Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics. This journal is © the Owner Societies 2014

On the near UV photophysics of a phenylalanine residue: a conformation-dependent $\pi\pi^*$ state deactivation revealed by laser spectroscopy of isolated neutral dipeptides

Yohan Loquais, a,b Eric Gloaguen, b,a Mohammad Alauddin, a,b Valérie Brenner, a,b Benjamin Tardivel, a,b and Michel Monsa,b

Supplementary material

2 figures: S1-2

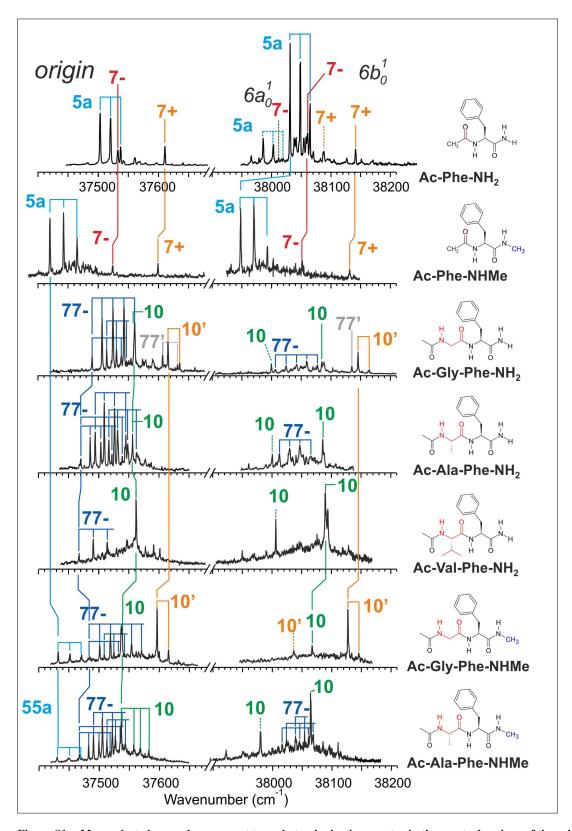


Figure S1: Mass-selected one-color resonant two-photon ionization spectra in the spectral regions of the origin and of the 6a/6b vibronic bands of the first electronic transition of the phenyl ring for the four peptides studied (GFa, AFa, GFm, AFm), together with related compounds of interest for comparison (Fa, Fm, VFa). The labels A, A', B, B', C refer to the origins, the 6b vibration (and the 6a vibration when observed) of the conformations detected (see text for assignment). The bars indicate vibrational progressions when required. The belonging of each band in the 6 vibronic region is identified from the corresponding spectral shift.

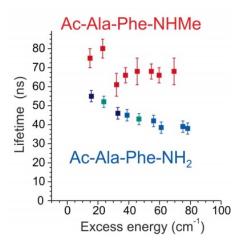


Figure S2: Lifetimes as measured in two-color resonant two-photon ionization resonant pump-probe experiments along the vibrational progressions (Fig. 2) of the 77- conformers of GFm and GFa. The horizontal axis corresponds to the excess energy above the origin in the S_1 state.