

# Supporting Information

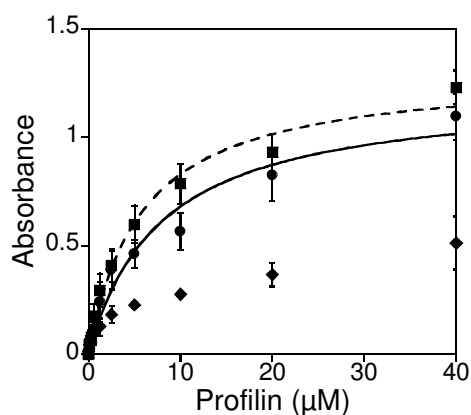
## High Affinity Binding to Profilin by a Covalently Constrained, Soluble Mimic of Phosphatidylinositol–4,5– bisphosphate Micelles

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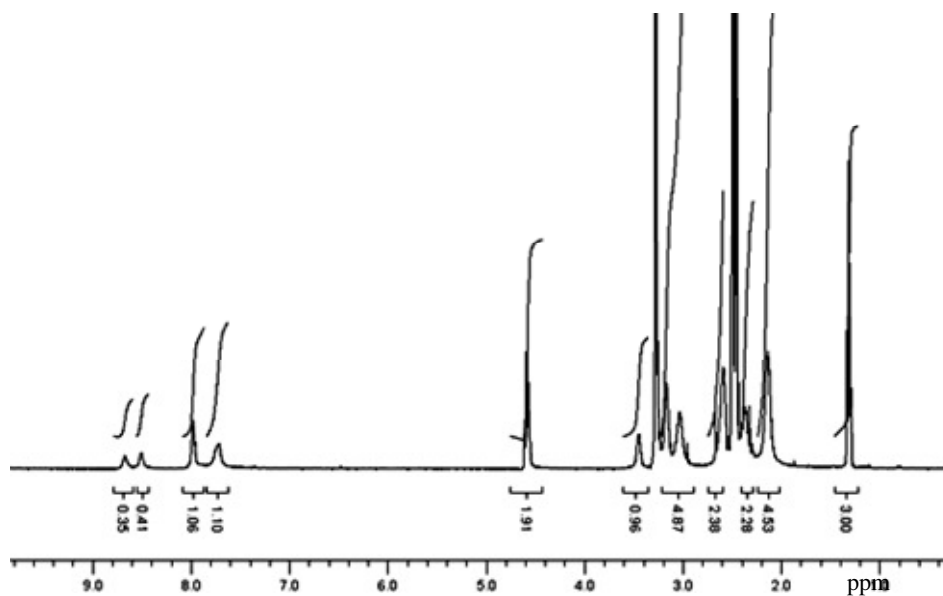
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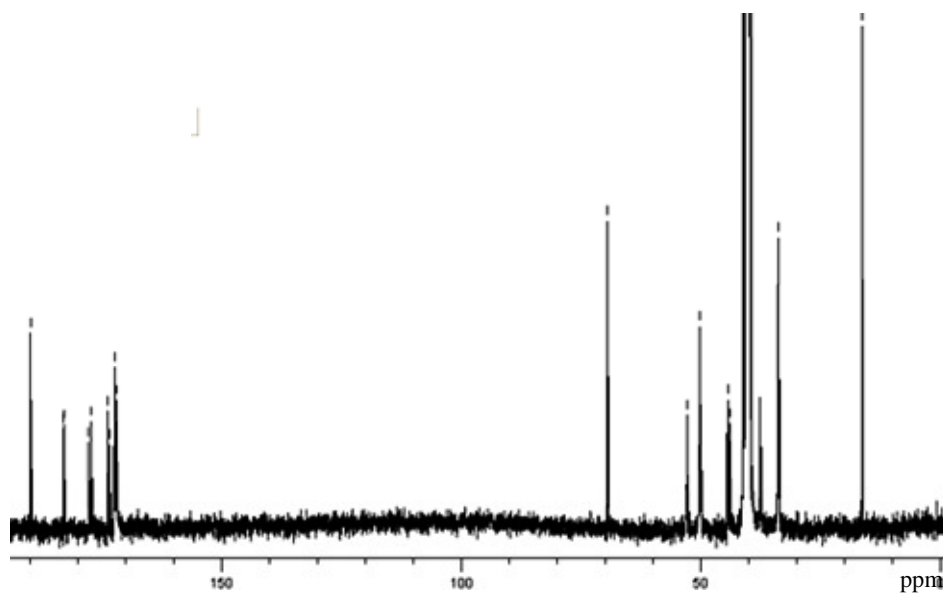


**Supplementary Figure 1.** Nonspecific binding of profilin in ELISA experiments. Shown are the average fitted ELISA data for binding titrations of profilin with PIP<sub>2</sub> (circles, solid line), PAMAM PIP<sub>2</sub> dendrimer **1** (squares, dashed line), and the nonspecific binding of profilin in ELISA experiments (diamonds). The binding associated with both PIP<sub>2</sub> and G4 PAMAM PIP<sub>2</sub> dendrimer **1** is clearly a specific interaction and outside the range of the nonspecific signal. The dissociation constants reported were derived from 15 separate experiments for both PIP<sub>2</sub> and for G4 PAMAM PIP<sub>2</sub> **1** and 10 separate experiments were used in the determination of the nonspecific binding; error bars represent the standard deviation of these experiments. Only data sets with a maximum absorbance of at least twice that of the nonspecific were included in the reported affinity constant calculations for PIP<sub>2</sub> and dendrimer **1**.

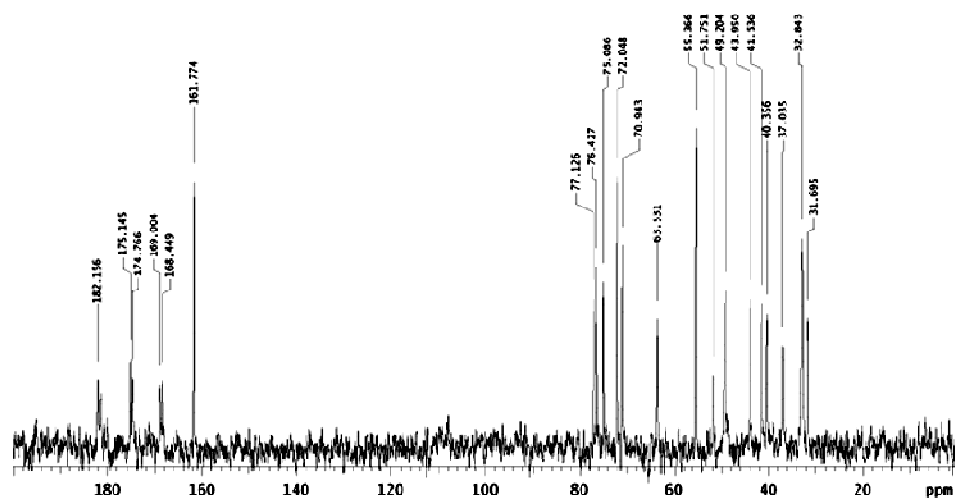
**A**



**B**



**Supplementary Figure 2.** (A) <sup>1</sup>H and (B) <sup>13</sup>C NMR spectra for the G4 PAMAM squarate dendrimer **3**.



**Supplementary Figure 3.**  $^{13}\text{C}$  NMR spectrum for the G4 PAMAM PIP<sub>2</sub> dendrimer **1**.