

Electronic Supplementary Information

Synthesis of dissymmetric phosphorus dendrimers using an unusual protecting group

Evgeny K. Apartsin<sup>a\*</sup>, Alya G. Venyaminova<sup>a</sup>, Serge Mignani<sup>b,c</sup>, Anne-Marie Caminade<sup>d,e</sup>, Jean-Pierre Majoral<sup>d,e\*</sup>

<sup>a</sup> Institute of Chemical Biology and Fundamental Medicine SB RAS, 8, Lavrentiev ave., Novosibirsk, 630090, Russian Federation.

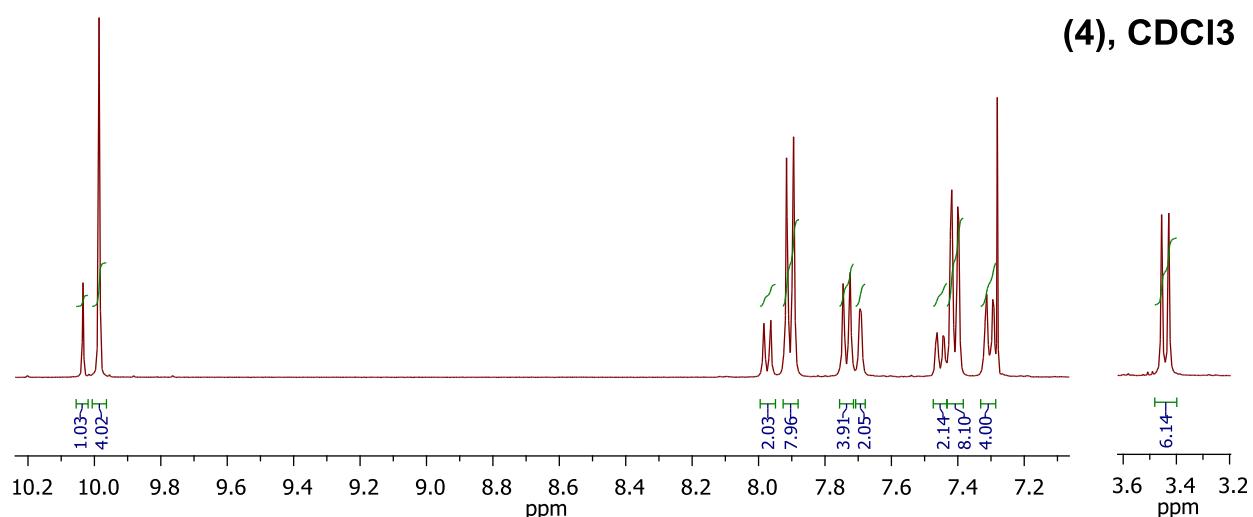
<sup>b</sup> Laboratoire de Chimie et de Biochimie Pharmacologiques et Toxicologiques, Université Paris Descartes, PRES Sorbonne Paris Cité, CNRS UMR 8601, 75006 Paris, France;

<sup>c</sup> Centro de Química da Madeira, MMRG, Universidade da Madeira, 9000-390 Funchal, Portugal;

<sup>d</sup> Laboratoire de Chimie de Coordination du CNRS, 205, route de Narbonne, 31077 Toulouse Cedex 04, France.

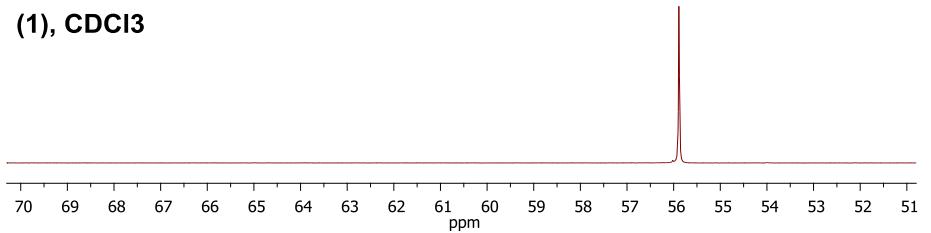
<sup>e</sup> LCC-CNRS, Université de Toulouse, CNRS, Toulouse, France

\* E-mail: [eka@niboch.nsc.ru](mailto:eka@niboch.nsc.ru) (E. K. Apartsin), [jean-pierre.majoral@lcc-toulouse.fr](mailto:jean-pierre.majoral@lcc-toulouse.fr) (J.-P. Majoral)

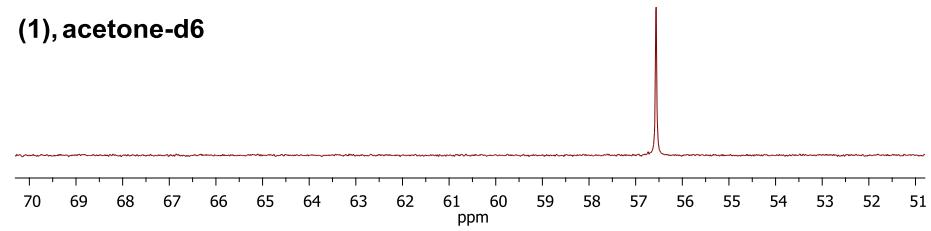


**Fig. S1.** <sup>1</sup>H NMR spectrum of the dissymmetric dendrimer (4) (G0'-P(S)-(G1')<sub>2</sub>). The signals of groups belonging to G0' and G1' are clearly distinguished.

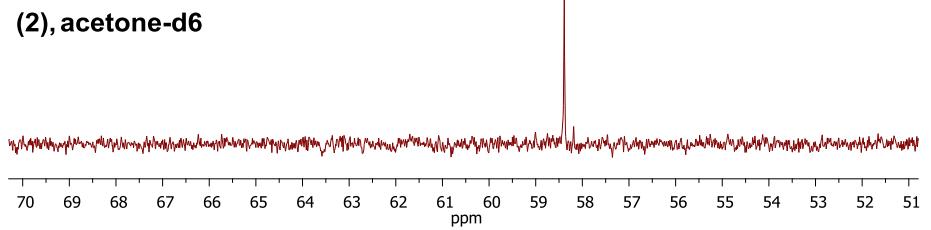
**(1), CDCl<sub>3</sub>**



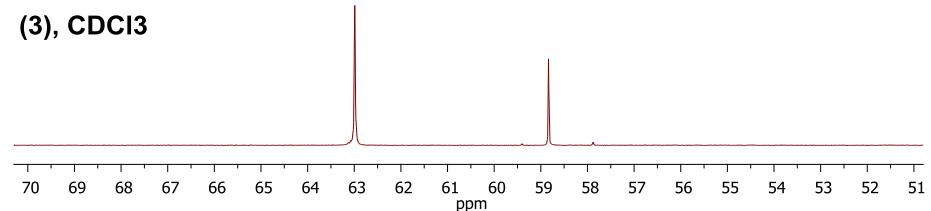
**(1), acetone-d<sub>6</sub>**



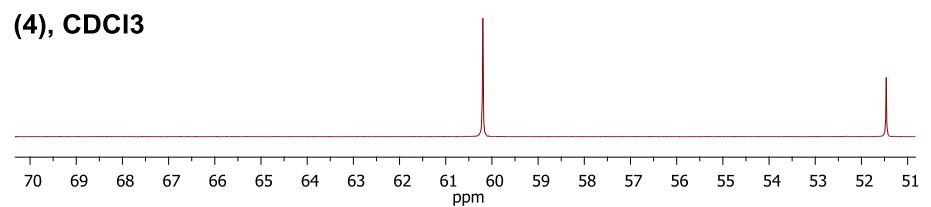
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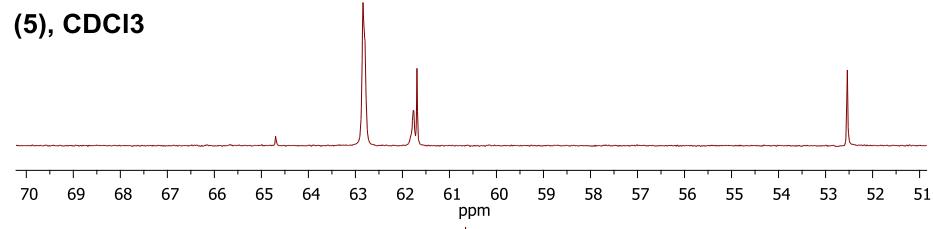
**(3), CDCl<sub>3</sub>**



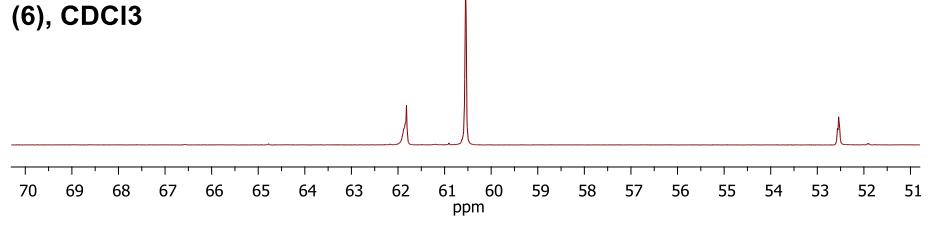
**(4), CDCl<sub>3</sub>**



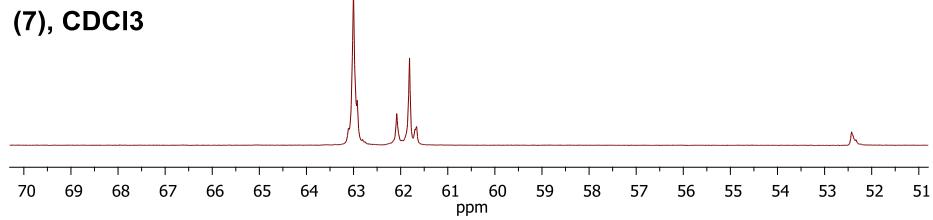
**(5), CDCl<sub>3</sub>**



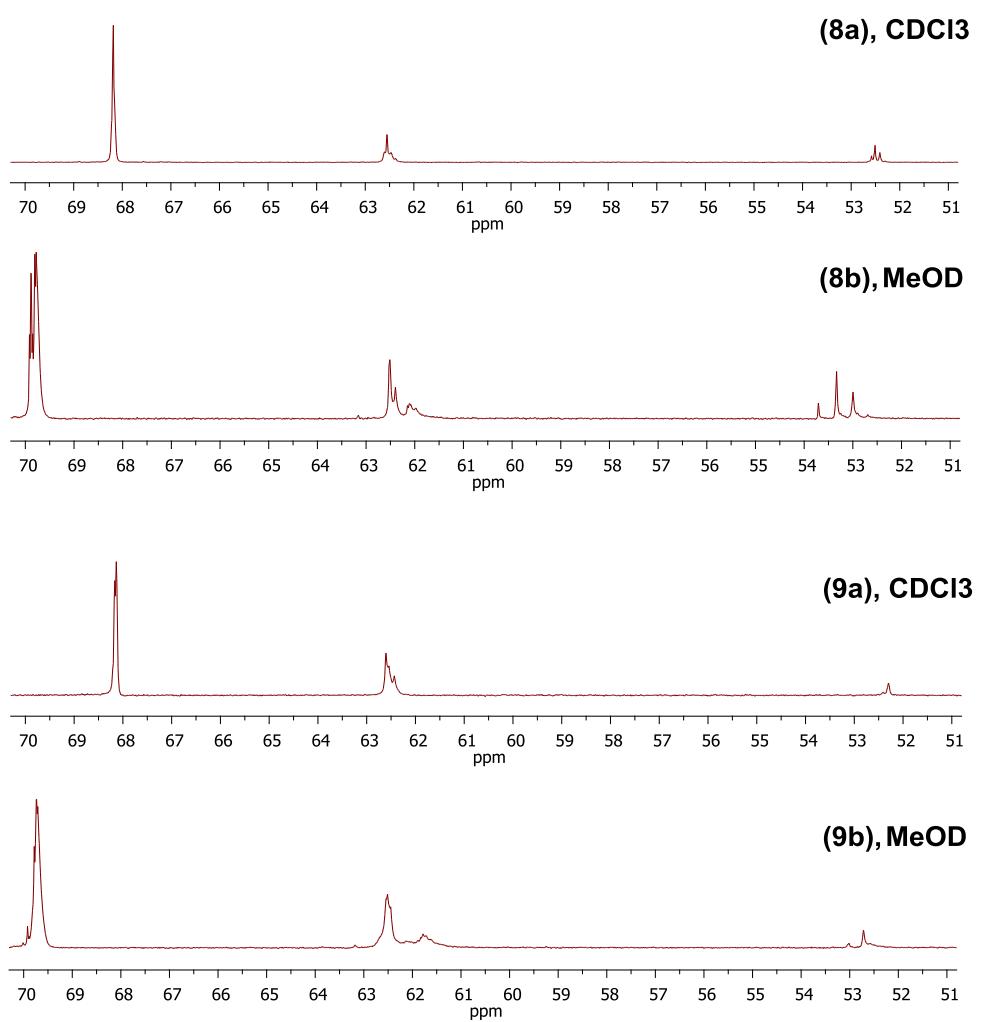
**(6), CDCl<sub>3</sub>**



**(7), CDCl<sub>3</sub>**



**Fig. S2.** Evolution of <sup>31</sup>P{<sup>1</sup>H} NMR spectra of neutral P(S)Cl<sub>2</sub>-terminated dissymmetric dendrimers



**Fig. S3.**  $^{31}\text{P}\{\text{H}\}$  NMR spectra of neutral amino-modified dissymmetric dendrimers (8a) and (9a), and their protonated forms (8b) and (9b)