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Supplementary Information

Phospholipid-induced secondary structural changes of lysozyme polymorphic amyloid fibrils

studied by vacuum-ultraviolet circular dichroism

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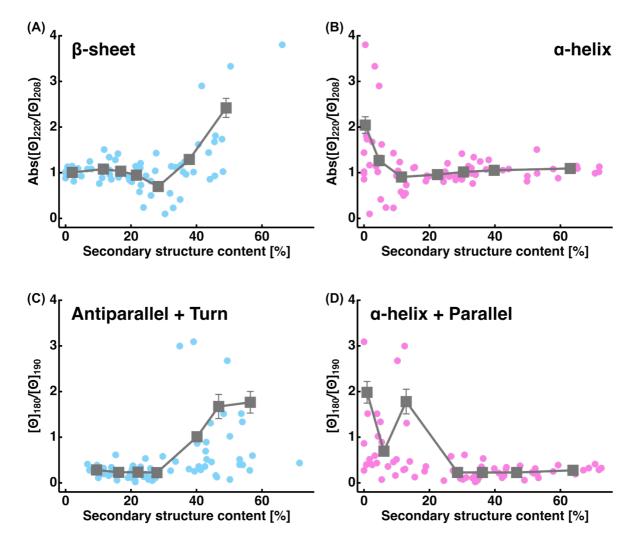


Fig. S1. Dependences of $[\Theta]_{220}/[\Theta]_{208}$ (A and B) and $[\Theta]_{180}/[\Theta]_{190}$ (C and D) on the corresponding secondary structure contents. (A) and (B) show the dependences of the absolute value of $[\Theta]_{220}/[\Theta]_{208}$ (Abs($[\Theta]_{220}/[\Theta]_{208}$)) on the β-sheet and the α-helix contents, respectively. (C) and (D) show the same dependences, but for $[\Theta]_{180}/[\Theta]_{190}$ values. Filled circles denote values obtained from the CD spectra of proteins stored in the SP175 database and from the fitting of the spectra by BestSel (for details, please see Materials and methods in the main text). To see the tendency of each plot, 10 consecutive data points were averaged, and resultant values are plotted in grey filled squares. Error bars denote the standard error of the mean. Note that in (A) and (B), the data of Concanavalin A in the SP175 database was omitted because it shows extremely high Abs($[\Theta]_{220}/[\Theta]_{208}$) values.

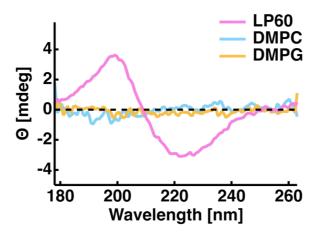


Fig. S2. VUVCD spectra of DMPC and DMPG vesicles. The spectra of DMPC and DMPG vesicles after buffer subtraction are denoted in cyan and orange lines, respectively. For comparison, the spectrum of LP60 is also shown in magenta. Note that the CD spectra of DMPC and DMPG were recorded separately from those used in this study, and the number of scans is also much less than the latter, which results in the noisy spectra.