

Supporting Information

Synthesis of Novel All-hydrocarbon Cross-linked Diazacyclopeptides

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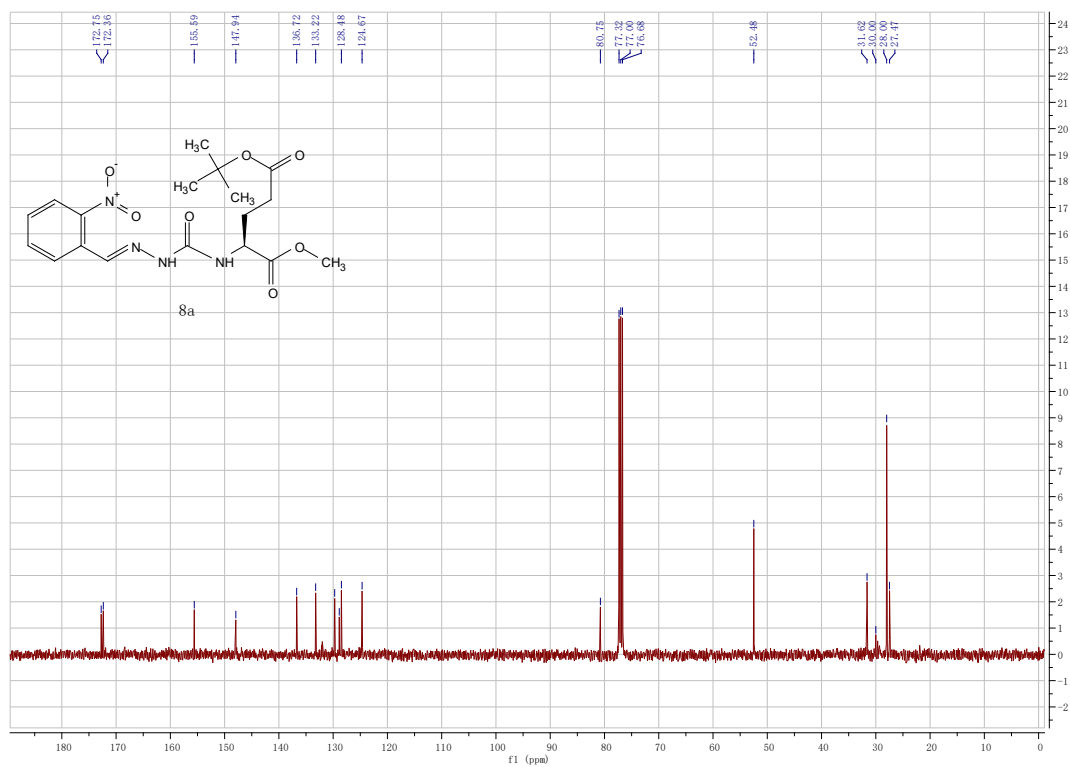
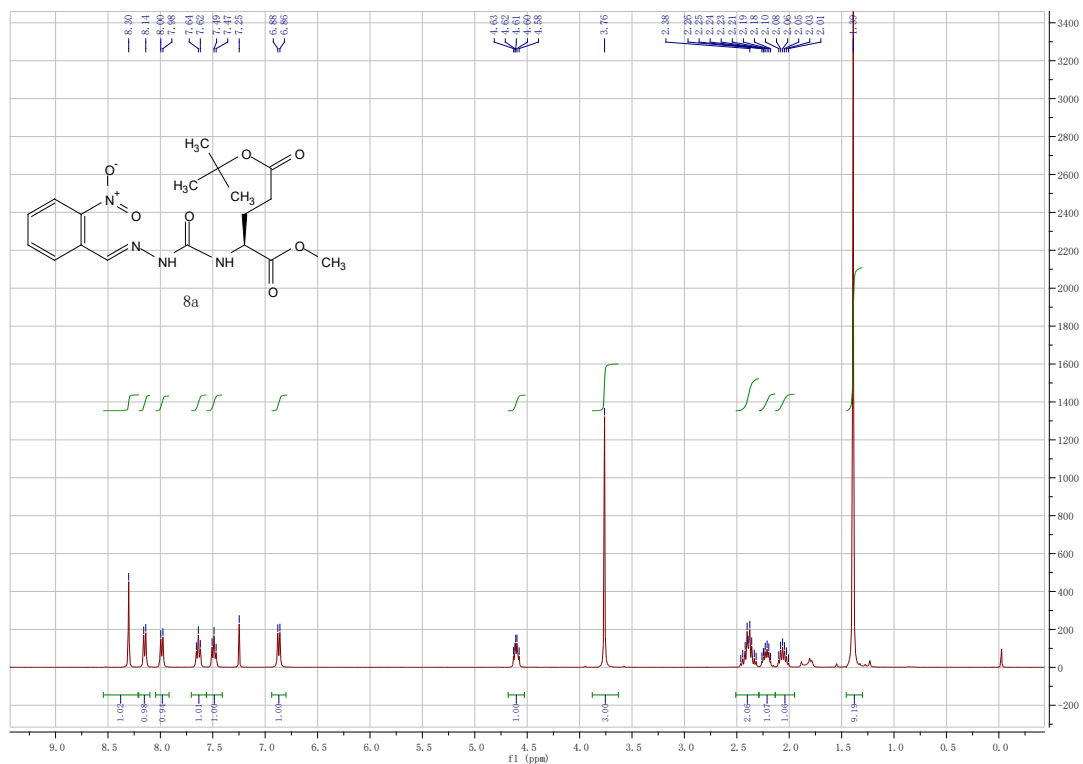
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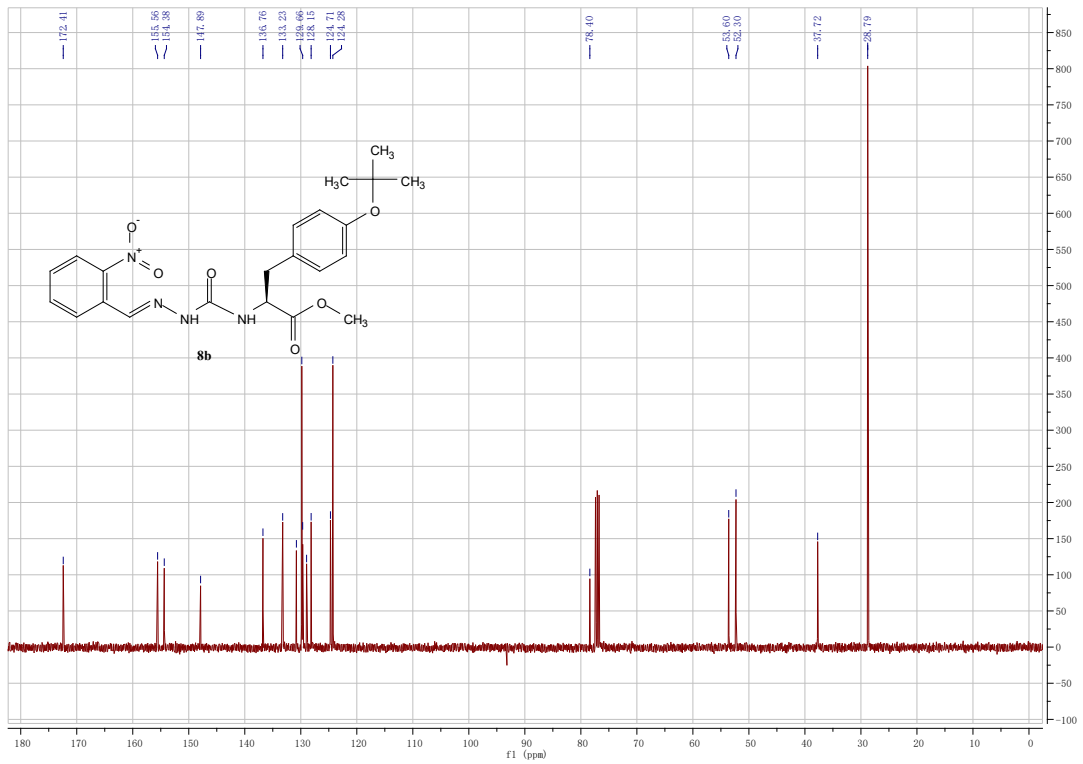
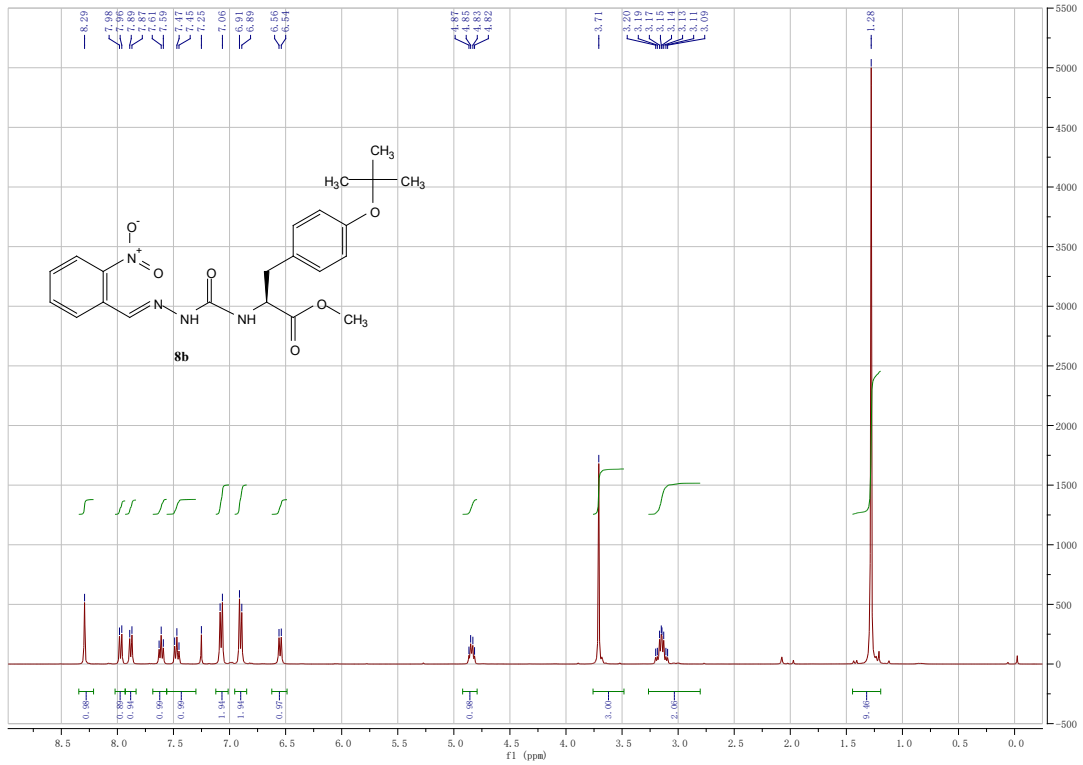
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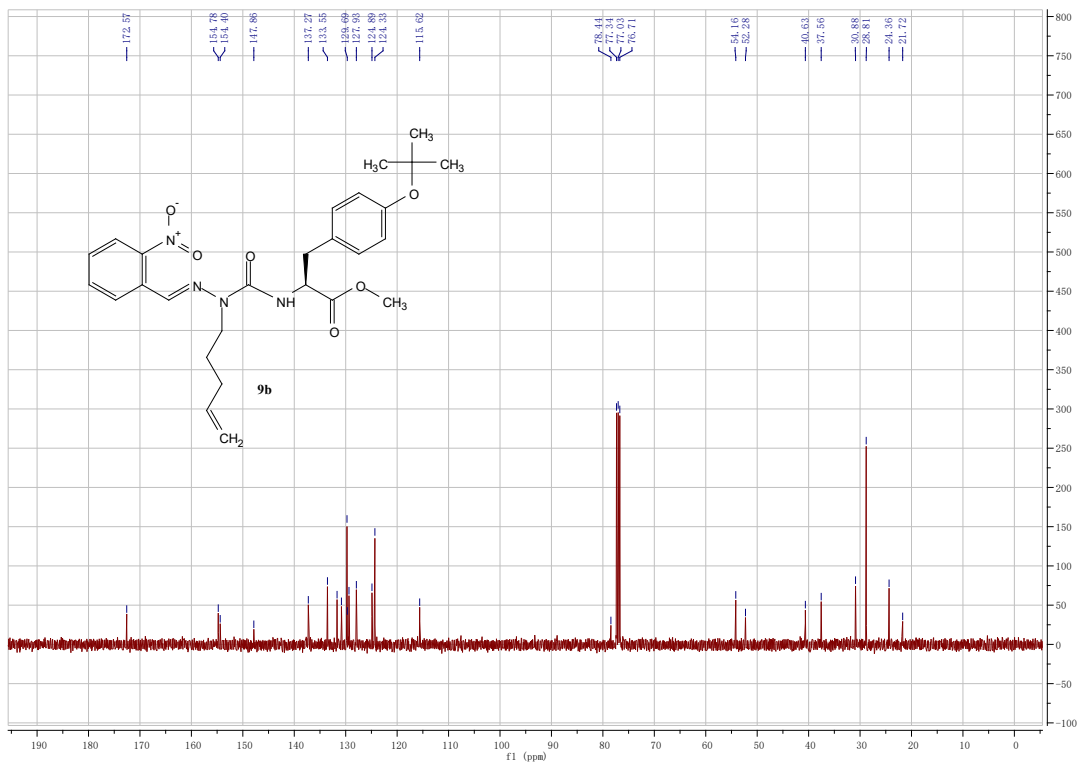
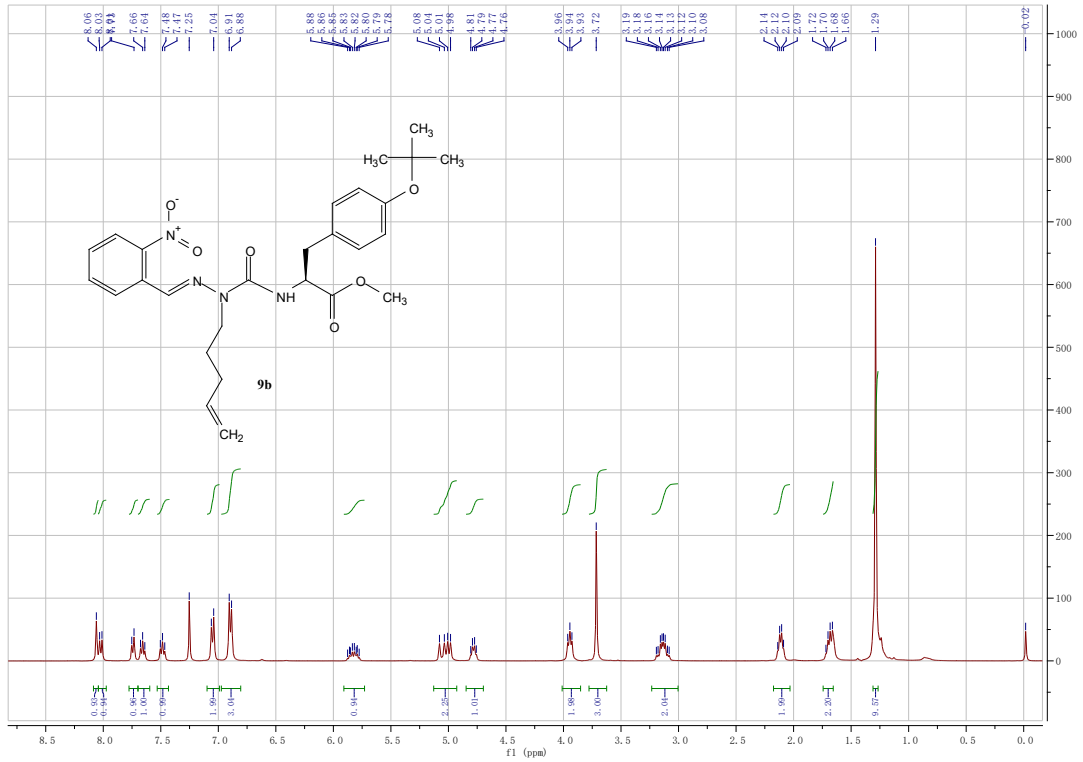
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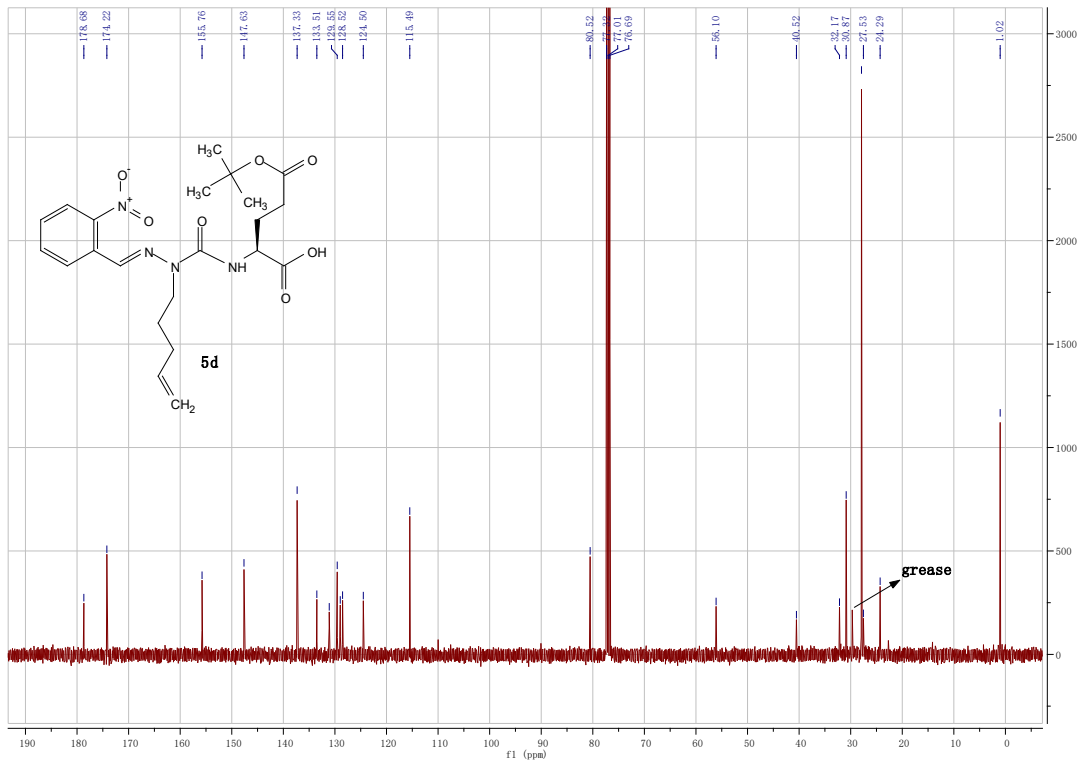
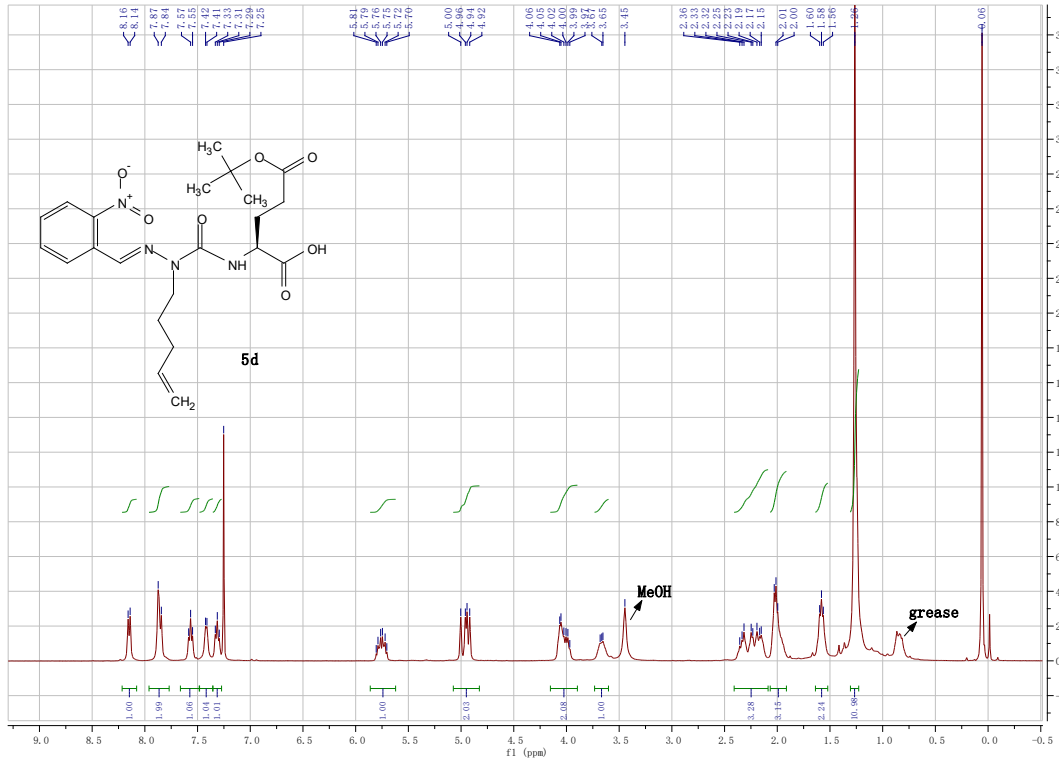
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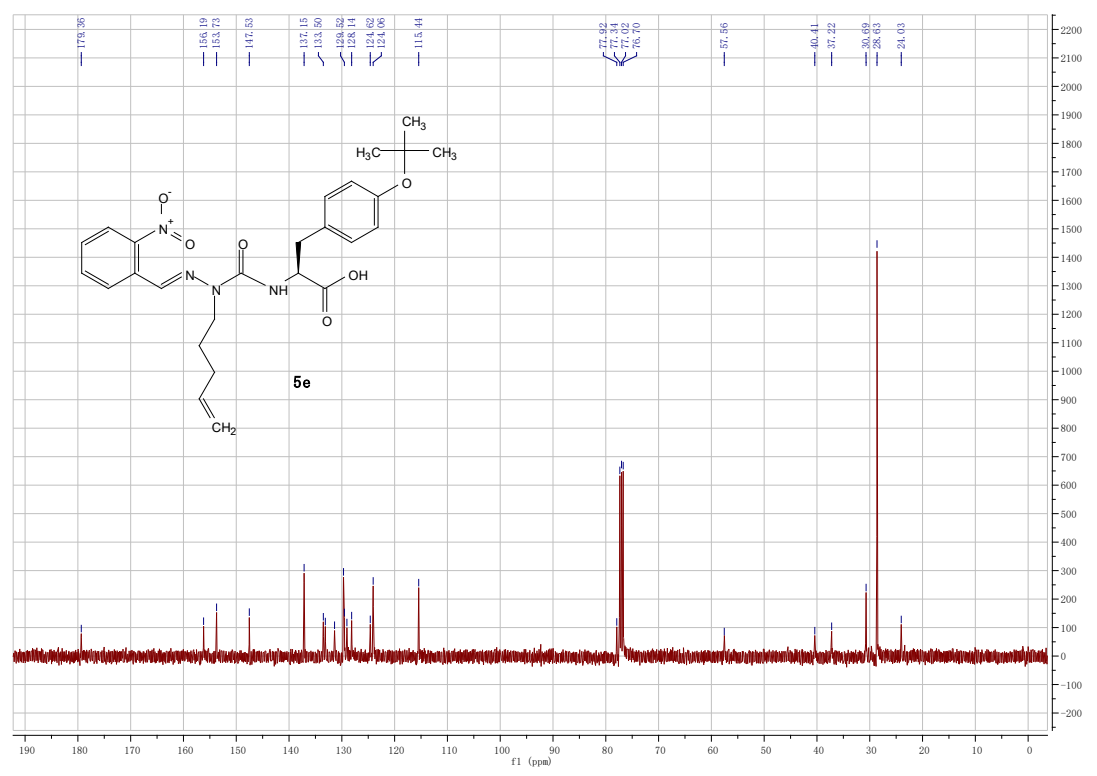
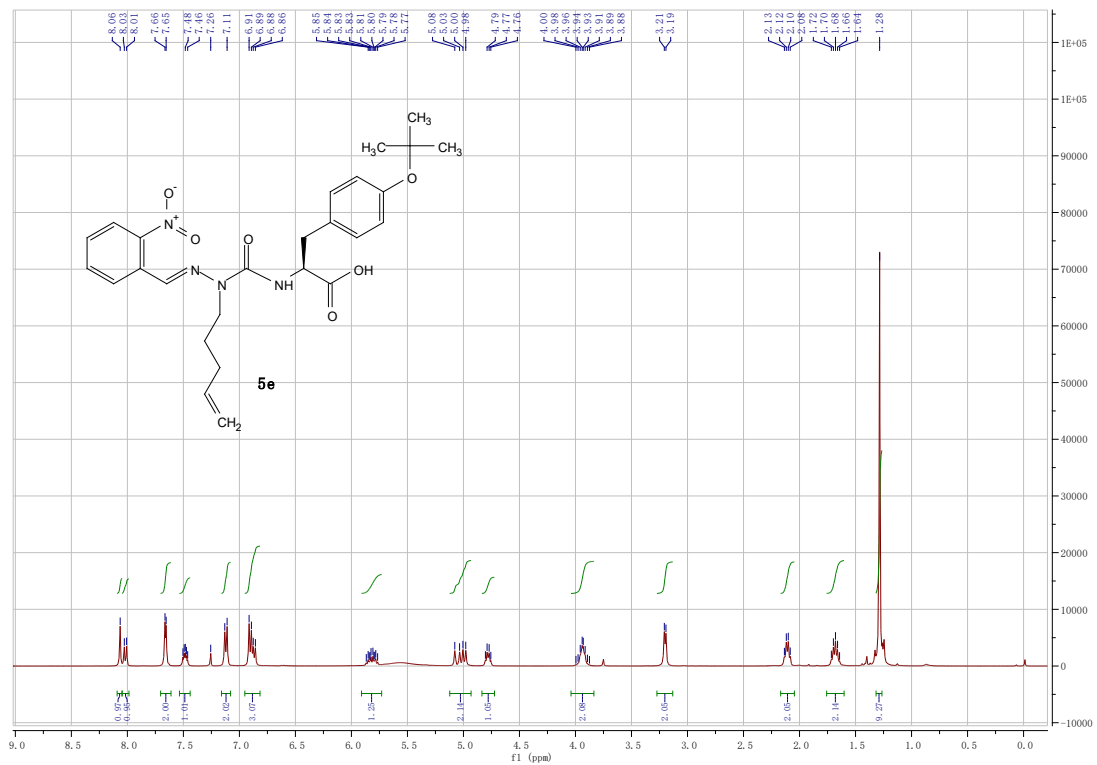
1. ¹H-NMR and ¹³C-NMR spectrum

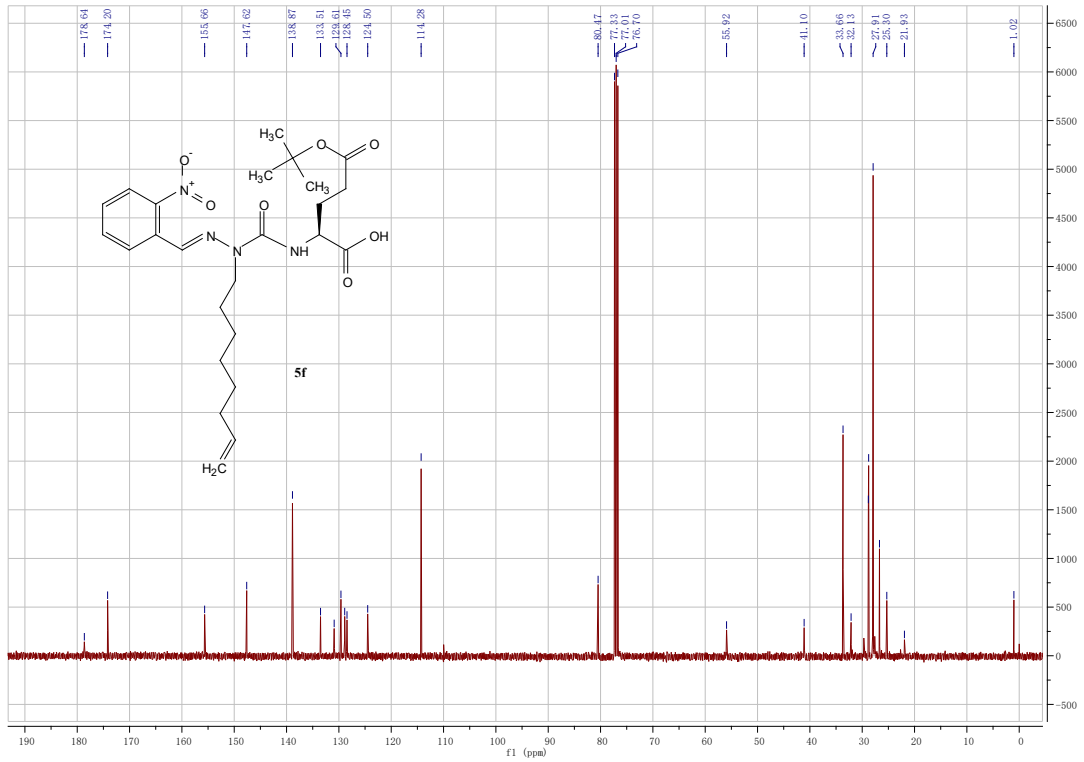
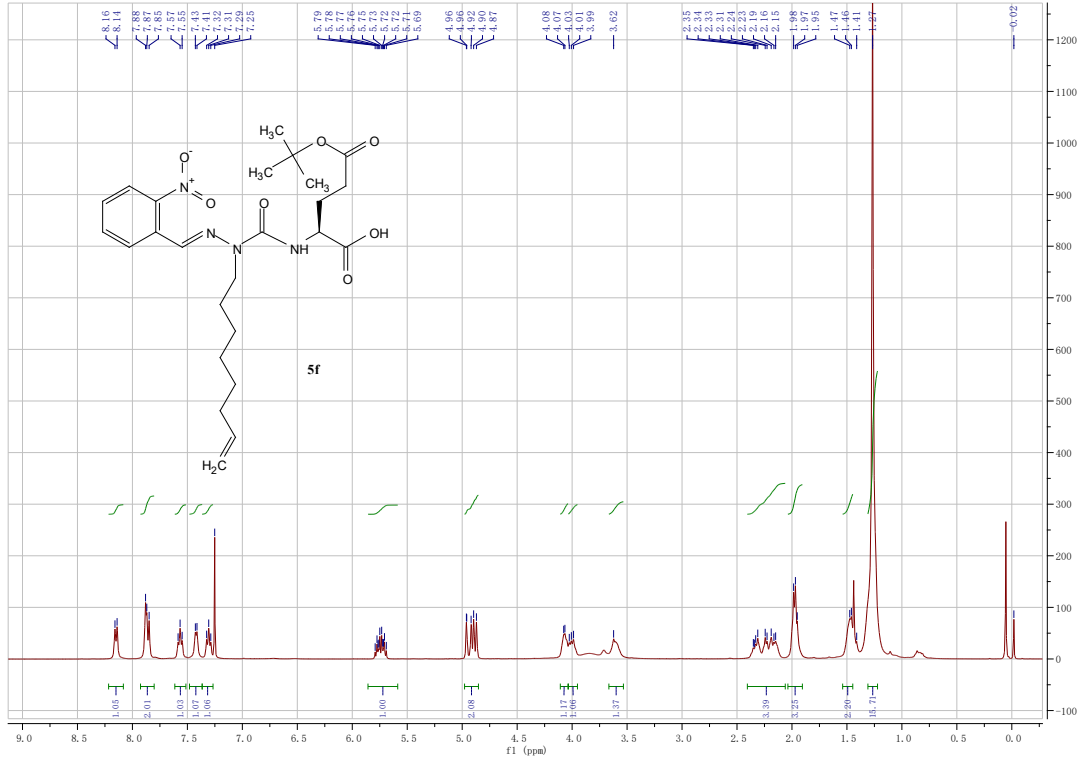












2. Analytical HPLC chromatograms of purified peptides.

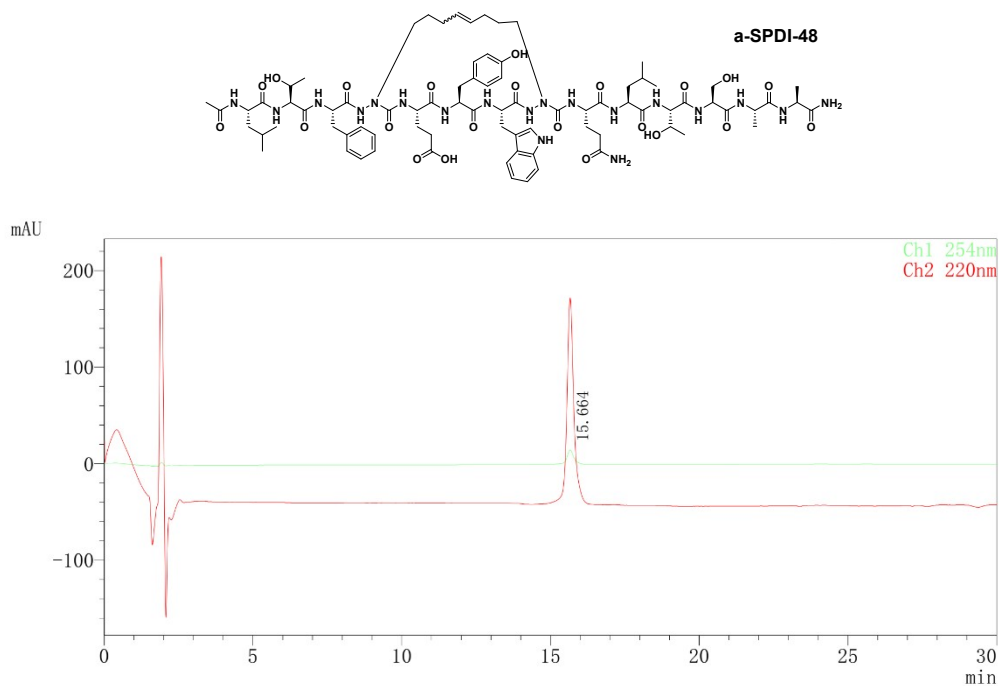


Figure S1. HPLC analysis of the aza-stapled peptide **a-SPDI-48** was performed using an isocratic gradient of 70% for 5 min, and then using a linear gradient of 70-95% of MeOH containing 0.1% FA in H₂O containing 0.1% FA over 15 min, R.T. = 15.664 min; HRMS m/z calcd for C₈₀H₁₁₅N₁₉NaO₂₂ [M+Na]⁺ 1716.83563, found 1716.83598.

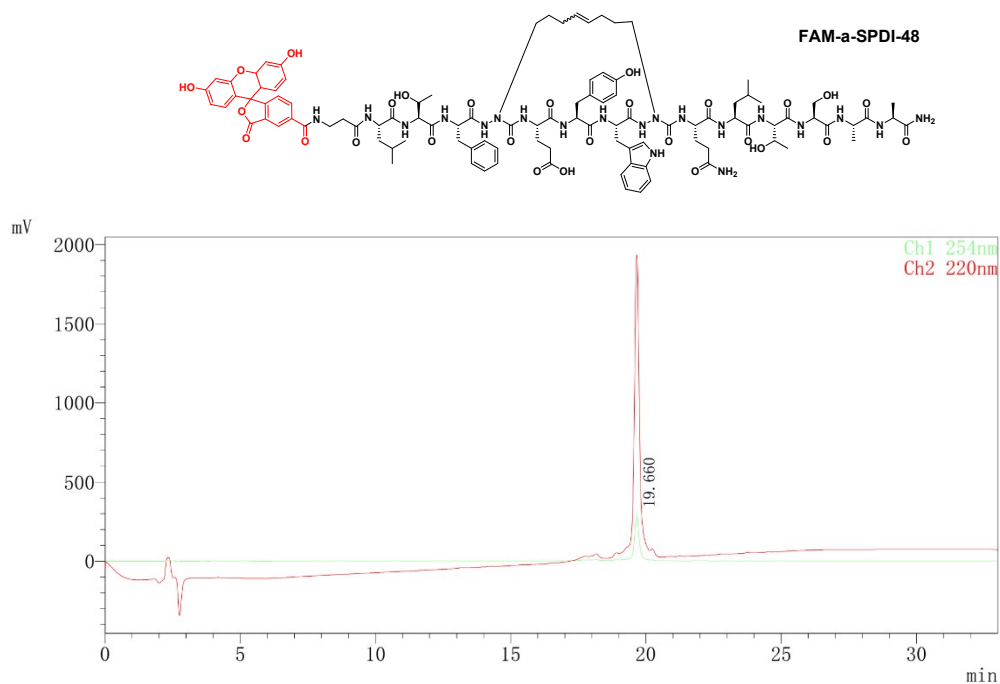


Figure S2. HPLC analysis of the aza-stapled peptide **FAM-a-SPDI-48** was performed using a linear gradient of 70-95% of MeOH containing 0.1% FA in H₂O containing 0.1% FA over 20 min, R.T. = 19.660 min; HRMS m/z calcd for C₁₀₂H₁₂₉N₂₀O₂₈ [M-H]⁻ 2081.92797, found 2081.92041.

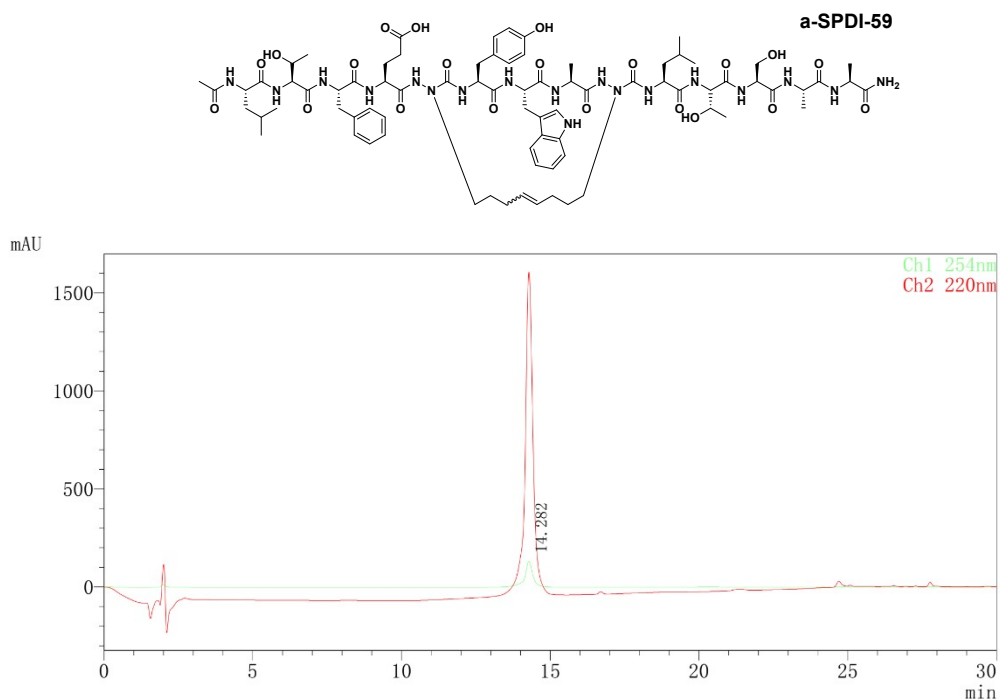


Figure S3. HPLC analysis of the aza-stapled peptide **a-SPDI-59** was performed using an isocratic gradient of 65% for 5 min, and then using a linear gradient of 65-95% of MeOH containing 0.1% FA in H₂O containing 0.1% FA over 15 min, R.T. = 14.282 min; HRMS m/z calcd for C₇₈H₁₁₂N₁₈NaO₂₁ [M+Na]⁺ 1659.81416, found 1659.81397.

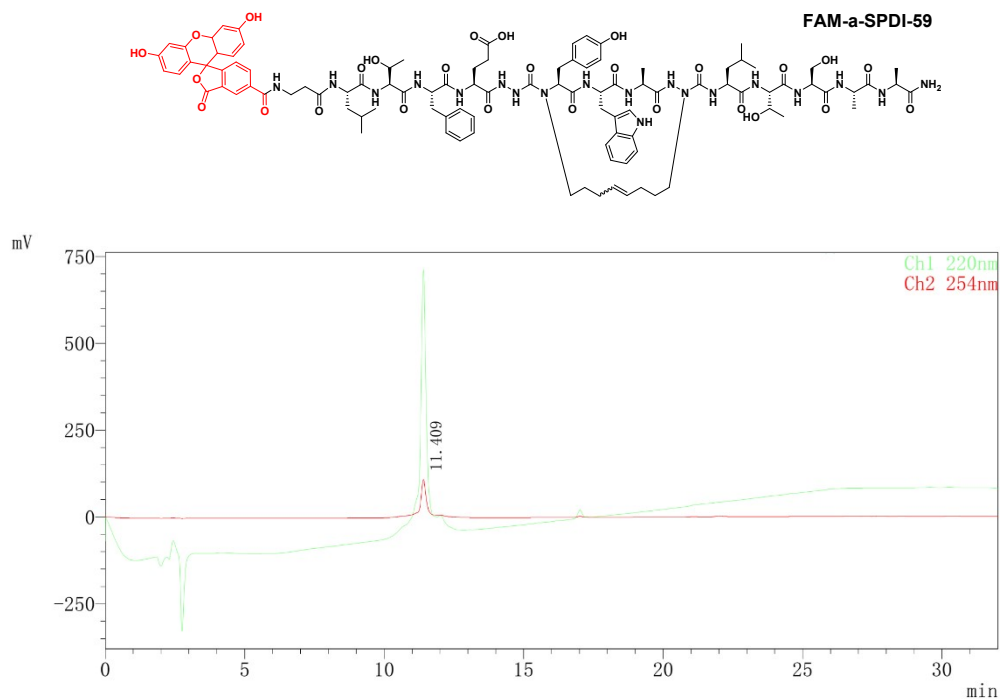


Figure S4. HPLC analysis of the aza-stapled peptide **FAM-a-SPDI-59** was performed using a linear gradient of 60-95% of MeOH containing 0.1% FA in H₂O containing 0.1% FA over 20 min, R.T. = 11.409 min; HRMS m/z calcd for C₁₀₀H₁₂₆N₁₉O₂₇ [M-H]⁻ 2024.90651, found 2024.90393.

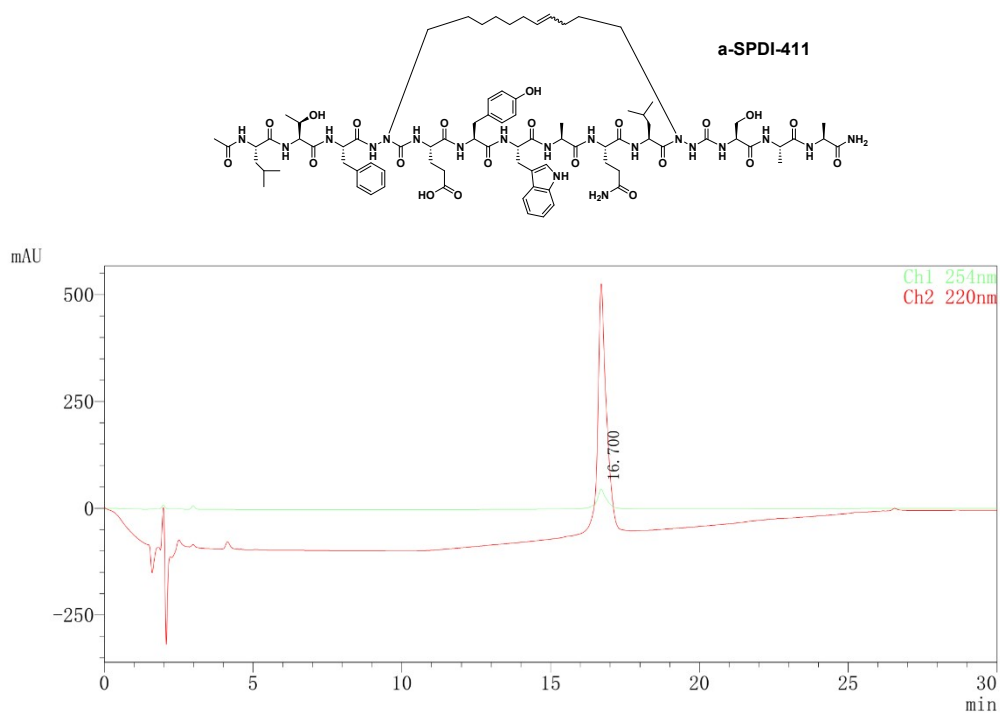


Figure S5. HPLC analysis of the aza-stapled peptide **a-SPDI-411** was performed using an isocratic gradient of 75% for 5 min, and then using a linear gradient of 75-95% of MeOH containing 0.1% FA in H₂O containing 0.1% FA over 15 min, R.T. = 16.700 min; HRMS m/z calcd for C₈₂H₁₁₉N₁₉Na₂O₂₁ [M+2Na]²⁺ 875.93062, found 875.93140.

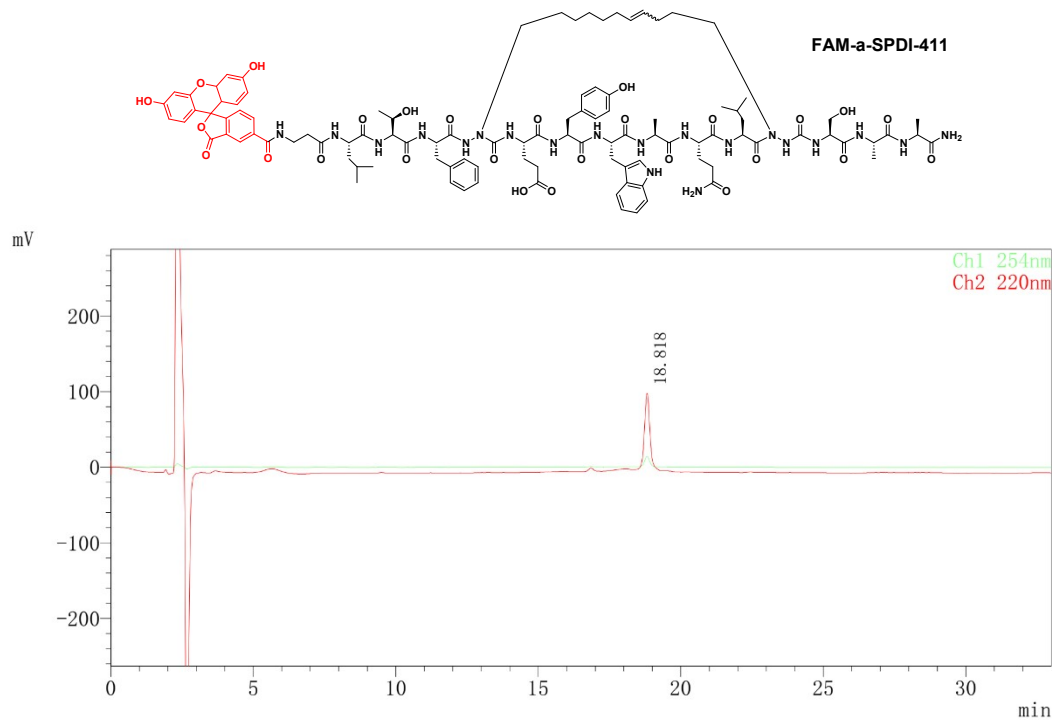


Figure S6. HPLC analysis of the aza-stapled peptide **FAM-a-SPDI-411** was performed using a linear gradient of 75-95% of MeOH containing 0.1% FA in H₂O containing 0.1% FA over 20 min, R.T. = 18.818 min; HRMS m/z calcd for C₁₀₄H₁₃₃N₂₀O₂₇ [M-H]⁻ 2023.96435, found 2023.95703.