

Supplementary Information

How short peptides can disassemble ultra-stable tau fibrils extracted from Alzheimer's disease brain by a strain-relief mechanism

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Supplementary Table 1. Cryo-EM statistics of D-TLKIVWX (X = I, S, R) fibrils

Supplementary Table 2. Cryo-EM statistics of AD-tau and AD-tau-D-TLKIVWX (X = I, S, R) complex

Supplementary Video 1. Strain-relief of D-TLKIVWX fibrils drives disassembly of AD-tau fibrils. The structure-based Strain-Relief hypothesis posits that the interaction of right-handed-twisting fibrils formed by peptide D-TLKIVWI with left-handed-twisting fibrils of protein AD-tau produces strain in both fibrils and strain is relieved by disassembly of the fibrils.