

Synthesis and Characterization of Cyclic PNC-28 Peptide, Residues 17-26 (ETFSDLWKLL), A Binding Domain of p53

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Abstract : The present study reports the synthesis of cyclic PNC-28 peptides with solid-phase peptide synthesis method. In the first step, we synthesize the linear PNC-28 Peptide and in the second step, we cyclize (N-to-C or head-to-tail cyclization) the linear PNC-28 peptide. The molecular formula of cyclic PNC-28 peptide is C₆₄H₈₈N₁₂O₁₆ and its m/z mass is ≈1233.64. Elemental analysis of cyclic PNC-28 is C, 59.99; H, 6.92; N, 13.12; O, 19.98. The characterization of LC-MS, CD, FT-IR, and ¹HNMR has been done to confirm the successful synthesis and cyclization of linear PNC-28 peptides.

Keywords : CD, FTIR, ¹HNMR, cyclic peptide

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