Supporting Information for:

Rationally Designed, Non-Toxic, Non-Amyloidogenic Analogs of Human Islet Amyloid Polypeptide with Improved Solubility

Authors: Hui Wang, Andisheh Abedini, Bela Ruzsicska and Daniel P. Raleigh

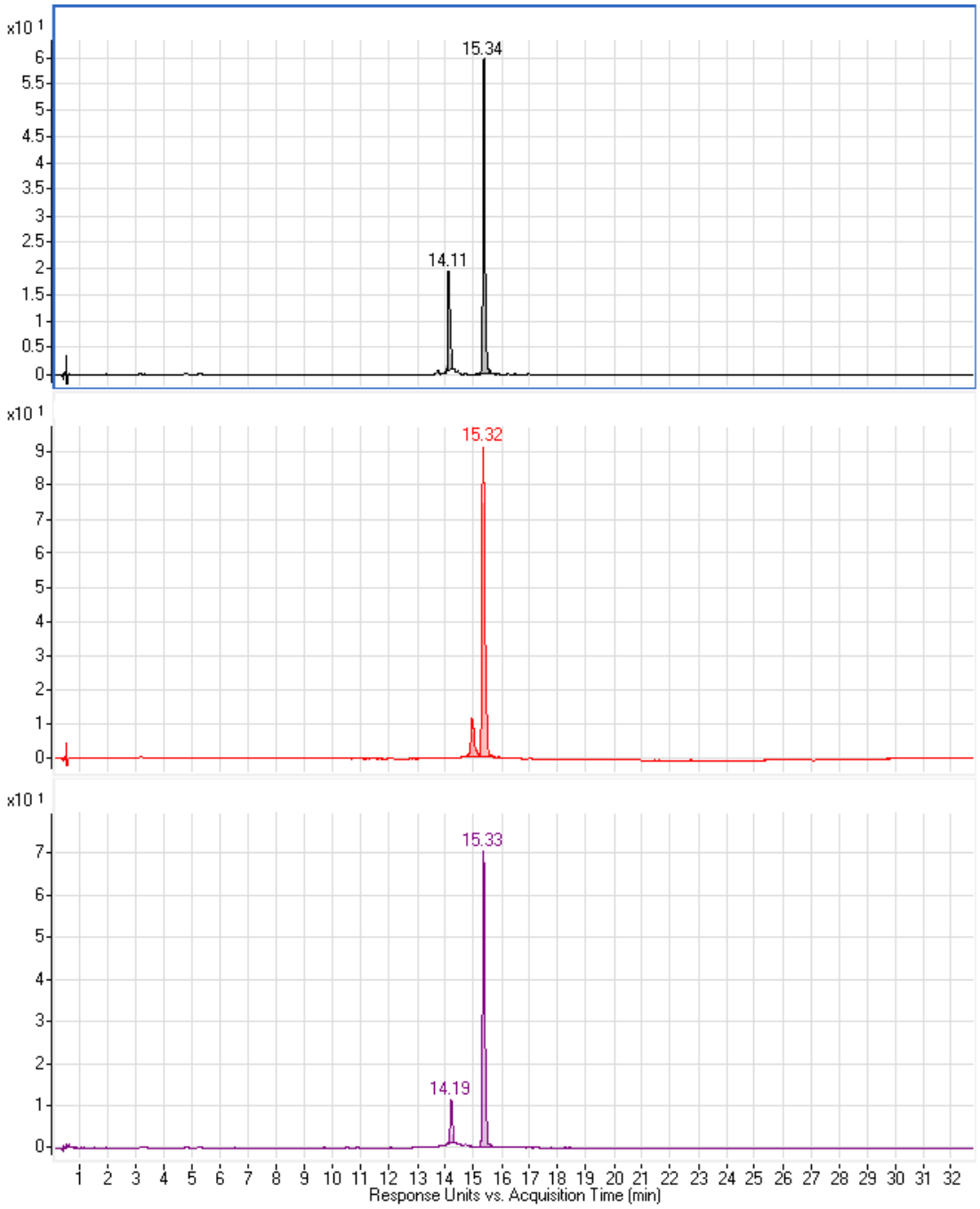

Figure S1. LC chromatographs of mixtures of insulin with IAPP analogs at time zero. Black, insulin + DM; red, insulin + PM; purple, insulin + TM-a. The units of the Y-axis are milli-absorbance units. The absorbance was measured at 280 nm.

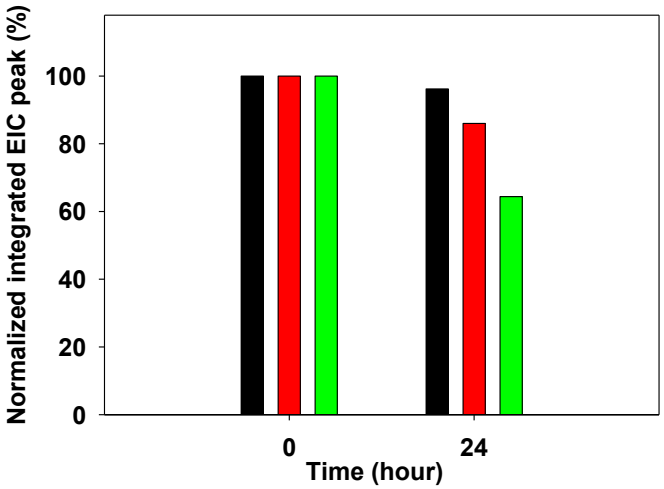

Figure S2. Designed analogs are more soluble than pramlintide in the presence of insulin. Extracted ion chromatography (EIC) peak intensity for freshly dissolved (control, t = 0) samples, and samples which were incubated for 24 hours in PBS buffer at pH 7.4. Each sample is a mixture of insulin and one IAPP analog. Only the analog peaks are shown in the graph for clarity. Black, TM-a; red, DM; Green, PM The peak area was normalized based on the peak area of the freshly dissolved sample. The initial concentration of each peptide was 500 μM.

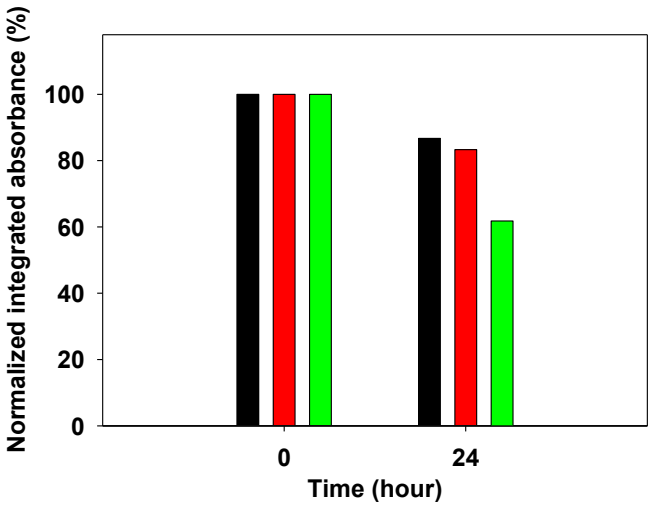

Figure S3. Designed analogs are more soluble than pramlintide in the presence of insulin. Integrated absorbance from the liquid chromatograph trace measured at 280 nm for freshly dissolved samples and for samples which were incubated for 24 hours in PBS buffer at pH 7.4. Each sample is a mixture of insulin and one IAPP analog. Only the peaks due to the IAPP analogs are shown in the graph for clarity. Black, TM-a; red, DM; Green, PM The peak area was normalized based on the area of the freshly dissolved sample. The initial concentration of each peptide was 500 μM.