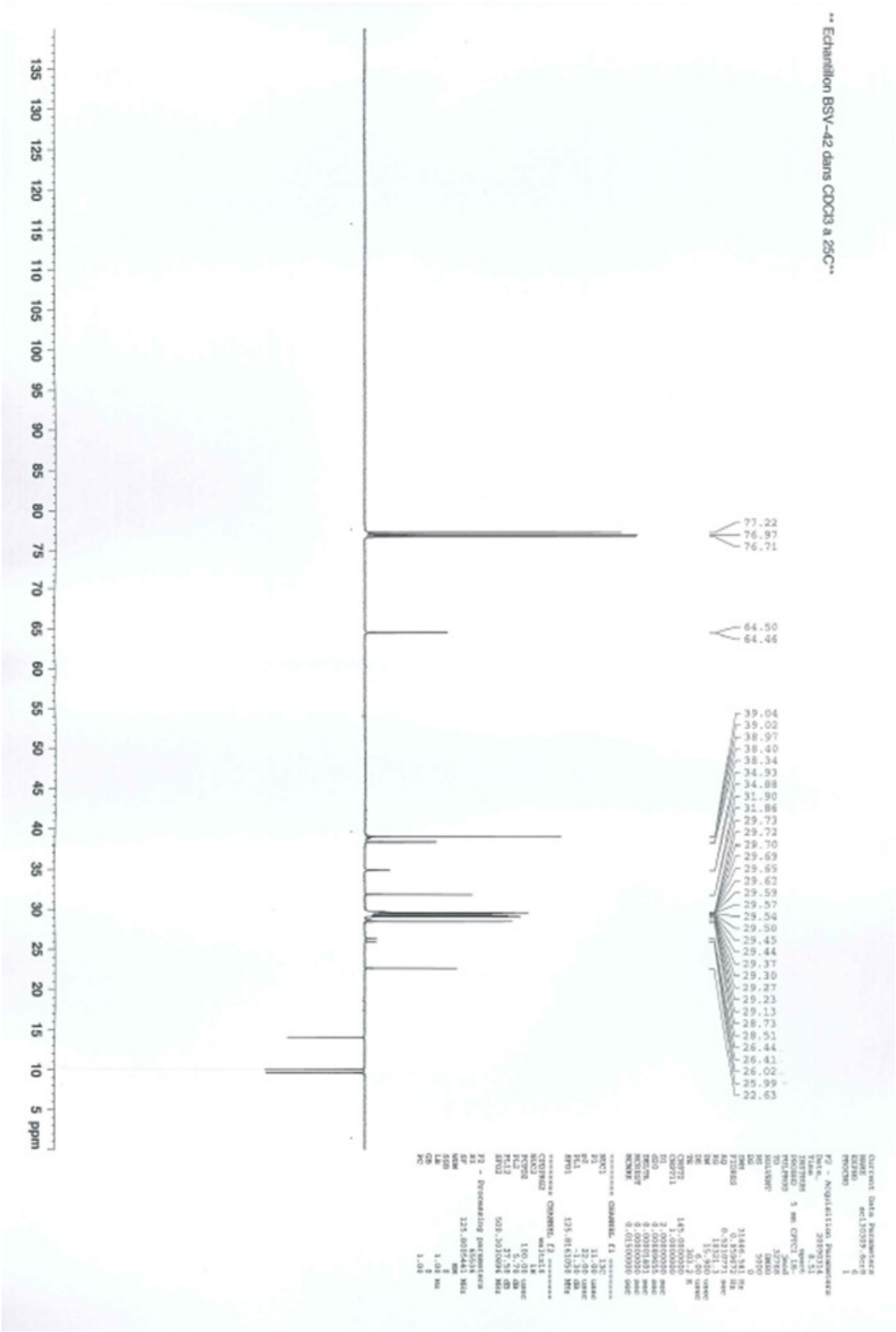

Figure S2-2 : ^{13}C jmod NMR spectra ($CDCl_3$) of compound **5a** (BSV42)

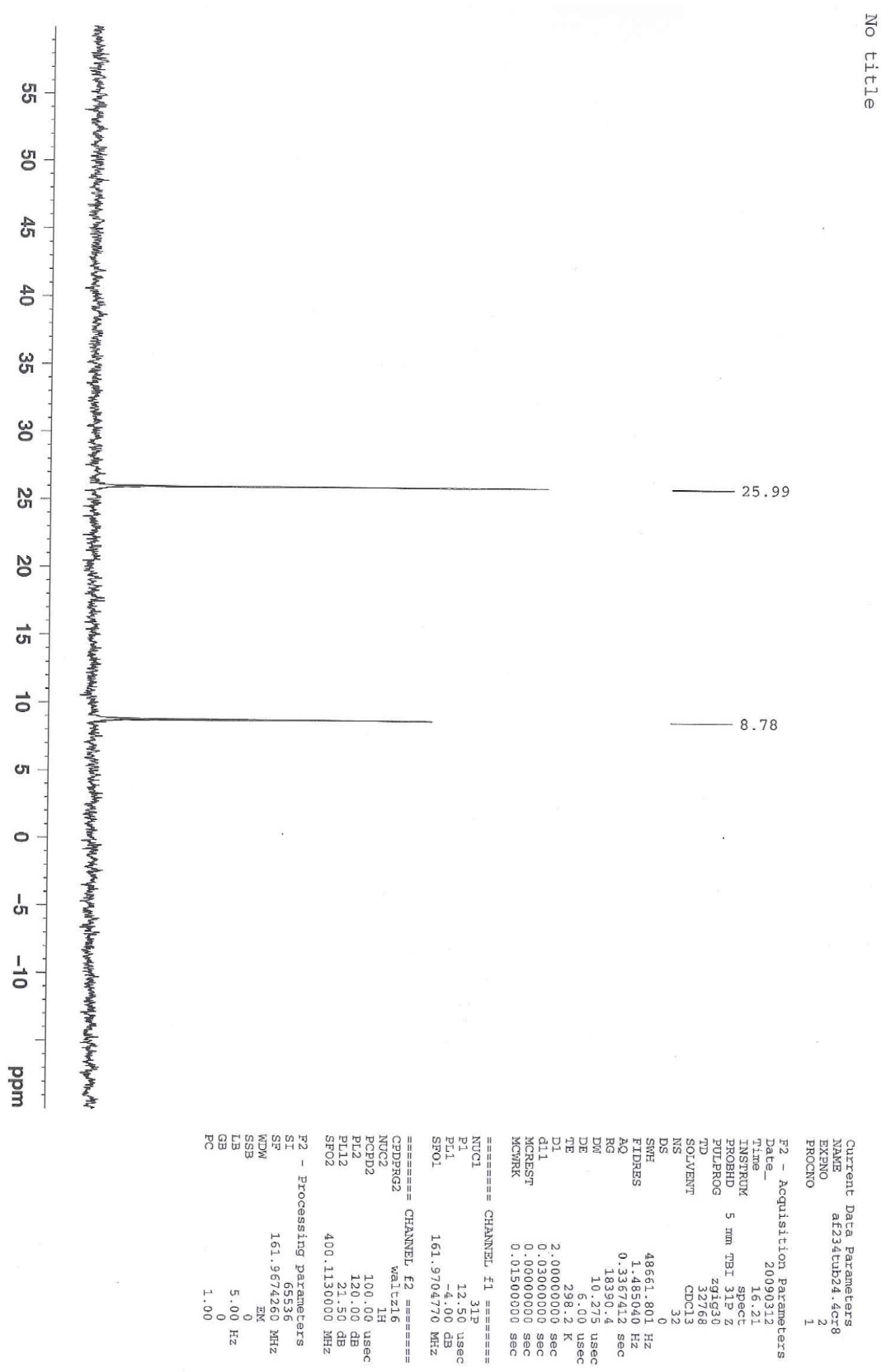

Figure S2-3 : ^{31}P $\{^{1}H\}$ NMR spectra ($CDCl_3$) of compound **5a** (BSV42)

S3 NMR data for compound 5b (BSV69)

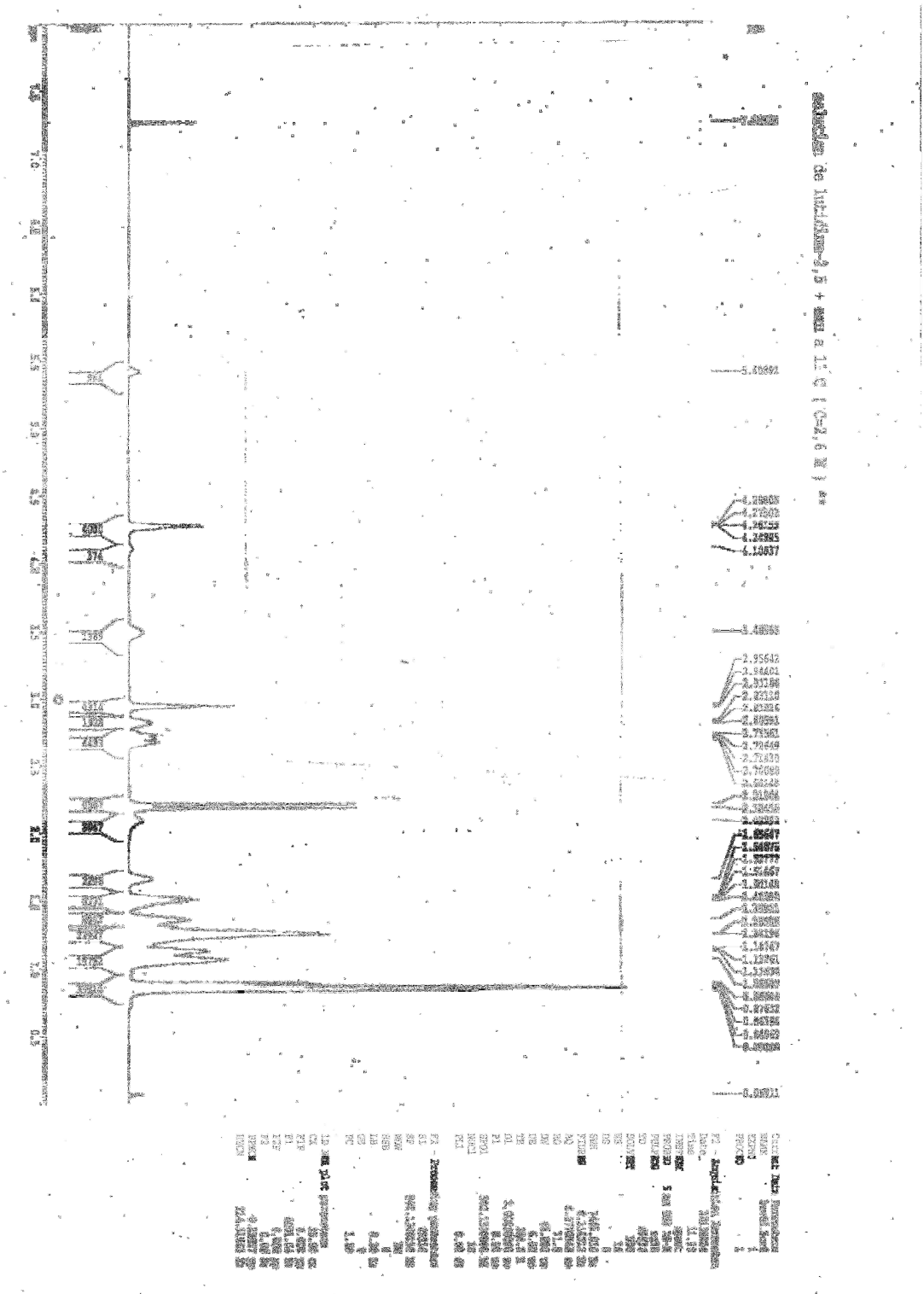

Figure S3-1: ^{1}H NMR spectra ($CDCl_3$) of compound **5b** (BSV69)

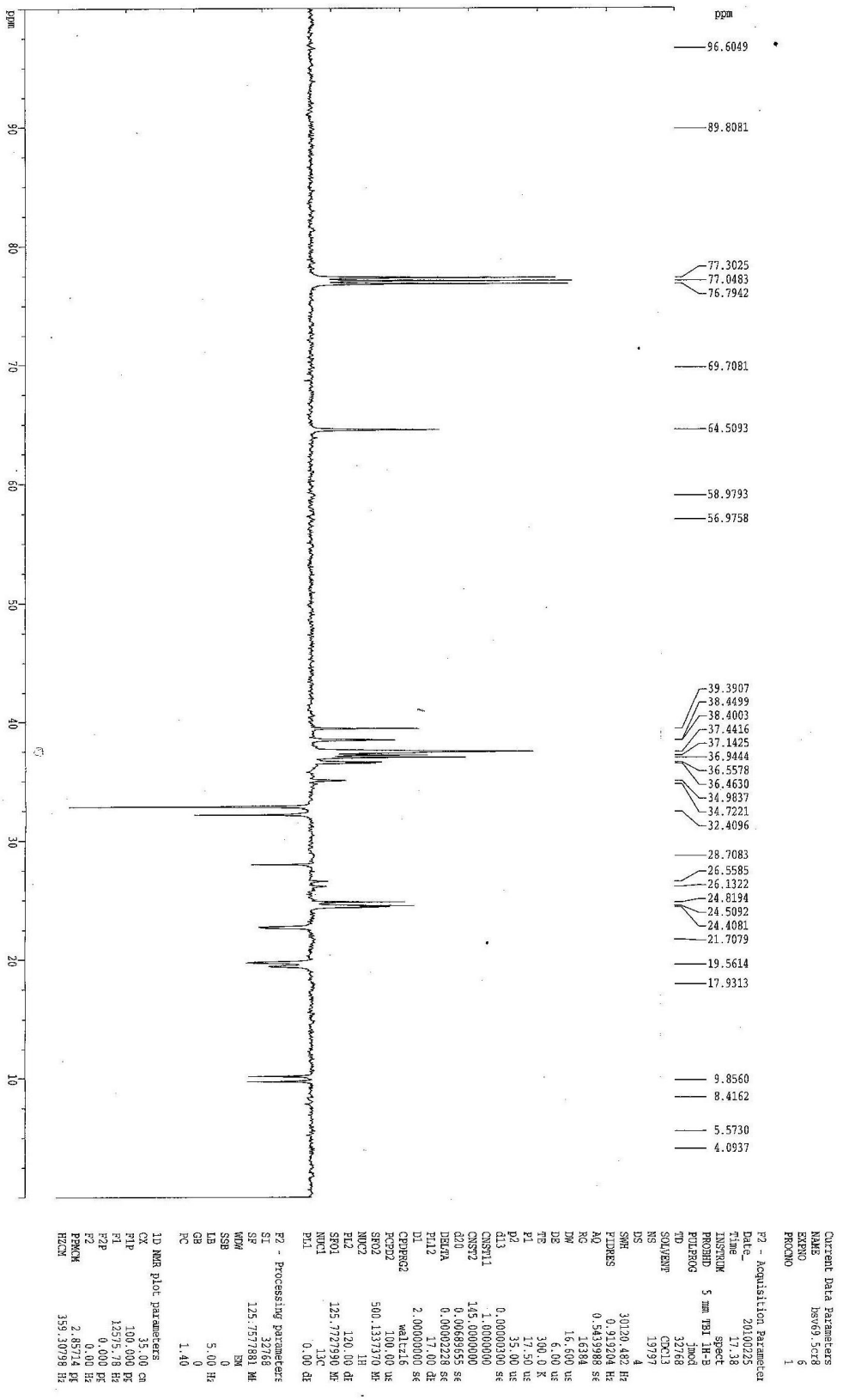

Figure S3-2: ^{13}C jmod NMR spectra ($CDCl_3$) of compound **5b** (BSV69)

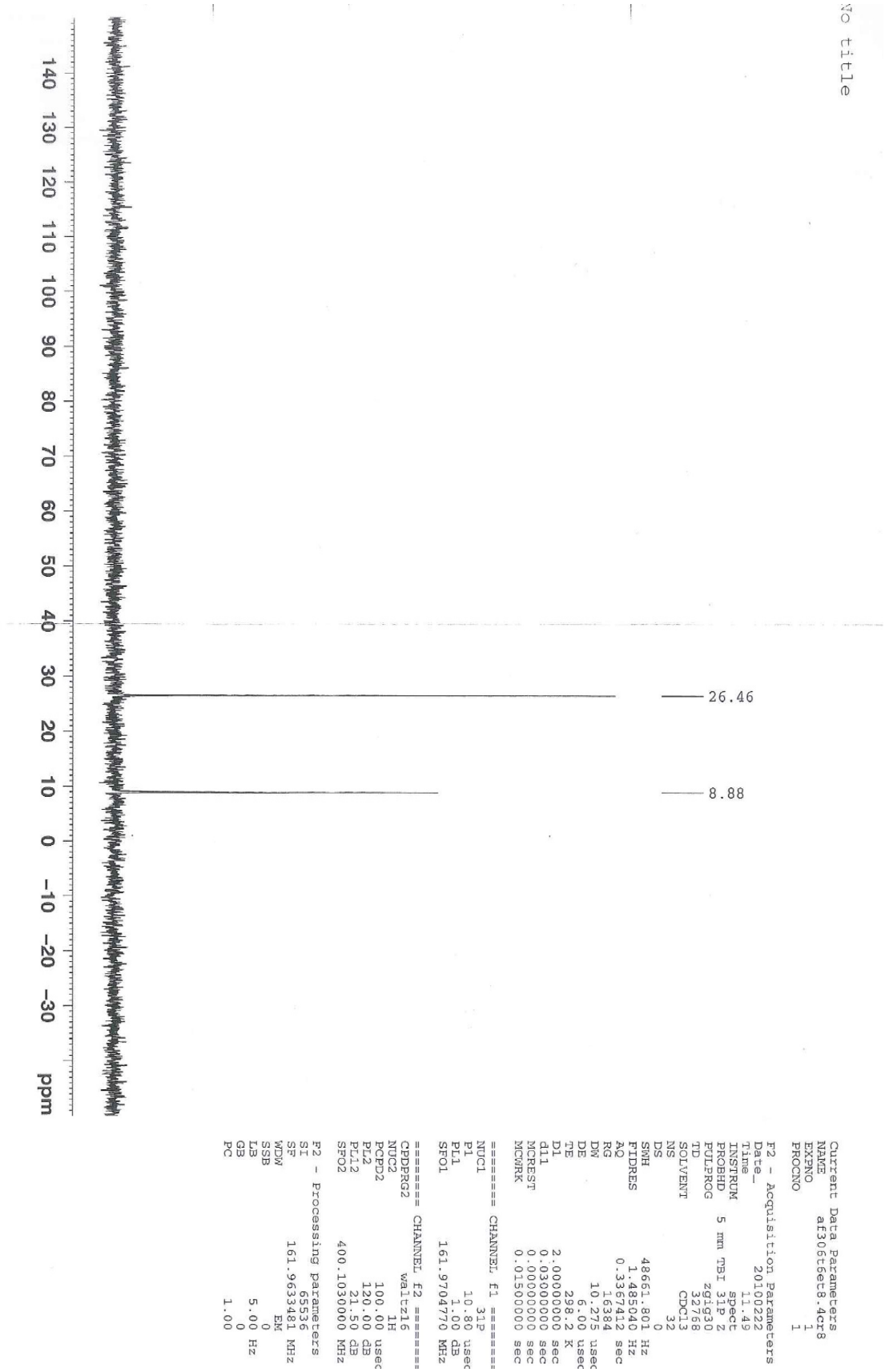

Figure S3-3: $^{31}P\{^{1}H\}$ NMR spectra ($CDCl_3$) of compound **5b** (BSV69)

S4 NMR data for compound 7 (BSV76)

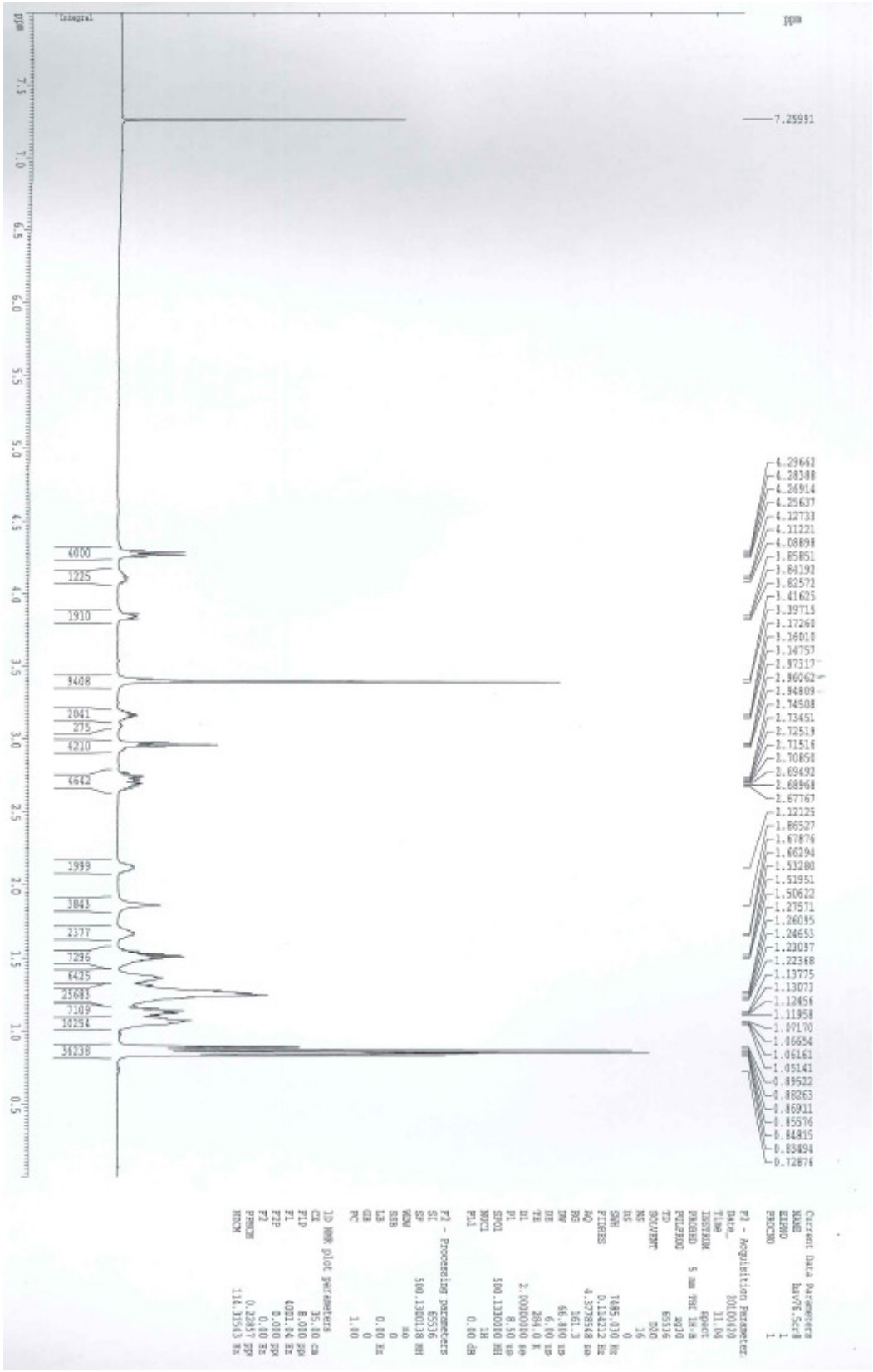

Figure S4-1: ^{1}H NMR spectra ($CDCl_3$) of compound **7** (BSV76)

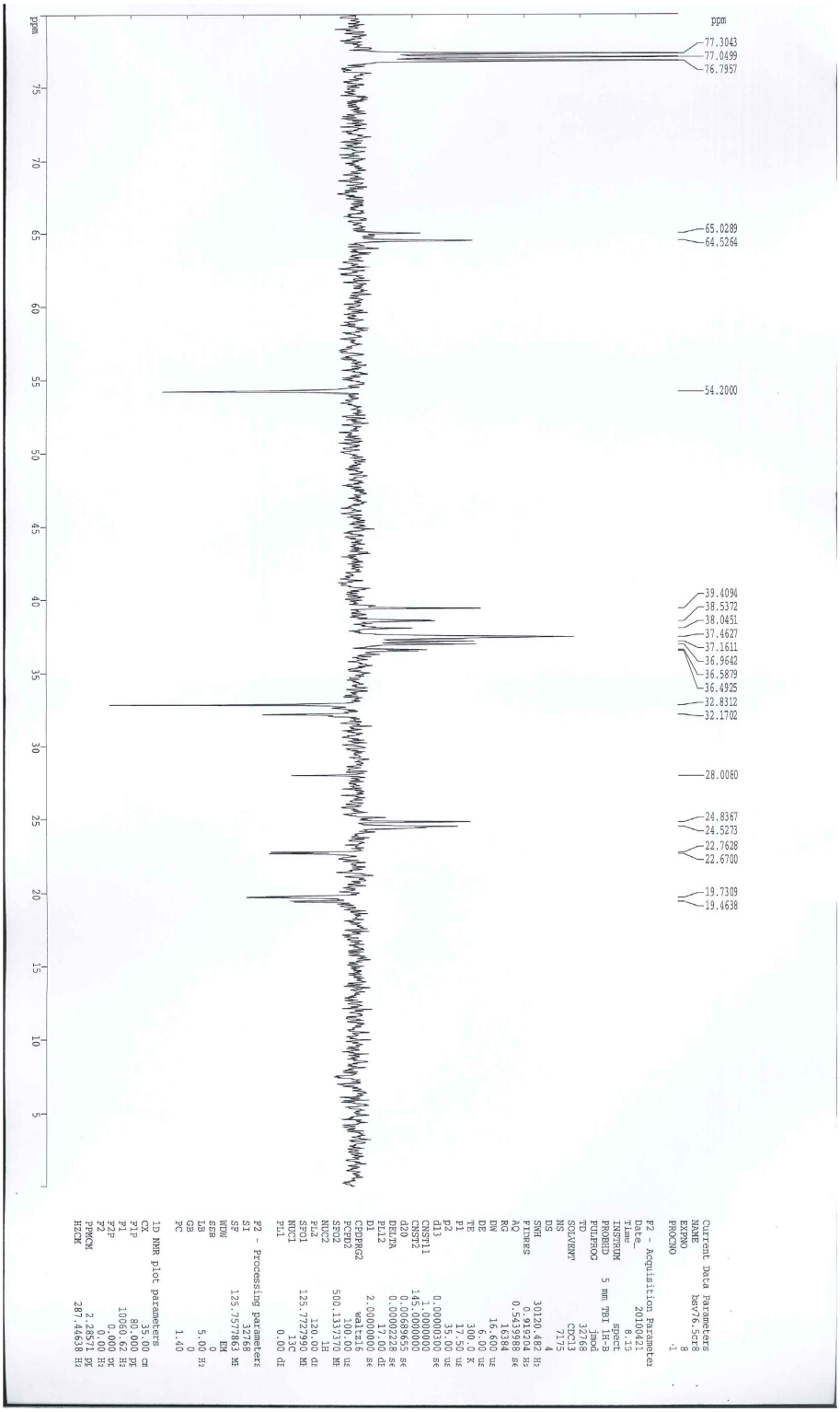

Figure S4-2: ^{13}C jmod NMR spectra ($CDCl_3$) of compound **7** (BSV76)

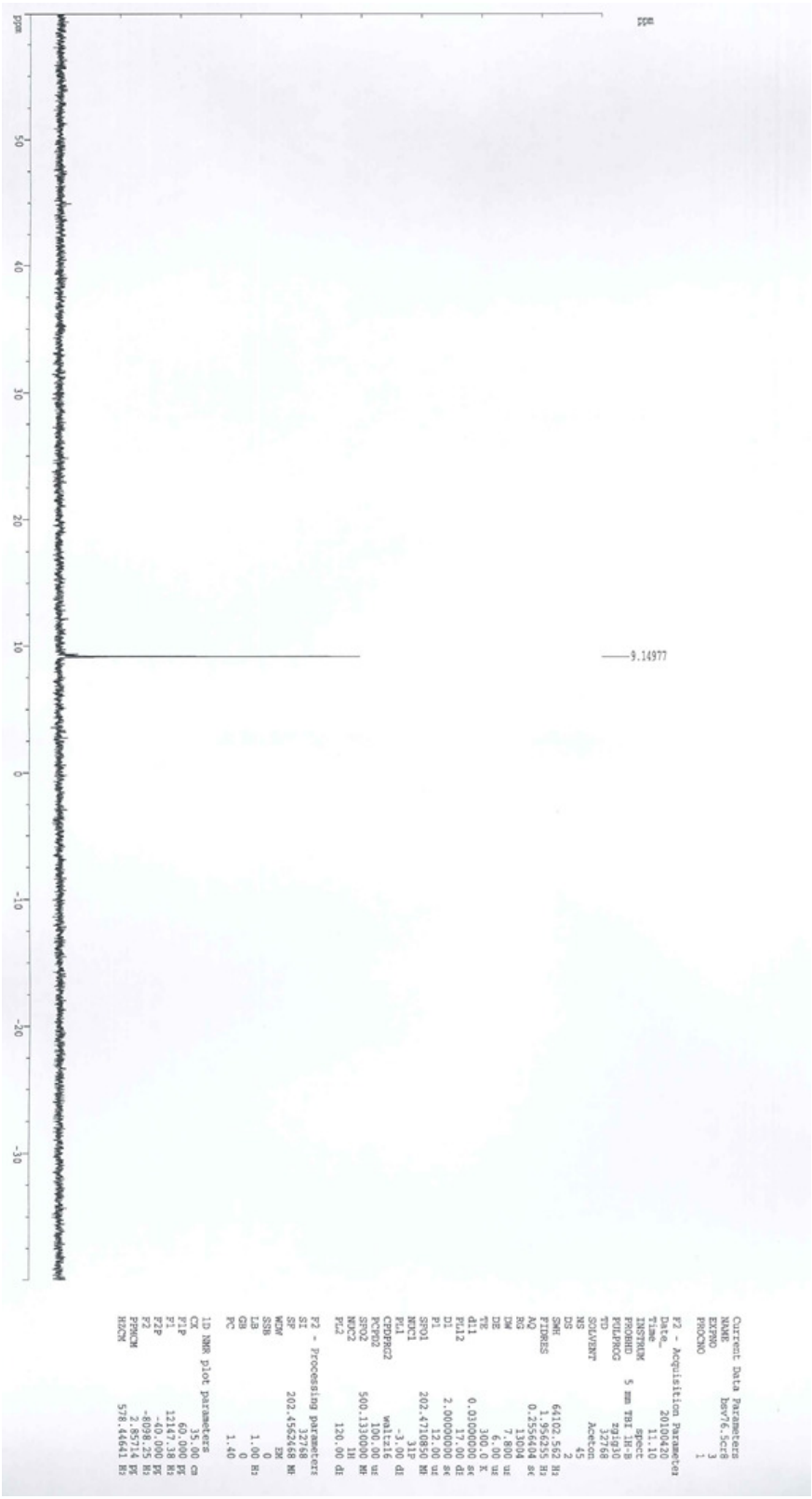

Figure S4-3: $^{31}P\{^{1}H\}$ NMR spectra ($CDCl_3$) of compound **7** (BSV76)