

Design, Synthesis, and Photo-Responsive Properties of a Collagen Model Peptide Bearing an Azobenzene

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Apparatus. Analytical HPLC was performed on a Hitachi L-7100 instrument equipped with a Chromolith Performance RP-18e column (4.6 × 100 mm; Merck) or XTerra MS C18 column (4.6 x 150 mm; Waters). The mobile phase was a mixture of 0.1% TFA in H₂O (solvent A) and 0.1% TFA in CH₃CN (solvent B) with a linear gradient of solvent B in solvent A (0–100% over 15 min) and a flow rate of 2.0 mL/min (chromolith) or 1.0 mL/min (XTerra). The absorbance at 220 nm or 290 nm was used for detection. Gel permeation chromatography (GPC) was performed on a Hitachi L-7100 instrument equipped with a TSKgel GMHxL (7.8 mm x 300 mm, TOSOH). The mobile phase was DMF and a flow rate was 0.5 mL/min.

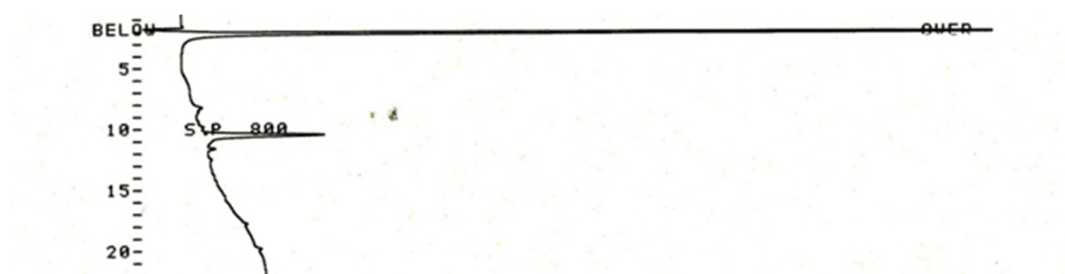


Figure S1. HPLC profile of Fmoc-(PPG)₁₀-OH (**16**).

HPLC Column: XTerra MS C18 (4.6 x 150 mm)

Eluent: 10–100% B over 15 min

Solvent A: 100% H₂O/0.1% TFA, Solvent B: 100% CH₃CN/0.1% TFA

Wavelength: 220 nm, Flow rate: 1.0 mL/min

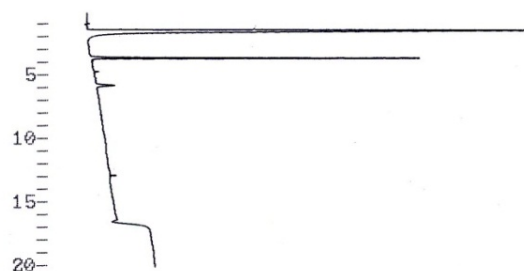


Figure S2. HPLC profile of Azo-Gly.

HPLC Column: Chromolith performance RP-18e (100 x 4.6 mm)

Eluent: 0–50% B over 15 min

Solvent A: 100% H₂O/0.1% TFA, Solvent B: 100% CH₃CN/0.1% TFA

Wavelength: 220 nm, Flow rate: 2.0 mL/min

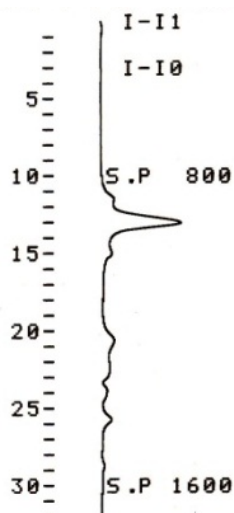


Figure S3. GPC profile of Azo-(PPG)₁₀.

GPC Column: TSKgel GMHxL (7.8 mm x 300 mm)

Solvent: DMF

Wavelength: 290 nm, Flow rate: 0.5 mL/min