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Supporting Information

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Inhibition of hIAPP Amyloid Aggregation and Pancreatic β -Cell Toxicity by OH-Terminated PAMAM Dendrimer

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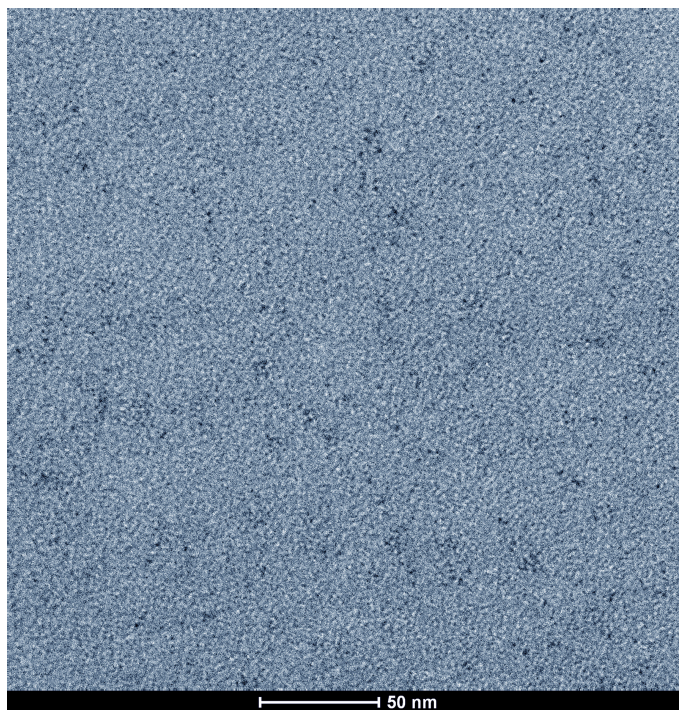


Figure S1. TEM image of PAMAM-OH dendrimer, stained with 2% uranyl acetate and examined using a Tecnai G² F30 Transmission Electron Microscope (FEI, Eindhoven, The Netherlands) at a voltage of 300 kV, under the same experimental conditions for acquiring Figures 1A-D.

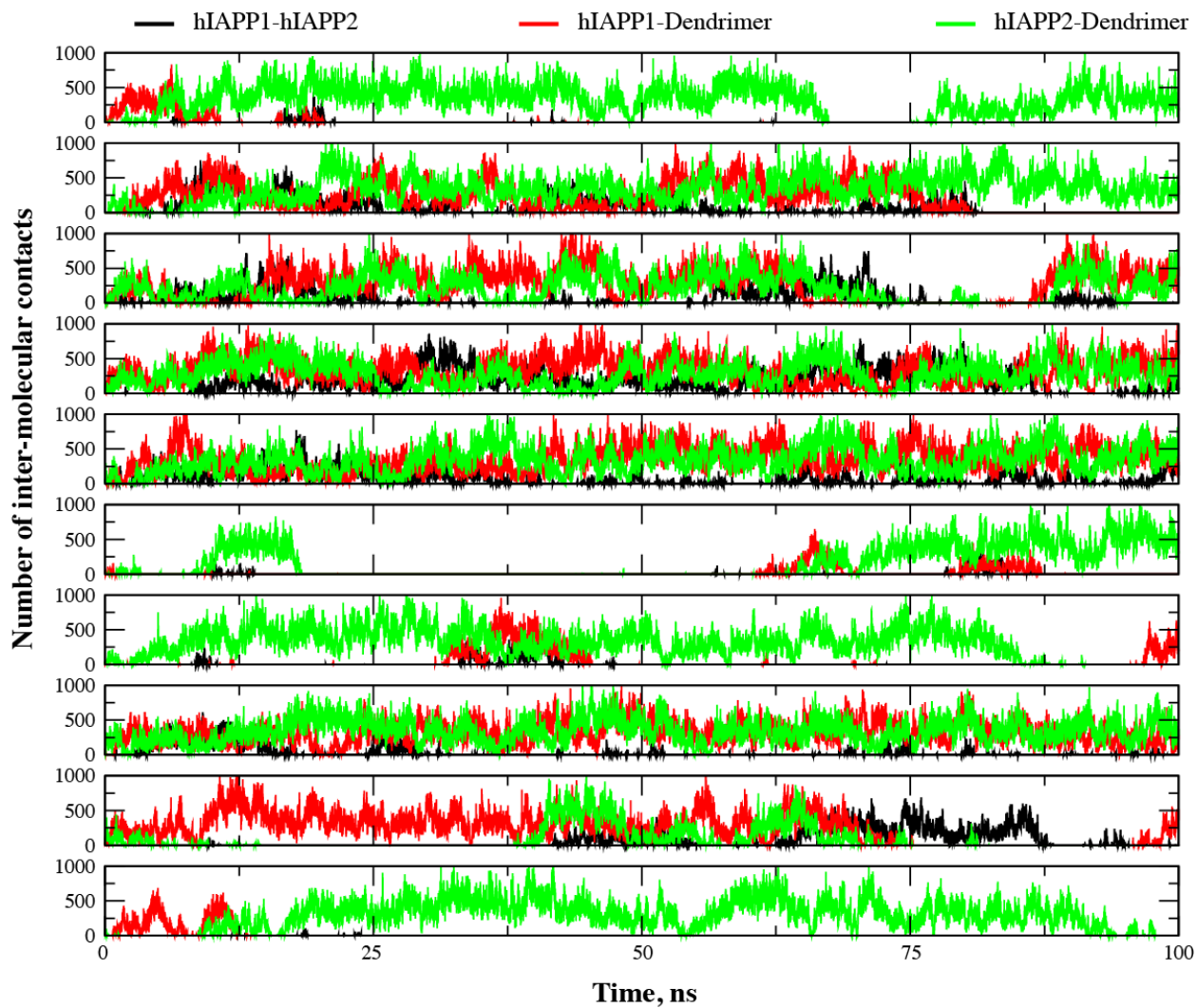


Figure S2. The number of contacts as a function of time between different molecular components (hIAPP-hIAPP, hIAPP-Dendrimer) for ten independent DMD simulations of a G3 PAMAM-OH dendrimer binding with two hIAPP peptides.

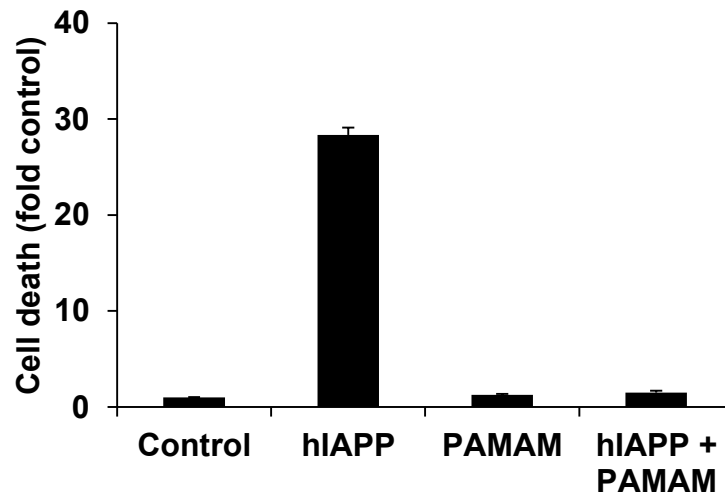


Figure S3. G3 PAMAM-OH dendrimer protects NIT-1 β -cells from hIAPP-induced cell death at a dendrimer/peptide molar ratio of 1:1. Incubation: 24 h. G3 PAMAM-OH dendrimer and hIAPP concentrations: 10 μ M. hIAPP was acquired from Abcam for this assay.

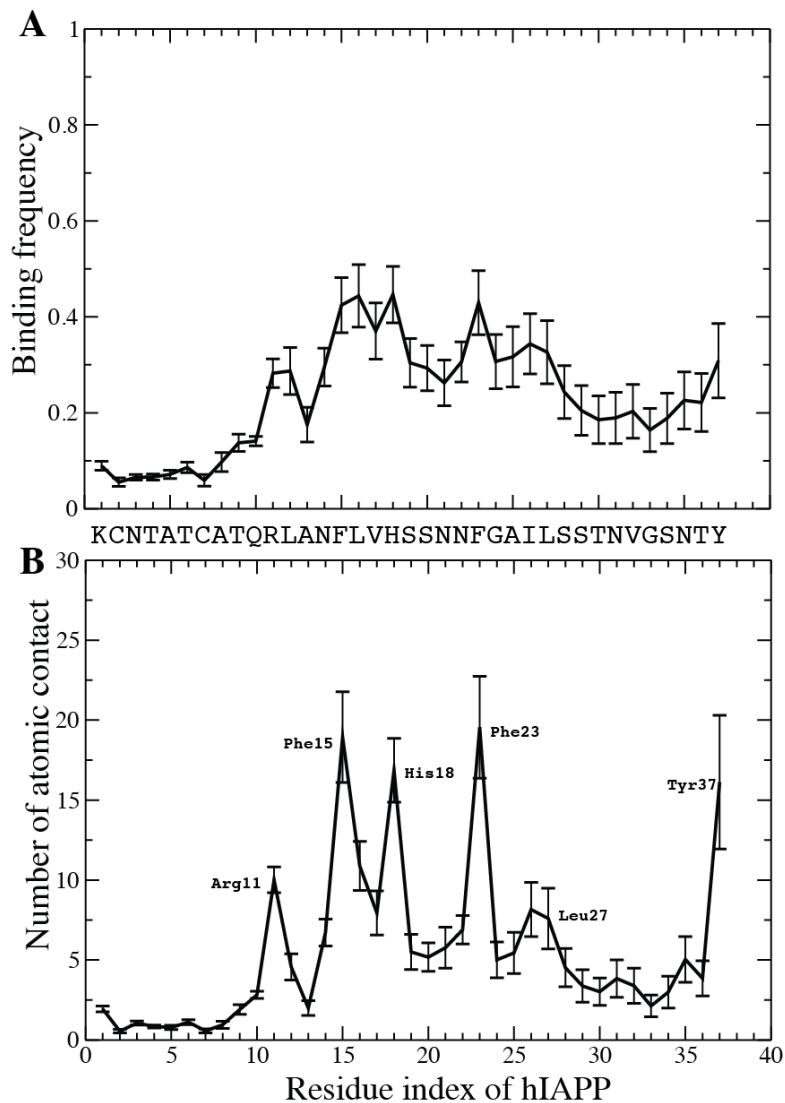


Figure S4. (A) Averaged binding frequency and (B) averaged number of atomic contacts between a G3 PAMAM-OH dendrimer and individual residues of hIAPP dimer.