

STUDY OF CONFORMATIONAL PROPERTIES OF A BIOLOGICALLY ACTIVE PEPTIDE OF FIBRONECTIN BY CIRCULAR DICHROISM, NMR AND MOLECULAR DYNAMICS SIMULATION

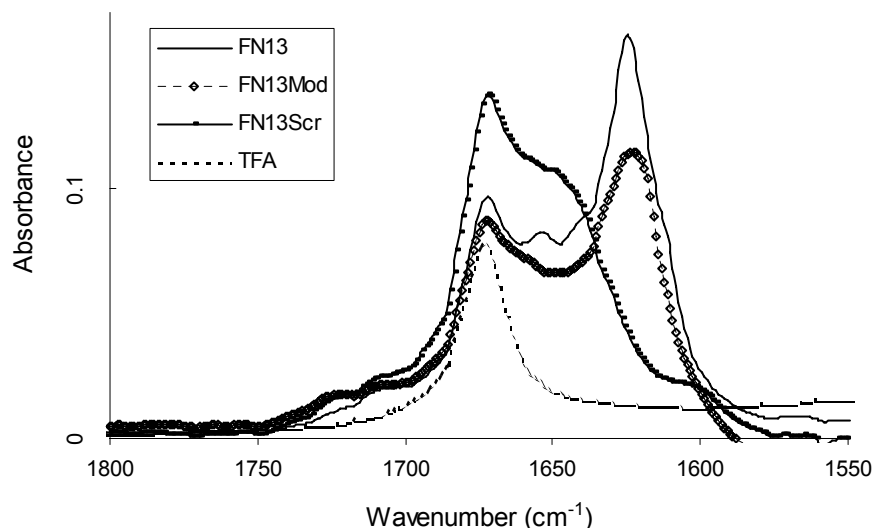
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IR spectroscopy. FTIR measurements were recorded with a JASCO FVS-4000 spectrometer. Peptides solutions were prepared in D₂O at a concentration of about 1.4 % (w/w). After an equilibration time of at least 24h for H/D exchange, the IR experiments were run by placing a small amount of solution between two BaF₂ windows separated with a 25 μm Teflon spacer.

The peptide samples were used without removing the residual trifluoroacetic acid (TFA) whose absorption around 1673 cm⁻¹ may interfere with the amide band [*J.Hilario, J. Kubelka, T. Keiderling, J. Am. Chem. Soc., 2003, 125, 7562*].

The figure presents the absorption spectra of the three peptides: FN13, FN13Mod, FN13Scr from which the D₂O absorption has been subtracted. The TFA spectrum (a.u.) is also presented for comparison.



Despite the presence in the samples of a residual amount of TFA, yet these preliminary results suggest different behaviour between the scrambled and the other peptides: the native (FN13) and the modified peptides (FN13Mod) present an absorption band at 1625 cm^{-1} which is not present for the scrambled (FN13Scr).