Supporting Information

MOMD Analysis of NMR Lineshapes from Aβ-Amyloid Fibrils: A New Tool for Characterizing Molecular Environments in Protein Aggregates

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**Figure S1.** Experimental $^2$H lineshapes from the methyl groups of L17, L34 and V36 at 274 K, and the methyl group of M35 at 310 K, in dry (black) and hydrated (red) 3-fold-symmetric $\alpha_{40}$ fibrils (upper row) and 2-fold-symmetric fibrils (lower row).\(^1\)
**Figure S2.** Experimental $^2$H lineshapes from the methyl group of V36 (part a) and M35 (part b) in the hydrated 3-fold-symmetric $\alpha B_40$ fibrils at the temperatures depicted in the figures. The spectra of the 3-fold-symmetric $\alpha B_40$ fibrils, the 2-fold-symmetric $\alpha B_40$ fibrils and the protofibrils of the D23N mutant are red, blue and black, respectively.\(^1\)

**References**